

# Readiness Proposal

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**with United Nations Environment Programme  
for Cuba, Ecuador, Honduras and Dominican Republic**

12 January 2021



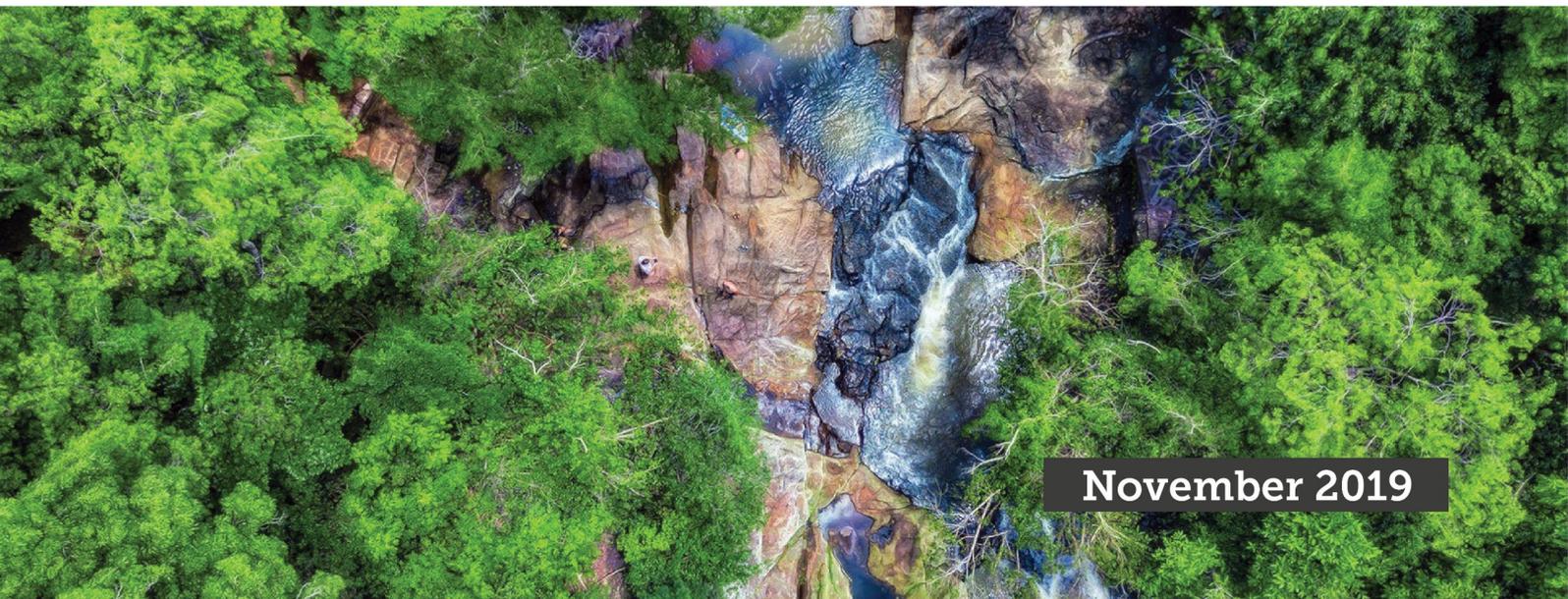
**GREEN  
CLIMATE  
FUND**

# READINESS & PREPARATORY SUPPORT

## PROPOSAL TEMPLATE



<b>Proposal title:</b>	Increasing resilience through Nature based Solutions in Latin American cities (Nature4Cities Latam)
<b>Country:</b>	Cuba, Ecuador, Honduras and Dominican Republic
<b>National designated authority:</b>	Ecuador
<b>Implementing Institution:</b>	UNEP
<b>Date of first submission:</b>	30 August 2020
<b>Date of current submission / version number</b>	16 December 2020 V.3



November 2019

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### Note: Environmental and Social Safeguards and Gender

Throughout this document, when answering questions and providing details, please make sure to pay special attention to environmental, social and gender issues, particularly to the situation of vulnerable populations, including women and men. Please be specific about proposed actions to address these issues. Consult Annex IV of the Readiness Guidebook for more information.

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GCF Readiness -[Country]-[yyymmdd]

## 1. SUMMARY

<b>1.1 Country submitting the proposal</b>	Country name: Ecuador (lead)	
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<b>1.2 Date of initial submission</b>	30 August 2020	
<b>1.3 Last date of resubmission</b>	16 December 2020	<b>Version number</b> V.3
<b>1.4 Which institution will implement the Readiness and Preparatory Support project?</b>	<input type="checkbox"/> National designated authority <input checked="" type="checkbox"/> Accredited entity <input type="checkbox"/> Delivery partner	
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<b>1.5 Title of the Readiness support proposal</b>	Increasing resilience through Nature based Solutions in Latin American cities (Nature4Cities Latam)	
<b>1.6 Type of Readiness support sought</b>	<input type="checkbox"/> I. Capacity building <input checked="" type="checkbox"/> II. Strategic frameworks <input type="checkbox"/> III. Adaptation planning <input checked="" type="checkbox"/> IV. Pipeline development <input checked="" type="checkbox"/> V. Knowledge sharing and learning	

## 1.7 Brief summary of the request

Latin America and the Caribbean (LAC) is the second most urbanized region in the world, with more than 8 out of 10 inhabitants living in urban centres. Climate change makes regional cities more vulnerable: according to the Climate Change Vulnerability Index, 48% of the capital cities in LAC show “extreme risk” to the effects of climate change. This is of considerable concern due to the “key role of capitals in national governance and as drivers of economic development”<sup>1</sup>. Most urban areas are also highly vulnerable to natural disasters (e.g. extreme events, coasts, hillsides, flood prone areas), that affect the quality of life and impact economic and social development. These risks represent major threats as the adverse effects of climate change are expected to further aggravate these challenges.

There is general recognition and growing awareness that Nature based Solutions (NbS) are a cost-effective and promising adaptation approach in the urban context, increasing climate change resilience, ensuring the delivery of sustainable infrastructure services and contributing to flexible planning in line with transformations and changes. The use of ecosystems for urban climate change adaptation and disaster risk reduction is a rapidly growing research and action area, and one with immense potential and significant challenges. According to the baseline of the Sustainable Development Goals (SDG) cities and metropolitan areas are centers of economic growth, contributing to approximately 60% of global GDP. However, they also account for about 70% of global carbon emissions and more than 60% of resource use. NbS also stand as an opportunity for cities to reduce their emissions and achieve a more efficient use of natural resources.

The definition and implementation of NbS in urban areas faces several barriers including: (i) the limited knowledge base for NbS; (ii) the inadequate governance structures for NbS; (iii) the balancing of the multiple goals and co-benefits NbS can deliver; (iv) effective citizen involvement; (v) insufficient social inclusion and social acceptance; (vi) lack of political and financial support; (vii) the challenges for monitoring NbS; and, (viii) the difficulties in upscaling NbS.

The project will support 4 LAC countries through examples in 6 selected secondary cities to identify and address the main barriers for nature-based adaptation and mitigation solutions by providing the necessary assessments, capacities and alternatives to financing schemes to accelerate adoption of these strategies. This will be done with a twofold approach: at a national and regional scale. Nationally, understanding that despite NbS are at an early stage in all participant countries, barriers and corresponding solutions may vary depending on each city’s context and priorities. Regionally, by developing replicable methodologies and tools and potentiating multi-country collaboration to replicate and upscale lessons learned from these 6 cities and to contribute to already existing regional and global platforms that currently provide limited information and examples of NbS in urban areas.

This proposal aims to increase the capacity of participating countries to design and implement Nature Based urban development strategies that ensure urban resilience to climate change through five main areas of work:

1. Strengthening the knowledge base of national and local governments to assess the potential for Nature Based Adaptation and Mitigation Solutions in urban areas in the context of broader climate change strategies
2. Reinforcing enabling policies and institutional frameworks to increase adoption of NBS in urban planning

<sup>1</sup> CAF. 2014. Vulnerability Index to climate change in the Latin American and Caribbean Region. Corporación Andina de Fomento. 206 pp <https://scioteca.caf.com/bitstream/handle/123456789/509/caf-vulnerability-index-climate-change.pdf>

3. Strengthening partnerships between key actors to accelerate the adoption of NBS solutions. The engagement and identification of opportunities for the private sector will be a key aspect in this component.
4. Defining climate finance strategies through innovative public, private and blended financial mechanisms and facilitating access to climate finance for the sustained implementation of NbS
5. Accelerating upscaling and replication through a regional Urban NBS platform

Overtime this initiative will result in quantified increased resilience and significant improvement of citizen’s wellbeing due to the transformational change in decision making processes for urban planning. These elements will be further assessed in the feasibility studies undertaken by this project and implemented through the proposals that participant countries may wish to put forward for funding from GCF.

Direct beneficiaries of this proposal include local governments and key stakeholders at the city level that will benefit from direct technical assistance and capacity building including both public and private sector: At the national level, national governments will benefit from their participation in the regional platform and the technical assistance for policy revision and the methodologies applied in the pilot cities for replication and upscaling to other cities.

**1.8 Total requested amount and currency**

USD 1,049,314

**1.9 Implementation period**

24 months

**1.10 Is this request a multiple-year strategic Readiness implementation request?**

- Yes
- No

**1.11 Complementarity and coherence of existing readiness support**

- Yes
- No

The participating countries have other Readiness initiatives in progress, for different climate change issues that can generate synergies with this Readiness Proposal, avoiding potential duplication of efforts with ongoing projects. Below is an indicative list, more information on complementarity is provided in Section 2 of this proposal

- **Ecuador** – “Green Climate Fund Readiness and Preparatory Support for Ecuador”; USD grant amount: 300,000; Finalized in 2018
- **Ecuador** – “*Ecuador NDA Institutional Strengthening and Digitalization Process*”; EUR grant amount: 450,000; Under implementation since November 2019
- **Ecuador** – “Enhance the capacity of Decentralized Autonomous Governments to access and manage climate finance in Ecuador and contribute to the implementation of the NDC”; USD grant amount: 559,516; Under implementation since October 2018
- **Ecuador** – “National Adaptation Plan in Ecuador”; USD grant amount: 3,000,000; Under Implementation since February 2018
- **Dominican Republic** – “*Strengthening National Capacities through the Climate Change Readiness Support Program in the Dominican Republic*” USD grant amount: 300,000; Finalized since 2016
- **Dominican Republic** – “*Building capacity to advance National Adaptation Plan Process in the*

- *Dominican Republic*; USD grant amount: 2,998,325; Under implementation since 2018
- **Dominican Republic** – “*Building Capacity for direct access to Climate Finance.*”; USD grant amount: 565,032; Under implementation since December 2019
- **Honduras** – “*Supporting strategic planning to engage with the GCF and comply with the national commitments under the Paris Agreement regarding the LULUCF sector*”; USD grant amount: 764,960; Under implementation since 2018
- **Honduras** – *Strengthening the understanding of Social and Environmental Safeguards applicable to climate change programmes and proposals in Honduras*; USD grant amount: US\$235,200; Finalized since 2020
- **Honduras** – “*Enabling environments to effectively plan, implement, monitor and report strategic National Adaptation Processes in Honduras*”; USD grant amount: \$2,449,590; Under implementation since 2019
- **Honduras** – “*Enhancing Honduras’s Access to GCF for climate investments*”; USD grant amount: \$282,420; Under implementation since 2019
- **Honduras** – “*NDA Strengthening + Country Programming*”; USD grant amount: \$300,000; Finalized since 2017
- **Cuba, Dominican Republic, Ecuador & Honduras** - “*Advancing a regional approach to e-mobility in Latin America*”; USD grant amount: 2,800,000 (for all countries involved); Under Implementation since 2019

## 2. SITUATION ANALYSIS

### Regional climate vulnerability and NbS potential in urban areas

LAC is the second most urbanized region in the world, with more than 8 out of 10 inhabitants living in urban centers. Climate change makes regional cities more vulnerable: according to the Climate Change Vulnerability Index, 48% of the capital cities in LAC show “extreme risk” to the effects of climate change. This is of considerable concern due to the “key role of capitals in national governance and as drivers of economic development”. Yet, the highest levels of vulnerability in urban areas are not concentrated in the region’s megacities<sup>2</sup>.

The intermediate cities (between 100.000 and 500.000 inhabitants) and metropolitan areas in LAC house around 46% of the regional population<sup>3</sup> and are becoming important poles of investment and economic growth, intermediate cities representing 25% of the region’s GDP and expected to reach 40% by 2030<sup>4</sup>. However, these poles face considerable sustainable development challenges, with high poverty rates and related inequities in access to basic services, transport congestion and environmental pollution. Additionally, the limited governance and enduring scarcity of financial resources hinders their capacity to deal with these complex urban challenges.

Over the past 20 years, highly disruptive flood events in multiple cities across the continent have been blamed on rapid and unregulated urbanization. These events were enhanced by the irregular occupation of slopes,

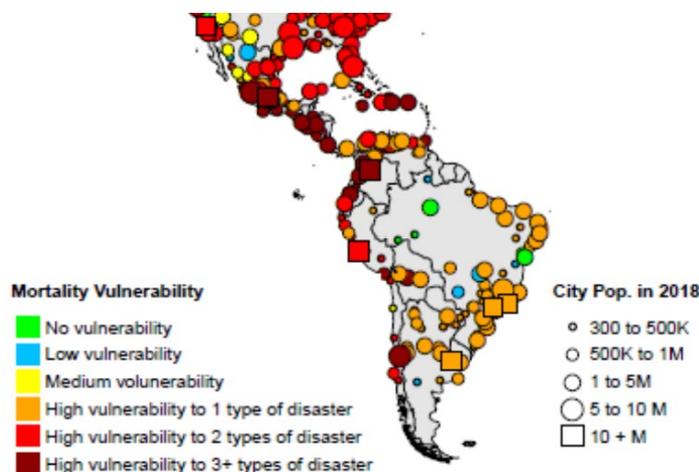
<sup>2</sup> CAF. 2014. Vulnerability Index to climate change in the Latin American and Caribbean Region. Corporación Andina de Fomento. 206 pp.

<sup>3</sup> According to IIED - <https://www.iied.org/outside-large-cities>

<sup>4</sup> <https://unfccc.int/climate-action/momentum-for-change/lighthouse-activities/emerging-and-sustainable-cities-initiative>

decreasing ground stability and increase surface water run off rates. Most urban areas are also highly vulnerable to natural disasters (e.g. extreme events, coasts, hillsides, flood prone areas), that affect the quality of life and impact economic and social development. These risks represent major threats as the adverse effects of climate change are expected to further aggravate these challenges.

**Map: Location of cities by population size and level of vulnerability to disaster-related mortality**



Source: UN DESA, 2019<sup>5</sup>

LAC has a large variation in sizes of cities, from high mountains to islands, from coastal to inland: not all cities can respond in the same way to transformations and changes. Drivers of vulnerability and risk, as well as adaptation strategies vary greatly and tend to be site specific, and within this context, most city administrations lack access to climate change adaptation training, knowledge networks and finance.

Urban areas account for approximately 70 percent of human induced GHG emissions due to the density of infrastructure and their often path-dependent development patterns<sup>6</sup>. While this makes cities vulnerable to the impacts of climate change, cities can also play an important role in taking on climate change mitigation and adaptation actions.

**NbS potential for urban adaptation and for mitigation co-benefits**

Cities are not homogeneous areas. They are made up of a network of dense built areas, less dense peri-urban areas and more or less dense rural spaces. These ecosystems, at different scales of the city, play a significant role in sustaining some of the diverse and intertwined components of natural features that make urban landscapes safe and livable environments. These different spaces (or ecosystems) provide support and regulate a series of services that increase the capacity of cities to mitigate the impacts of climate change mainly related to flood and landslide control, drought prevention, coastal erosion or heatwaves. Examples of these NBS include for example:

- permeable areas soak up precipitation, providing water drainage and regulation;
- foliage provide shade and absorption and regulation of heat;
- peri-urban ecosystems provide regulating services, such as watersheds that maintain water quality and quantity.
- wetlands, mangroves, and forests help reduce the impacts of storm surges in coastal areas or prevent soil erosion on banks and riverbeds due to the complex root systems of the vegetation;
- urban garden and fruits trees provide food security for the city and income for peri-urban populations.
- green and hybrid infrastructure to manage water supply and minimize risks in urban areas.

On GHG mitigation, the following measures might be envisaged:

<sup>5</sup> UN DESA, 2019, Exposure and vulnerability to natural disasters for world's cities, by D. Gu, Population Division, Technical Paper No. 2019/4, December 2019

<sup>6</sup> UN Habitat, 2019, Strategic Plan 2020-2023

- green spaces and areas for alternative transport decrease GHG emissions from transport.
  - increased green areas including parks, green roofs and vertical gardens maintain average temperature and decrease the use of heating and air conditioning.
  - walking and cycling paths to decrease emissions from transport, increase connectivity and improve mobility and accessibility, which translates into lower costs and times in transport.
- Reduction of energy needs for water pumping through rainwater harvesting systems, distributed water supply systems or increased aquifer recharge, among others.

Integrating and NbS approach in urban planning provides important opportunities for cities to create or enhance their own institutional arrangements in order to integrate all areas with urban planning competencies that have an impact on climate matters, both vertically and sectorally. This integrated approach is based on the application of technological tools that provide the best information available for decision-making based on scientific evidence. This will enable each city to identify key areas and opportunities to define climate investment and management priorities contributing to bridge the emissions and adaptation gap between their NDCs and the policies in place. It will also help to enhance collaboration between national and subnational governments in order to identify cost-effective mitigation options aligned with the LTSs and/or IPCC mitigation reports, especially on key sectors at the local level. Legal frameworks at the city level can also be enhanced to encourage the development of cities that include NbS in a broader and comprehensive urban sustainability framework including public transportation, electricity and locally-sourced markets and promoting land mixed-uses to create the space for green infrastructure and NbS in strategic locations of the cities

Increasing resilience for urban areas requires a combination of interventions that restore and conserve key ecosystem services that provide water flow and temperature control, carbon sequestration, water and air quality, food security and biodiversity among others. As illustrated by Figure 1, the construction of urban resilience through NbS implies considering the city as a space formed not only by the built areas, but also by peri-urban and rural areas that are connected to the city. The diagram summarizes some of the NbS interventions that can be implemented in urban areas and their associated benefits.

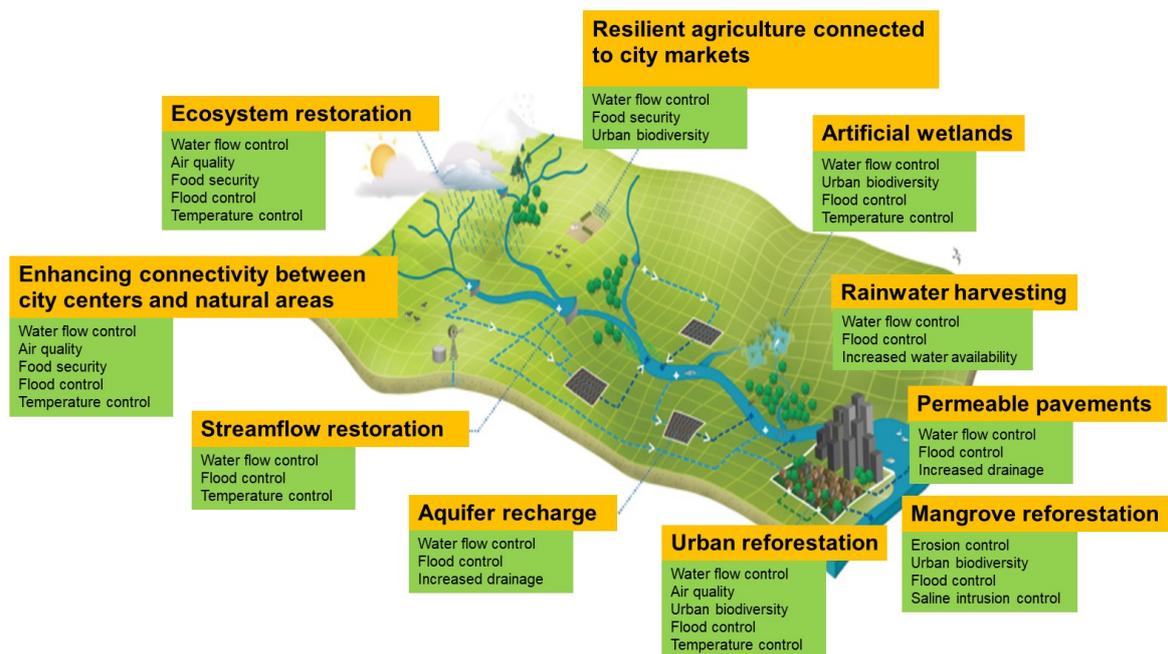


Figure 1. Urban NbS solutions and associated benefits

There is general recognition and growing awareness that NbS are a cost-effective and promising adaptation and mitigation approach in the urban context, increasing climate change resilience, ensuring the delivery of sustainable infrastructure services and contributing to flexible planning in line with transformations and changes. The huge carbon footprint created by our cities results from poor planning and layout. Huge gains, in terms of reducing harmful gases and economic losses from climate impacts can be made by changing how cities and towns are planned built and managed<sup>7</sup>. The use of ecosystems for urban climate change adaptation, mitigation

and disaster risk reduction is a rapidly growing research and action area, and one with immense potential and significant challenges<sup>7</sup>.

Nature-based solutions have a multi-purpose character, addressing specific demands or challenges, and at the same time maximising other environmental, social and economic co-benefits. They represent an effective, resource-efficient and flexible approach to sustainable and inclusive economic growth, while improving human health and well-being and the natural environment.

### Overview of urbanization process in participating countries

According to the latest reports prepared for the HABITAT III conference in 2016 for the four participating countries, all of them are experiencing a fast and uncontrolled transition of population from rural to urban areas. In these reports, all four countries identify risks associated to climate extreme events and climate change as well as an increasing need to strengthen local governments in their capacity to design and implement urban planning strategies that unlock the adaptation and mitigation potential of urban centres.

Table 1: Overview of the urbanization trends in the four participating countries and the main challenges identified in the HABITAT III reports.

	Cuba <sup>8</sup>	Ecuador <sup>9</sup>	Honduras <sup>10</sup>	Dominican Republic
Urban population	76,8% (est 2012 census)	74.3% estimates based on 2010 census	53.96% in 2013	78.7%
Urban population growth	Cuba is considered as an advanced urban transition country with significant urban growth in the last 50 years	Up 23 percentage points between 1970 and 2010	up 8 percentage points between 2001 and 2013	28.8% increase in urban population between 2002 and 2016)
Urbanization trend	During the last 50 years Cuba has undertaken concrete actions to decentralize Havana's leadership based on the development of other cities and promote the concentration of the rural population to provide smaller settlements with basic infrastructure and services.  The capital of the country, provincial and municipal head cities have developed planning instruments that define their physical development, which are periodically updated. Around 70% of the current Cuban population	While urban population of metropolis like Quito and Guayaquil are decreasing (43 to 41% of total urban population between 2001 and 2010), smaller and intermediate cities' populations, like Machala, are growing (representing 59% of total population in 2010, accordingly)	The growth of the urban population in Honduras has been accelerated, the urban population of the country, reaches more than half of the total population of the country. Population pressure on urban spaces has changed urban morphology in Honduras' major cities manifesting themselves in smaller lots, un-urbanized lots (without basic services) and informal settlements located in areas of risk to floods and landslides	Agricultural areas and small cities in the peripheries have tended to become depopulated in favour of a growth in the "colonization" of urban-rural territories of increasing economic development, mainly in the two most densified cities: Greater Santo Domingo and Santiago.

<sup>7</sup> Brink, E. et al. (2016) Cascades of Green: a review of ecosystem-based adaptation in urban areas, Global Environmental Change 36: 111-123.

<sup>8</sup> <https://uploads.habitat3.org/hb3/National-Report-LAC-Cuba-Spanish.pdf>

<sup>9</sup> <https://uploads.habitat3.org/hb3/National-Report-Ecuador-spanish.pdf>

<sup>10</sup> [https://uploads.habitat3.org/hb3/INFORME\\_REPUBLICA\\_DE\\_HONDURAS\\_ES.pdf](https://uploads.habitat3.org/hb3/INFORME_REPUBLICA_DE_HONDURAS_ES.pdf)

	lives in urban areas with some kind of development planning			
Size and number of urban areas	Around 7000 population nodes including 597 centers classified as urban areas and 58 classified as cities	224 municipalities, among which 205 are considered "small".	289 municipalities	Political-administrative division of the national territory in the Dominican Republic is given by 31 provinces and the National District
Main climate change impacts that have affected cities in the past 25 years	Alternate and recurring droughts and floods, heavy rains and winds, severe weather events, heat waves and sea level rise are identified as the main climate risks for urban areas. In the last 20 years 14 hurricanes have battered Cuba, including 4 category 4, and 5 category 5 hurricanes	<b>Between 1970 and 2007</b> , there is a gradual increase in anomalous climatic events, especially in the areas of the Coast and the Amazon – among all extreme events that have caused damages, <i>climatic events</i> are associated with 78% of the total deaths and 84% of the total homes destroyed and / or affected by extreme events. <b>Between 1996 and 2006</b> , on average, an increase in the precipitation in the Coast region of 33%, and the Guayaquil region has been changes in the rainy season periodically Likewise, 30% of the populations in the regions of the the coast and the Amazon are subject to periodic floods	<b>1998</b> : Hurricane Mitch affected most of the urban infrastructure of Honduras and mainly those neighbourhoods and homes located in the flood plains. <b>2014 and 2015</b> : the most severe droughts in the last 20 years affected more than 100 municipalities	According to the Global Climate Risk Index 2015 prepared by Germanwatch (Kreft et. Al. 2014), the Dominican Republic ranks eighth in the world as the most vulnerable country to the effects of climate change and extreme hydrometeorological events
Other challenges	There is a need to increase the capacities of local governments and communities in planning, urban management and housing. Integrated approach. There is a clear need to design and implement policies for cities that contribute to the reordering of the modes of transport of the population in urban spaces	Urban growth has been uncontrolled and outside the urban limit, causing social and territorial fragmentation, and great anthropic pressure on ecologically sensitive and agro-productive territories.	Rapid urbanization meant migratory population settled in undeveloped lots (without basic services) and informal settlements located in areas at risk of flooding and landslides	Important demands from civil society to expand the coverage and quality of drinking water and basic sanitation (the Government has declared the period 2016-2020 as the four-year period for water)

### **Participant countries GHG inventory status**

In terms of GHG emissions, all four countries have conducted GHG inventories included in their most recent national communications. These inventories have been developed at the national level following the standard methodologies proposed under the UNFCCC. Only a few cities in these countries have attempted to develop GHG inventories at the city scale.

**In the Dominican Republic**, following the recommendations of the Third National Communication to the UNFCCC, the Biennial Update Report (BUR01) included the development of GHG emission inventories at the subnational level (provinces and municipalities), but the country is faced with the lack of resources and capacities to address such an effort. Institutions were advised to include this in other initiatives (such as CBIT) and national efforts (such as the NDC). In the city of Santiago, a first experience was created to generate a GHG Inventory, with the support of the IADB-ESC Program, the findings were published in 2015 in the document: "Climate Change, Natural Risks and Urban Growth in Santiago de los Caballeros"<sup>11</sup>. The report includes the city's only GHG inventory available. In absolute terms, the emissions of the municipality of Santiago in 2013 were 3,196,689 t of CO<sub>2</sub>e. Part of these emissions are offset by removals, which in 2013 amounted to -123,311 t of CO<sub>2</sub>e, resulting in a net balance of emissions of 3,073,378 t of CO<sub>2</sub>e. The main emitting sector is "Industry + IPPU" with 41% of the total emissions, mainly due to emissions associated with the cement industrial process. After this, the mobility sector is the second with the highest contribution to greenhouse gas emissions with 21%. Given the lack of quality alternatives to journeys in private vehicles and the inefficient mobility and urban planning network, it is a sector with great potential mobility to reduce emissions. The third most important emitting sector is residential with 19% of total emissions mainly due to electricity consumption.

**In Ecuador**, The total emissions of the GHG Emissions National Inventory of 2012 of Ecuador amounted a total of 80,627.16 Gg of CO<sub>2</sub> eq, of which the Energy sector generates the highest contribution with 46.63% of these emissions, followed by the AFOLU sector with 25.35% of total net emissions (net value resulting from emissions minus removals). The third place is occupied by the sector Agriculture with 18.17% of GHG emitted into the atmosphere. The IPPU and waste sector together represent approximately 10% of emissions of the country, registering 5.67% and 4.19%, in each case. The city of Machala has never performed a local GHG Inventory process in the past.

**In Honduras**, According to data extracted from the Third National Communication the distribution of gross emissions in Honduras in 2005 in the sectors was: Energy (38%); LULUCF (28%); Agriculture (26%); Waste (5%) and IPPU (3%). For 2015 the distribution was: Energy (41%); LULUCF (31%); Agriculture (15%); IPPU (7%) and Waste (6%). Although Honduras has no sub-national level GHG inventory systems, sub-national governments integrate the technical teams to create the National System of GHG Inventories, specifically for the National Reference Emissions Level from the Forestry Sector (NREL). Moreover, Tegucigalpa is the first municipality in the country that has an Inventory of Greenhouse Gases (GHG), prepared in 2014<sup>12</sup>.

**In Cuba**, in the context of the national inventories carried out with information up to 2015, included in the Third National Communication for 2020, the emissions of the sectors that contribute to the GHG, including all the cities of the country, have been included. Regarding the cities proposed for the project, the relevant inventoried emissions include industries, transportation, cooking of food and the surrounding agricultural activity: livestock (mainly in Camagüey), pig farms, rice crops (Manzanillo) and other crops. With regard to Santa Clara, the heat island effect has been studied.

The methodological approach of the national GHG inventories is certainly a barrier in terms of estimating the mitigation potential in urban areas, however, the availability of these national assessments together with more simple and adapted tools for local governments can create an interesting combination in the analysis of mitigation potential from cities and their contribution to the objectives set in the NDC.

### **Urban planning process at the national and municipal level**

<sup>11</sup> <http://santiagosostenible.do/wp-content/uploads/2017/05/Ind.-028-031-Mitigaci%3%b3n-cambio-clim%3%a1tico.pdf>

<sup>12</sup> <https://webimages.iadb.org/PDF/Plan+de+Accion+-+Tegucigalpa.pdf>

Urban planning processes determine the opportunities and key actors that should be considered in the identification of opportunities for NbS integration into urban planning. As summarized below, most countries are undertaking significant decentralization efforts that in turn require an equivalent effort in strengthening sub-national decision-making structures through technical capacity building, institutional articulation, and data analysis to inform these processes.

**Ecuador** is organized through “Decentralized autonomous-governments” (GADs), that operate at three different level: Provincial, Cantonal and at the Parish level. They are in turn respectively led by Prefects, Mayors and Parish *Juntas*. As mandated by the Constitution, these GAD are autonomous in regards of their administrative, political and financial capacity, even if they have the obligation to observe the legal, territorial, and economic unity, as well as to guarantee equal treatment and the sovereignty of the State. Each level of government is thus ruled by its own regulations and policies, and these mandates are renewed through electoral processes every 4 years. According to their own characteristics, each GAD receives an allocated amount of the national budget every year in a direct, timely and automatic process. They then have the autonomy to generate and manage their own resources. At the municipal level, the GADs also ratify the competences for the organization and management of the land as a fundamental axis in the elaboration of the development plan and territorial ordering and unifies in its normative body the special laws of the sector. Citizen participation in decision-making related to land management is also promoted through the creation of citizen participation systems in each GAD, which implement participatory planning processes, participatory budgets and accountability mechanisms, through which citizens, individually or collectively, can participate in local government decision-making<sup>13</sup>.

**In Cuba**, the Physical Planning Institute (IPF) is the leading institution in Cuba for Territorial Planning (POT), playing a leading role in the implementation of territorial and urban policies related to the use of land and buildings, the location of investments, the territorial organization of the Human Settlement System and the physical-spatial structure. The POTs are carried out at the provincial level, and Urban Planning (POU) at the municipal level with the participation of the actors at both levels. All government agencies, mass organizations and other relevant local actors participate in the planning and implementation of the POU. The plan is presented and approved at the level of Municipal and Provincial Governments for small cities, while a technical review is also done at the national level and approved at the Council of Ministers’ level for intermediate and big cities, such as Manzanillo and Camagüey. The National Territorial Planning Scheme (ENOT) is the highest territorial planning instrument, led by the bodies of the Central Administration of the State (OACE), other national entities and criteria of the Councils of the Provincial Administration.

Cuba recently started a process of decentralization to give more autonomy to the territories, with the aim of more efficiently achieving development objectives. This process did not affect IPF and urban planning, which had previously had delegations at the provincial and municipal levels. On a financial aspect, cities manage 2 budgets: their own and national’s. 1% of taxes on companies and other sectors of the economy constitute contributions to the city Government to carry out actions to improve the quality of life of the inhabitants. Municipalities and provinces can develop tax collection agreements and thus acquire more autonomy in investments. The investment process requires a systematic work of analysis, consultation and consent for its implementation as part of the development of each locality. Those of greater scope are the object of studies that can be consulted at the national or provincial level, according to the financial amount and the relevance of the investment, and in alignment with what is outlined by the national development plan. The recent Tax System Act establishes a tax on ownership of homes and urbanized land. However, this legal rule differs from the application of this tax that is only approved by the Budget Act for the corresponding year<sup>14</sup>. The municipal budget is created by the municipal Government with the municipal directorates of health, education, urban maintenance, hydraulic resources, physical planning, etc. The plan at the municipality and province level is approved every year in the country’s annual Economic Plan of the Ministry of Economy and Planning. Regarding national budgets, according to the 2030 Plan, priority is given to the budget for the country’s development.

**In Honduras**, urban planning processes are led by internal agencies, among which the Directorate of Territorial Regulation (DOT) that leads the revision of the Municipal Development Plan with a Territorial Regulation approach, the Municipal Policy for Comprehensive Risk Management and the Municipal Zoning Regulation; while the Municipal Unit Of Integral Risk Management (UMGIR) leads the Planning for the Assets’ Adaptation to Climate Change (PACC), the Project for the Control and Mitigation of Disasters in the Slopes of the Central District (JICA) and the Resilient Neighbourhood Project (GOAL). Other planning processes, such as the Urban Adaptation

<sup>13</sup> [https://www.machala.gob.ec/PDF/Planes/PDyOT\\_2018.pdf](https://www.machala.gob.ec/PDF/Planes/PDyOT_2018.pdf)

<sup>14</sup> Resolution No. 114 of the Ministry of Justice of 29 June 2007 put into force “*Rules and procedures for the organization and operation of the registration of property*”, which regulates the registration of property, rights, acts and circumstances there of property as a guarantee of legal certainty, including transfers of domain

Program, Master Plan of the Historic Center of the capital city, Green Building Code and Urban Mobility Master Plan are led by specialized unit within each Ministry. Finally, it is important to highlight that the Municipal Mayor's Office of the Central District of Tegucigalpa (AMDC) partners with several international platforms of sustainable cities mentioned above, among which ICLEI and UCCI and CC35<sup>15</sup> a 2020-founded initiative. On another hand, with the implementation of the Honduras Land Administration Program Phase II, 16 Municipal Development Plans were developed with a focus on Territorial Planning, carried out by 6 different institutions or companies linked to the sector. This set the base to articulate and link the planning with the budget with the institutional roles of the Secretariat of the Interior and Population (SEIP), the Association of Municipalities of Honduras.

According to Articles 294, 299 and 301 of the Honduras Constitution, the national territory is divided into departments. The departments are divided into autonomous municipalities administered by corporations elected by the people. The economic and social development of the municipalities must be part of the National development Plan. The taxes and contributions levied on income enter into the Municipal Treasury in the cases when investments are made in the respective municipal understanding, as well as the participation that corresponds to municipalities for the exploitation or industrialization of natural resources located in their jurisdiction, unless reasons of national convenience require other destinations.

**In the Dominican Republic**, urban planning falls into municipalities' responsibility and is led by the Mayors with the support of the Ministry of Economy, Planning and Development (MEPyD) and its Directorate of Territorial Planning and Development (DGODT)<sup>16</sup>. Municipal Territorial Development Plans (PDOT) include urban planning and are established every 12 years. The rapid urbanization has reshaped the delimitation of roles of actors at the national and local level, and the MEPyD has established tools to support local governments to lead a participatory process of territorial planning<sup>17</sup>, encouraging them to revise and update, at the beginning of each management period (every 4 years) their municipal development plans, with the support of the Municipal Development Council and through a structured participation process. For the PDOTs formulation processes, consultation spaces are established, composed of various local actors (national public institutions, private sector, community organizations, among others) and consulted through different mechanisms depending on the city. In the case of Santiago, they are based on the existing structures within the Council for Strategic Development of Santiago (CDES), in the case of the National District, consultation spaces are organized by geographical areas (Circumscriptions 1, 2 and 3) composed of the relevant actors in each unit.

Although Dominican municipalities are legally defined as decentralized legal entities, with political, fiscal, administrative and functional autonomy<sup>18</sup>, the process of functional and fiscal decentralization has not fully materialized, mainly by the lack of financial resources. The municipal budgets are provided by the national government and consists on national, international and private sector sources of funding<sup>19</sup>. In the last 10 years the amount transferred has not exceeded 4% of the annual budget of the State, insufficient considering that the 2005 law stipulates it should be 10%. Municipalities fiscal capacity is also limited, as they have the power to set fees for the specific services in their domain, but they do not generate a significant amount of revenue. Plus, in accordance with the current legal framework, municipalities must request prior authorization from the Central Government before initiating any management of public credit operations, with the exception of the waste management sector (Habitat III Report, 2016). Large cities have some collection capacities, for example, in the city of Santo Domingo (National District), municipal own collections account for approximately 50% of their annual revenue budget, while in other cities (Santiago and other medium-sized cities), it does not exceed 30%.

### **Complementarity with National Adaptation Plans Financing Strategies**

The project will support national governments understand and demonstrate technologies for climate change adaptation by implementing urban NbS interventions at three different levels of government across pilot cities, a fact that will help execute NAPs in an integrated and cost-effective way and/or update the NAPs financial strategies when available. Sustainable financing mechanisms of the project will support the upscaling of urban NbS in each country. Furthermore, project design strategies – with relevant planning departments and ministries – to upscale NbS across urban and peri-urban areas will include the development of municipal roadmaps to

<sup>15</sup> [http://cc35.city/assets/\\_americas-accelerator-platform\\_cc35-2020.pdf](http://cc35.city/assets/_americas-accelerator-platform_cc35-2020.pdf)

<sup>16</sup> According to General Law on the Environment and Natural Resources (Law 64-00 of August 18, 2000),

<sup>17</sup> Methodological Guide to the Formulation of Municipal Land Planning Plans – available at <https://mepyd.gob.do/publicaciones/guia-metodologica-para-la-formulacion-del-plan-municipal-de-ordenamiento-territorial>

<sup>18</sup> Constitution of the Dominican Republic, 13 June 2015.

<sup>19</sup> As established by Law No. 166-03 on the participation of the Municipalities in the total income of the Dominican State, of October 6, 2003, revised in 2005

integrate best practice NbS and prioritized areas for this approach and sustainable finance strategies to upscale the interventions after the project lifespan.

These strategies will describe in detail: i) lessons learned through the project and other related initiatives in the LAC region; ii) the benefits of urban NbS, particularly its cost-effectiveness relative to other approaches for adapting to climate change; iii) recommendations for mainstreaming urban NbS into national and local development planning such as the NAPs; iv) the potential roles and responsibilities of stakeholders in each country related to the upscaling of urban NbS approaches; and v) sustainable financing mechanisms to support the upscaling of urban NbS in each country through NAP financial strategies when available.

### **Participant countries national climate change planning frameworks**

The identification of NbS at the urban level must directly contribute to national efforts on adaptation and mitigation and can provide insights into the underestimated potential of urban areas towards these national goals. All participating countries have developed climate change action frameworks that help shape the priority areas where action at the city scale could focus on.

**Cuba.** NDC adaptation strategies include increasing cities' resilience even if it is not addressed specifically: in its 2nd National communication to the UNFCCC (2015), urban adaptation is indeed integrated in two priorities – agriculture and health. The former describes the loss of biological diversity in urban areas as a major threat for human well-being, especially with changes in diseases patterns. Although urban adaptation is not integrated, the document proposes a national strategy for the sustainable development of urban and peri-urban agriculture to ensure food security.

There are currently two main national plans in the country that consider NbS, the first of them being *Tarea Vida*, State Plan to address Climate Change (2017), that indicates the resilient human settlements, in correspondence with policies of housing, Territorial Development, Improvement of the land use planning system and for land management and the *New Urban Agenda* as prioritized activities. On another hand, the *New Urban Agenda (NAU)* (2019) aims at perfecting the actions of urban planning through public consultation processes regarding the solutions to undertake in existing urbanized areas and those to be built, in order to fulfill the goals of SDG 11 and make the country's cities more resilient. The Caribbean island will also be mainstreaming NbS through the 2018-approved GCF project in Coastal Areas EbA, thus building capacity to replicate this experience into urban development planning. The national climate change management institutional arrangements involving sub-national government participation will be used for this project, and could feed into Nature4Cities' baseline assessments under output 2.1.1.

Moreover, the IPF developed between the years 2013-2016 a first project on urban resilience in three provinces with practical examples in the cities of Bayamo, Havana and Santiago de Cuba. Based on the exposure to various risks, the project dealt with risks, the demand for housing and the use of sustainable local construction materials. Despite of one Urban Green Areas Plan in Bayamo, NbS were not treated in these plans either. NbS are thus starting to be mainstreamed in the national regulatory frameworks, but need to be transferred to Provincial and Municipal instruments. Nature4Cities will complement the results from the urban resilience project by integrating NbS into the range of solutions and approaches towards resilience.

**Ecuador.** The National Climate Change Plan of Ecuador is the core instrument designed to make the mainstreaming of Climate Change action effective in the planning of initiatives that are carried out in the country. The Plan integrates actions aimed at (1) capacity building, (2) mitigation and (3) adaptation to climate change, focusing action measures from a sectoral perspective (energy, agriculture, water, ecosystems, capacity building, risk management and territories). The sectoral approach implies identifying and grouping the measures and actions in the field of mitigation, adaptation and strengthening of conditions, based on the prioritization of key sectors. The temporality of the National Plan agrees with the action guidelines of the National Climate Change Strategy that go up to 2025.

Human Settlements have been a prioritized sector in Ecuador's, according to its NDC, climate change National Strategy and national communications to UNFCCC, as it's considered as "particularly vulnerable" sector due to potential climate change impacts in commerce, transport and infrastructure. In its NDC, the country pledges for the reduction of risks related to human settlements through safe-land regulation and affordable housing in areas with low exposure to climate hazards.

In accordance with the UN-Habitat's Global Urban Agenda, Ecuador published its new 2036 Sustainable Habitat Agenda in September 2020. Its implementation over the next 16 years represents a historic opportunity to strengthen the key role of cities and human settlements as drivers of sustainability and the fight against climate change. Four main focus areas (equitability, production, sustainability and governance) are considered to build cities and human settlements' resilience. The initiative proposes a paradigm shift to consider cities through a scientific perspective and highlights the importance of mainstreaming this aspect in the cities' planification and the development of urban policies.

Ecuador has also released its *Applied urban research agenda* in 2020: the agenda underlines the need for applied research on urban spaces for the development of a society and the adaptation to emerging challenges,. The agenda identifies the priorities for applied research including climate change mitigation and adaptation as one of the key areas. This project would thus fit into this highlighted information gap and could contribute to increase the NbS content into the new urban priorities.

The GIZ Sustainable Intermediate Cities' project in Cuenca, Lago Agrio, Loja, and Portoviejo, and the Adaptation Fund project "*Reducing Climate Vulnerability and Flood Risk in Urban and Semi-Urban Coastal Areas of Latin American Cities*" aim at building capacities in urban adaptation in all these cities and focuses on climate risks management, such as flooding landslides in Esmeraldas.

**Honduras.** Being one of the most vulnerable countries to the adverse effects of climate change, the National Adaptation Plan is the core climate instrument in the country and it identifies six key priority areas and four cross-cutting axes, being one of these areas "Resilient Cities and Communities" and another one "Biodiversity and Ecosystem Services".

Moreover, the climate change law in Honduras mandates the creation of strategic and operational plans for climate change in key sectors, including human health, coastal marine areas, agriculture and livestock, forest resources, ecosystems and protected areas, and infrastructure. The country currently has seven sectoral adaptation strategies: National Strategy on Adaptation to Climate Change for the Agricultural-food Sector of Honduras (2014-2024); National Strategy on Adaptation to Climate Change for the Health Sector; National Strategy on Climate Change for the coffee sector; Adaptive Strategy for the Coastal Marine Sector (for the Mesoamerican Caribbean); Mitigation Strategy on the Effects of Climate Change and Vulnerability Reduction in the Garifuna Coast of Honduras; Local Adaptation Strategy to Climate Change in the middle basin of the Guacerique River and Aguán River Basin Adaptation Strategy. A sectoral strategy for the forestry sector is currently under development. However, it has been noted that the sectors of Infrastructure and Water Resources, both of high relevance for the country, do not have these strategies yet.

Finally, Honduras has two adaptation projects related to urban areas and EbA, financed by the Adaptation Fund at the Central Forest Corridor of Tegucigalpa City. Water management is one of the most important topics prioritized in the NAP of Honduras. The project "Addressing Climate Change Risks on Water Resources in Honduras: Increased Systemic Resilience and Reduced Vulnerability of the Urban Poor" as well as the project "Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa" aims at increasing climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of Tegucigalpa and surroundings aimed at this specific topic. These projects help design adaptation strategies for the infrastructure and water management sectors at the local levels and their outcomes where incorporated into the National Adaption Plan.

**Dominican Republic.** In 2008 the Dominican Republic developed a NAPA, as part of the preparation of the Second National Communication to the UNFCCC, which was submitted in 2009. Since then, the country has made relevant progress in several adaptation fronts: i) the NAPA was updated in 2016, for the period 2015-2030, ii) an adaptation roadmap was developed in 2016-2017 as part of the preparation of the Third National Communication to the UNFCCC, and 3) vulnerability assessments have been conducted and some studies have provided information on the cost of adaptation. In addition, adaptation planning has taken place in some sectors such as agriculture, water, forestry and tourism. As of the year 2010, the territorial ordering acquires constitutional character, whose Article 194 establishes that "*It is a priority of the State the formulation and execution by law of a territorial organization plan that ensures the efficient and sustainable use of the natural resources of the Nation, in accordance with the need to adapt to climate change*" (UN Habitat, 2016).

The National Adaptation Plan (NAP), currently being developed by the GCF readiness programme, intends to develop 5 adaptation plans at the municipal level in urban areas (Santo Domingo and the other 4 most populous

cities in the country) and a concept note for two adaptation programmes, one of which will be focusing on urban areas (covering Santo Domingo and 4 other cities). The NAP process in the Dominican Republic will have a comprehensive scope, integrating climate change adaptation in development policies, plans and actions across sectors. Importantly, the Dominican Republic NAP process will prioritize ecosystem-based adaptation, identifying synergies between socio-economic benefits and environmental benefits in the medium and long term. It is also noteworthy that Dominican Republic NDC prioritizes ecosystem-based adaptation, integrated water management, health, food security, floods and droughts, and coastal-marine areas amongst other approaches.

In 2019, Dominican Republic started the implementation of a project financed by the Adaptation Fund: “Enhancing Climate Resilience in San Cristóbal province, Dominican Republic Integrated Water Resources Management and Rural Development Programme”. This Program will work directly with 5 strategic axis: Improving water security and food security; Promote the built environment and climate-proof infrastructure; Promoting Healthy and Resilient Communities; Increasing the resilience of ecosystems, biodiversity and forests; Enabling competitiveness through environmental sustainability and climate resilience. There has been some progress on local adaptation, with progress in five main cities (Santo Domingo, San Pedro de Macoris, Santiago and Las Terrenas) and the establishment of the National Coalition for Resilient Cities, however, the approach that has been given to programs related to protected areas and the system of payment and compensation for environmental services, for example, has not been expressly related to this concept of NBS and to the unfolding of the multiple functionalities that it has in the ecosystem approach for addressing problems and building resilience capacity.

The current proposal would complement the adaptation initiatives at the city-level, specially Santo Domingo and Santiago. It could promote the establishment of the Municipal Environmental Management Units (UGAM) in the identified cities, as well as for the deployment and coordination of plans, programs or actions of this type, which directly link the Ministry of Environment and Natural Resources. It would also greatly benefit to fill the data collection gap regarding current regulations with opportunities for inclusion of NBS. In essence, it could strengthen the inter-institutional coordination for the development of joint actions, and thus avoid gaps and/or duplication of efforts and guarantee greater effectiveness in the envisaged enforcements within this area.

### **Integration of climate change at the city-level planning systems**

**In the Dominican Republic**, within the framework of the Planning Program for Climate Adaptation, the territorial planning instruments for the adaptation of municipal cities were formulated<sup>20</sup>. The cities of Santo Domingo (National District) and Santiago developed climate vulnerability assessments for Territorial Planning Plans in 2016<sup>21</sup> and Adaptation Action Plans in 2017<sup>22,23</sup>, including: main climate impacts and vulnerabilities; adaptation strategies and measures and; implementation criteria. The abovementioned “*Climate Change, Natural Risks and Urban Growth in Santiago de los Caballeros. Climate Change and Urban Studies for Santiago de los Caballeros*” was the result of the creation of a multisectoral Group of Mitigation to Climate Change which created a roadmap for the mitigation actions prioritized by the city, in line with the GHG emissions inventory results. These plans are established within Municipal Authorities, with the consultation of the Municipal Development Councils composed of public authorities and private actors. Depending on the level of economic, social development and population size of cities, these groups have different levels of citizen empowerment: the case of the Santiago Strategic Development Council (CDES) is one of the most solid examples.

**In Ecuador**, the PDOTs are elaborated by the *Technical Secretariat of Planification for Ecuador* (SENPLADES) every 4-year, for the different GADs<sup>24</sup>. In accordance to the 2017 *Organic Code of the Environment*, that determines that “*The autonomous decentralized provincial, municipal or metropolitan governments, within the scope of their competences, will incorporate measures to respond to the effects of climate change in their policies and instruments of land use planning*”<sup>25</sup>, the ministry and the SENPLADES developed different toolboxes<sup>26</sup> for the periodic revisions of the PDOT for the integration of climate change in all of PDOTs and local policies. They are also implementing a new programme to enforce the inclusion of adaptation and mitigation measures by the GADs, with a strong emphasis on planification; activities are currently at the state of capacity training and

<sup>20</sup> [https://www.programaecomar.com/RCC4ProEcoMar\[20-06-2018\].pdf](https://www.programaecomar.com/RCC4ProEcoMar[20-06-2018].pdf)

<sup>21</sup> <http://adn.gob.do/pot/3-PLAN-DE-ADAPTACION-DEL-DISTRITO-NACIONAL/3.1-%5BDN%5d-Evaluacion-de-Vulnerabilidad.pdf>

<sup>22</sup> <http://adn.gob.do/pot/3-PLAN-DE-ADAPTACION-DEL-DISTRITO-NACIONAL/3.9-%5BDN%5D-Plan-de-Medidas-de-Adaptacion.pdf>

<sup>23</sup> <https://sismap.gob.do/Municipal/uploads/evidencias/637092454699739960-12-nov-2019-Plan-de-Medidas-de-Adaptacin-del-Municipio-Ayuntamiento-de-Santiago.pdf>

<sup>24</sup> <https://www.planificacion.gob.ec/guias-para-la-formulacion-actualizacion-de-los-pdot/>

<sup>25</sup> [https://www.ambiente.gob.ec/wp-content/uploads/downloads/2018/01/CODIGO\\_ORGANICO\\_AMBIENTE.pdf](https://www.ambiente.gob.ec/wp-content/uploads/downloads/2018/01/CODIGO_ORGANICO_AMBIENTE.pdf) Article 252

<sup>26</sup> <https://www.planificacion.gob.ec/wp-content/uploads/2019/09/Caja-de-herramientas-Cambio-Clima%CC%81tico-.pdf>

technical advice. In addition to this planning approach, the Interinstitutional Committee on Climate Change (CICC) was created in 2010, coordinated by the Ministry of Environment and Water. Among its members are the strategic sectoral entities, the Consortium of Provincial Autonomous Governments of Ecuador (CONGOPE) and the Municipal Associations of Ecuador (AME)<sup>27</sup>. The AME is an associative instance of municipal and metropolitan GADs that promotes the construction of a decentralized and autonomous local management model; among its roles, it serves as an intermediate actor coordinating municipalities and ministries. Through its collaboration with the Ministry of Environment and Water, the AME coordinates the National System of Municipal Indicators (SNIM), where climate change indicators have been designed and should soon be integrated<sup>28</sup>.

**In Honduras**, at the national level, the Inter-institutional Committee on Climate Change (CICC), a participatory platform to formulate public policies, monitoring and reducing the negative impacts of climate change in the country, and its technical arm, the Inter-institutional Technical Committee on Climate Change (CTICC), were created in 2010. They are composed by thematic groups and receive counselling from the Regional Development Councils, and the AMDC is invited to participate in the CITCC meetings<sup>29</sup>. They produce guidelines for the integration of climate change in public policies, and from these frameworks and the National Climate Change policies, municipalities can derive their own Plans. This is how the AMDC elaborated a local adaptation to climate change plan, through which they conducted a Municipal Institutional Diagnosis (DIM) in adaptation and projected adaptation plans for the urban area and 5 sub-watersheds and 33 micro-basins around the city. Within the AMDC, two agencies are been responsible for dealing with issues related to climate change: the Municipal Unit for Comprehensive Risk Management (UMGIR) and the Environmental Management Unit (UGA). On the one hand, the UMGIR is in charge of Comprehensive Disaster Risk Management issues, and because of its direct relationship with the issue, it assumes responsibility for issues of adaptation to climate change, both at the level of regulations and plans, as well as at the level of projects and specific actions in the municipality. The UGA, on the other hand, has been the agency in charge of actions related to climate change mitigation, due to the relationship of this issue with environmental management, air quality, waste and environmental conservation.

**In Cuba**, the Ministry of Science, Technology and Environment (CITMA) has representation at the provincial level through the Environment Units (UMA), and leads the multidisciplinary and inter-institutional working group for the studies of Hazard, Vulnerability and Risk, assesses the impacts and vulnerability, and guides the adaptation and mitigation of climate change. All relevant provincial institutions intervene, like Environment, Civil Defense, Physical Planning, Hydraulic Resources, Agriculture, Meteorology, as well as the Government authorities. These working groups work at the provincial level, gathering the inputs at the local level and with the support of the national Government. The results and recommendations for policy makers from these studies are included in the Territorial Planning (POT) and Urban Planning (POU). POTs and POU also include the conclusions from the provincial, local and sectorial Disaster Reduction Plans (PRD) coordinated by the Civil Defense. Since 2017, through the State Plan to address Climate Change (Tarea Vida), attention to climate change has been systematized at municipal, provincial and sectoral levels, starting from the climate change scenarios to 2050 and 2100 to identify the areas of greatest impact. Actions are planned to solve the most critical problems and apply a diversity of actions to reduce the effects of climate change, including engineering solutions, EbA, settlement relocations, changes in construction typologies, and regulations and prohibitions as prevention measures. On another hand, Cuba's State Plan for the New Urban Agenda, includes lines of work for the environment and climate change and Hazard, Vulnerability and Risk studies, as well as the State Plan for addressing Climate Change (Tarea Vida) and the Civil Defense Disaster Reduction Directive 1/2010. Each province and municipality undertake the territorial planning following the national policy and the methodological documents. At the local level, there are also Local Development Plans and Integral Territorial Development Plans, from which priorities framework arise.

## **Global and regional initiatives for NBS in urban areas**

### **Regional projects**

Understanding ecosystem services transcends a single territory, and cities can take advantage of other urban areas' expertise. In this regard, UNEP has been implementing a regional project that aims at building capacities, mainstream NbS into city planning processes and enhance their resilience to climate change. The project is based

<sup>27</sup> <http://extwprlegs1.fao.org/docs/pdf/ecu140057.pdf>

<sup>28</sup> <https://www.snim.ame.gob.ec/> and [https://plataformamunicipal.ame.gob.ec/Servicios\\_IndicadoresMunicipales.html](https://plataformamunicipal.ame.gob.ec/Servicios_IndicadoresMunicipales.html) information completed by Rosana Gonzalez, Ministry focal Point

<sup>29</sup> ANED, MiAmbiente, INVESTH, 2020, Plan local de Adaptación al cambio climático, AMDC

in three pilot cities (Xalapa, Mexico, San Salvador, El Salvador and Kingston, Jamaica) with demonstrative activities that will be gathered in a regional online platform on NbS for adaptation in cities ([www.cityadapt.com](http://www.cityadapt.com)), to provide regional guidelines and technical assistance for the mainstreaming of EbA in urban areas. This proposal will build on the exiting experience from CityAdapt, using methodologies developed in this project and working in synergy with actors that have collaborated with this GEF initiative.

Based on the experience gained with the implementation of CityAdapt, UNEP also implemented an e-learning on “*Financing Climate Action in Cities: Nature-Based Solutions as a Mechanism for Adaptation in Latin America and the Caribbean*” that involved participants from 15 countries and 40 cities across the region. The initiative presents a strong precedent that the proposal will build upon regarding capacity strengthening for the mainstreaming of NbS at the urban level in LAC.

In addition to this regional project, Nature4Cities would draw lessons from the IADB Emerging and Sustainable Cities (ESC) program, that provides cross-cutting technical assistance to support national and subnational governments in the development and execution of city action plans that integrate climate change, environmental and urban sustainability. The program counts on a large network made up of more than 160 LAC cities, mostly intermediate and metropolitan. It provides practical tools, proposing general city diagnoses in order to identify action lines to be financed. In addition to the IADB programme, other political networks are recognized for their work in the promotion of cities’ participative, inclusive and integrated sustainable development in the region: Mercociudades, for instance, is a network of local governments that has been working for more than 25 years in the issue – but only in South America. Considering both initiatives focus mostly on big cities in advanced economies in LAC, none of the cities selected in this proposal are part of these initiatives. Not only would Nature4Cities provide a new regional focus to intermediate cities, but it would also add value to these networks by promoting stronger vulnerability assessments and the integration of financial consideration into the urban planning.

Considering almost all cities for climate action networks are focused on mainstreaming urban integrated planning approaches, this proposal will help integrate the specific approach of NbS as a concrete approach for adaptation. In this regard, the proposal will liaise with knowledge management platforms, such as the International Association of Local Governments for Sustainability (ICLEI) and the Fundación Futuro Latinoamericano (FFLA), of the Climate and Development Knowledge Network (CDKN), initiatives that provide useful practical approaches to help communities understand and develop effective network governance systems, with a particular urban program aimed at building Resilient Cities. They promote tools such as CCORAL and ARIA to empower communities to take control of the adaptation process and better understand the institutional arrangements that affect their ability to build resilience on the ground. Their scope been more focused on awareness raising and sensitization activities, this proposal will disseminate their tools under component 5.2., but will provide a specific focus on NBS for adaptation in each of the selected city.

Several other countries, cities and local institutions in the LAC region are exploring and implementing NbS. This project could thus build on this regional baseline, which includes a guide for integrating NBS in urban planning was launched in Colombia<sup>30</sup> and a series of activities to create capacity on NbS at governmental level and civil society level in México<sup>31</sup> among others. This proposal will foster the exchange of experiences and connect the different initiatives and stakeholders to accelerate the implementation of the NBS, through this project’s platform and community of practices.

This Readiness proposal will further build on the experiences from the Euroclima+ “*Regional Collaboration in the transparency frameworks and compliance of Nationally Determined Contributions and preparation of Long-Term Climate Strategies*”, led by UNEP, ECLAC, GIZ and FIAPP, between 2019 and 2022. This regional cooperation program includes the goal of creating installed capacities to carry out climate action plans with national urban development platforms, in line with the NDCs and LTSs.

Finally, the project will create synergies with another UNEP regional Readiness proposal named “*Increasing the ambition of the NDCs and climate financing in the Central America*”, being currently revised by the GCF, and of which the Dominican Republic and Honduras are currently part of. This proposal includes the creation of Guidance for engagement of Private sector and subnational stakeholders on updated NDCs and it will strongly focus on the creation of a portfolio of private sector NDC actions and partnerships, including cities, to be developed in each participant country, with a regional focus.

<sup>30</sup> <http://www.humboldt.org.co/es/component/k2/item/1536-guia-para-la-integracion-de-las-soluciones-basadas-en-la-naturaleza-en-la-planificacion-urbana-primera-aproximacion-para-colombia>

<sup>31</sup> <https://wrimexico.org/our-work/topics/sustainable-cities>

### Building capacities from global initiatives

Cities from LAC take part in wider initiatives that, despite a global scope, advocate international action and cooperation from a local perspective, allowing professionalization and strengthening of local and regional governments. This is the case of the Euro-Latin American Cooperation Alliance, the Allas Project<sup>32</sup>, a dialogue platform between cities, that aims at improving public policies and territorial development by promoting administrative, legal, and institutional changes. Working to achieve transformational changes is also the aim of the City Resilience Program, in which around twenty LAC cities have reached WB and GFDRR financing to increase their Planning, Financing and Partnerships for Resilience.

At the global level, UNEP coordinates the Global Environmental Facility (GEF) Sustainable Cities Impact Programme Global Platform (SCIP-GP), for the 2018-2025 period, in charge of promoting common methodologies and approaches to achieve sustainability in urban areas. The SCIP-GP is implemented in coordination with C40 and ICLEI, the first been a network composed of the mayors of the world's megacities committed to addressing climate change and achieving the Paris Agreement goals, and the second been a global network of local and regional governments committed to low emission, nature-based, equitable, resilient and circular urban development. It is also supported by the World Resources Institute (WRI), an institution that works directly with 120 cities in developing economies regarding strategic planning and data through its knowledge hub CityFixLearn. Several LAC cities are active members of these networks, looking to create systemic change in urban areas through practical, integrated solutions.

However, the SCIP-GP core is focused on mainstreaming urban integrated planning approaches. Urban sustainability in this platform builds on funds allocated by participant countries, coming from biodiversity, land use and climate mitigation GEF-STAR allocations. This proposal will help integrate the specific approach of NbS as a concrete approach for adaptation.

The proposal will also interact with a growing initiative, Friends of EbA (FEBA), that facilitates the linkages with a global collaborative network of more than eighty agencies and organizations involved in Ecosystem-based Adaptation (EbA). This collaboration will allow to share experiences and knowledge between institutions and improve the implementation of NbS activities on the ground, while having a stronger and more strategic learning and policy influence on NbS at country and city level.

This project will use as a reference the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC). The GPC seeks to help cities develop a comprehensive and robust greenhouse gas inventory in order to support climate action planning and help cities establish a base year emissions inventory, set reduction targets, and track their performance. Nature4Cities will help participant cities to measure the impacts of NbS implementation in reducing their GHG emissions and report this in future GPC inventories.

Nature4Cities will leverage experiences from the UNEP's Global Initiative for Resource Efficient Cities (GI-REC), integrating NbS concepts into circular economy approaches in cities. Working in both resource efficiency and climate change issues, the GI-REC has developed tools that measure local level contribution to circular economy at national and global levels. Considering both platforms are hosted by UNEP, Nature4Cities will provide its methodologies for the GI-REC to promote them in ongoing pilot cities in order to integrate NbS impacts in the contribution measurements towards achieving a circular economy.

### Expertise to be gained from global research programs

As demonstrated by the surge for these knowledge developments and sharing initiatives, the information gaps around NbS in urban areas is a key challenge in LAC. Adjusting solutions to local contexts can be realized by learning from global climate change research, these are some of the most relevant programs that could contribute to this:

- Urban Ecosystems Working Group within the Ecosystem Services Partnership (ESP): It provides a platform for researchers and practitioners to exchange information, tools, and best practices for assessing, mapping, and valuating ecosystem services provided by 'green and blue infrastructure' in urban areas, and to make the information available to a wider community of users. The tools presented in this platform could be of great use for infrastructure project that could integrate NbS from the sensitization activities carried out by Nature4Cities under output 5.1.

<sup>32</sup> <https://proyectoallas.net/>

- Observatory of Innovation for Sustainable Cities (OICS)<sup>33</sup>: Virtual platform for mapping and dissemination of innovative urban solutions, contextualized to the national territory through typologies of cities-region. This effort applies to the areas of water, solid waste, mobility, energy, built environment and nature-based solutions. This Brazilian platform has been launched in Q3 of 2020, and several exchange of experiences could be developed once both initiatives are advanced.
- Urban Climate Change Research Network<sup>34</sup> (UCCRN) is a consortium of over 800 individuals dedicated to the analysis of climate change mitigation and adaptation from an urban perspective, and to support appropriate city-level action. Led by the Colombian University, it focuses on knowledge sharing and could thus promote South-North knowledge exchange, using Nature4Cities input and its LAC focus.
- Nature-based Solutions Initiative<sup>35</sup>: Interdisciplinary programme of research, policy advice and education based at the University of Oxford. Its mission is to enhance understanding of the potential of Nature-based Solutions to address global challenges and increase their sustainable implementation worldwide. It provides a strong expertise on NbS, has limited on-the-ground experience and could gain from central American's examples on urban NbS.
- The Global Green-Gray: Community of Practice and European research projects allow to connect and exchange with the research, public and private sectors on the hybrid green-gray approach to implement NbS infrastructure to generate more knowledge, lesson learned and best practices for the NbS benefits and build climate resilience strategies for the cities, people and nature. While it is focused on Infrastructure, Nature4Cities would provide additional tools on soft solutions.
- IUCN Urban Nature Alliance: The IUCN Urban Nature Alliance raises awareness of the value of ecosystems in urban areas, and of how these ecosystems can help address urban challenges including air pollution, flooding and health problems caused by lack of access to quality green spaces. The Alliance is also working on a City Nature Index, providing a standardized way for cities to measure the quality of their underlying stock of natural resources – known as 'natural capital'. This presents an incentive for regional cities to join the network prior to the Nature4Cities initiative and join other global network incentivizing the integration of Nature in urban areas.

**Table 2. Complementarity of the proposal with other readiness investments**

Country – Project Title	Funding	Delivery Partner – Status	Description	Complementarity
Ecuador – “Green Climate Fund Readiness and Preparatory Support for Ecuador”	GCF readiness USD grant amount: 300,000	UNDP – Finalized in 2018	Proposal aims at developing no-objection procedures for GCF programme and to develop the GCF Country Programme	The current proposal will complement inputs generated from this project related to the establishment of exchange groups with the private sector and the development of the country work program with networks and concept notes developed at the city level. It would also serve to strengthen the country level no-objection process for new concepts entering the GCF CP.
Ecuador – “Ecuador NDA Institutional Strengthening and Digitalization Process”	GCF Readiness EUR grant amount: 450,000	GIZ - Under implementation since November 2019	The proposal has the objective to support the NDA's organization to improve complementarity and coherence between the activities of the GCF and activities of other relevant institutions, to better mobilize the full range of financial and technical capacities – focusing on the optimization of organization and human capacities.	Given that the proposal currently under implementation by GIZ focuses strongly on the design of a national climate finance strategy and on the development of tools to identify and monitor climate finance flows from international sources, there will be a close coordination to ensure complementarity of approaches with regards to climate finance, downscaling it to local actors and institutions.
Ecuador – “Enhance the capacity of	GCF Readiness	Fundación Avina	Project aiming at enhancing GADs at the province level in Ecuador to be able to access	The proposal from Fundación Avina is generating capacities and subnational governments at the province level to

<sup>33</sup> <https://oics.cggee.org.br/>

<sup>34</sup> <https://uccrn.ei.columbia.edu/>

<sup>35</sup> <https://www.naturebasedsolutionsinitiative.org/>

Decentralized Autonomous Governments to access and manage climate finance in Ecuador and contribute to the implementation of the NDC"	USD grant amount: 559,516	Under implementation since October 2018	climate finance from the Green Climate Fund and other sources of finance for the implementation of strategic and prioritized climate change-related activities.	access and manage climate finance. It is therefore, setting the first steps towards empowering these actors as important data providers with regards to climate finance and as users of the tools that the current proposal will develop. The project also provides the most updated and complete assessment of the capacities of subnational governments and are therefore a valuable input to the current proposal for the development of the stakeholder engagement plan under output 2.2.1, definition of monitoring frameworks and development of finance strategies.
Ecuador – "National Adaptation Plan in Ecuador"	GCF Readiness USD grant amount: 3,000,000	UNDP Under Implementation since February 2018	The NAP project will develop a national adaptation plan for medium to long term climate change risks and to build capacity for adaptation planning and budgeting. One of the six prioritized sectors is human settlements.	This project will work towards the fulfillment of both objective set by the NAP, by developing climate change risk assessment and city level ecosystem-based adaptation priorities. The proposal will also revise and use relevant indicators and targets established through the institutional structures of the National Adaptation Plan and will coordinate with the institutional structure set up by the NAP
Dominican Republic – "Strengthening National Capacities through the Climate Change Readiness Support Program in the Dominican Republic"	GCF Readiness USD grant amount 300,000	CEDAF Finalized since 2016	Proposal developed no-objection procedures for GCF programme and to develop the GCF Country Programme	Nature4Cities would serve to strengthen the country level no-objection process for new concepts entering the GCF CP.
Dominican Republic – "Building capacity to advance National Adaptation Plan Process in the Dominican Republic"	<a href="#">GCF Readiness</a> USD grant amount USD\$ 2,998,325	UNEP Under implementation since 2018	The NAP project will develop a national adaptation plan for medium to long term climate change risks and to build capacity for adaptation planning and budgeting. One of the sectors it has prioritized is human settlements.	As the NAP includes the development of 5 adaptation plans at the municipal level, in urban areas (Santo Domingo and the other 4 most populous cities in the country), this proposal will work closely with the NAP team to feed in the climate change risk assessments conducted at the city-level into the NAP. Nature4Cities will strengthen the adaptation plans and identify additional sub-national opportunities.
Dominican Republic – "Building Capacity for direct access to Climate Finance."	<a href="#">GCF Readiness</a> USD grant amount 565,032	CEDAF Under implementation since December 2019	Proposal aims at implementing activities that prepare NAEs by strengthening fiduciary, environmental and social capacities and standards of the GCF .	No direct complementarity.
Honduras – "Supporting strategic planning to engage with the GCF and comply with the national commitments under the Paris Agreement regarding the LULUCF sector"	<a href="#">GCF Readiness</a> USD grant amount US\$764,960	UNEP Under implementation since 2018	The proposal aims at aimed at strengthening the strategic planning to engage with the GCF and comply with the national commitments under the Paris Agreement regarding the LULUCF sector.	No direct complementarity.
Honduras – "Strengthening the understanding of Social and Environmental Safeguards"	GCF Readiness USD grant amount US\$235,200	<a href="#">GCF Readiness</a> 2018-2021	The project aims at strengthening Social and Environmental Safeguards applicable to the climate change projects and programmes from different sectors (energy sector, solid	The current proposal will apply the SES guidance in output 2.2.2 (Developing Urban climate change plans) and 4.1.1 (developing concept notes) to meet the GCF environmental and social standards.

<i>applicable to climate change programmes and proposals in Honduras</i>			waste, agriculture, industry, land-use change).	
<b>Honduras – “Enabling environments to effectively plan, implement, monitor and report strategic National Adaptation Processes in Honduras”</b>	<a href="#">GCF Readiness</a> USD grant amount \$2,449,590	UNEP Under implementation since 2019	The NAP project will develop a national adaptation plan for medium to long term climate change risks and to build capacity for adaptation planning and budgeting.	Nature4Cities will work closely with the NAP team to feed in the climate change risk assessments conducted at the city-level into the NAP. Nature4Cities will strengthen the adaptation plans and identify additional sub-national opportunities  As the NAP process is establishing an adaptation cooperation round table lead by government, Nature4Cities will use this discussion group to advice and support in its implementation.
<b>Honduras – “Enhancing Honduras’s Access to GCF for climate investments”</b>	<a href="#">GCF Readiness</a> USD 282,420	Ministry of Energy, Natural Resources, Environment and Mining Under implementation since 2019	The objective of this readiness proposal is to define a climate finance strategy for the deployment of the Sustainable Infrastructure Investment Fund (SIIF) that will catalyse private sector investments in climate technology solutions and GCF funding. This proposal, among other activities, will conduct a market study for the scale-up of prioritized climate technology solutions in Honduras and provide recommendations for innovative financing to leverage private sector investments	Nature4Cities will contribute to the finance strategy and future revisions of that finance strategy through delivery of Output 2.4.1 of Nature4Cities project.
<b>Honduras – “NDA Strengthening + Country Programming”</b>	<a href="#">GCF Readiness</a> USD grant amount \$300,000 for Honduras	Secretariat of State for Energy, Natural Resources, Environment and Mining Finalized since 2017	Proposal aims at developing no-objection procedures for GCF programme and to develop the GCF Country Programme	Nature4Cities would serve to strengthen the country level no-objection process for new concepts entering the GCF CP.
<b>Cuba, Dominican Republic, Ecuador &amp; Honduras</b>  “Advancing a regional approach to e-mobility in Latin America”	<a href="#">GCF Readiness</a> USD grant amount 2,800,000 (for all countries involved)	UNEP Under implementation since 2019	UNEP is supporting all four countries to identify and address the main barriers for electric mobility by providing the necessary assessments, capacities and financing alternatives to accelerate adoption of electric mobility technology. This will be done with a twofold approach: at a national and regional scale. The proposal also included NDA strengthening support and strategic framework support.	Nature4Cities will benefit from several lessons learnt from the E-mobility initiative, especially regarding private sector engagement plans (under output 2.4.1 and 4.1.1) and baseline on city-level transportation stakeholders in all four countries. Considering the integrated planning approach of the different cities initiatives this project will coordinate with, electric mobility project reflecting on solutions for integrated transport planning that could be leveraged through NbS approaches.

### **Gender integration into urban planning**

LAC stands out as the main region in the world where urban sex ratios have historically been feminized: while in other continents, migration from rural areas to urban ones are usually translated by a masculinization of cities

(men migrate more) and feminization of rural areas, this is not the case in LAC<sup>36</sup>. On another hand, there is an increasing trend of overrepresentation of women in households living in poverty. Poor women's access to property in cities (whether owned, leased or rented) limits their prospects of prosperity and restricts their possible economic empowerment<sup>37</sup>. This, in addition to the increased number of women heads of households, with minor children and / or older adults, imposes higher domestic responsibilities and an increased work and family related burden, further limiting their economic opportunities.

**In Honduras:** The Presidential Program "Ciudad Mujer" was created as a new management model that integrates 14 public institutions to support women in the exercise of their rights, access services for their well-being and the empowerment of their development opportunities. INAM assumes responsibility for ensuring the articulation of public gender policies with all the services offered by the Program.<sup>38</sup> Art 71. of Law of Equal Opportunities for Women (Decree No. 34-2000), includes the evaluation of the housing needs of women, stimulating the design and implementation of innovative projects that promote women's access to services and means of financing. It also repeals the laws and administrative practices that restrict or limit the possibility of acquiring a home as the owner or as a rental. This is however not enough, as it is necessary to formulate and strengthen policies and practices to promote the full participation and equality of women in human settlement planning and all decision-making<sup>39</sup>. A second Plan for Gender Equality and Equity of Honduras for the period 2010–2022 was established<sup>40</sup>, however up to today there is no exclusive section in the institutional organization chart that ensures the issue of Gender Equity.

**In Dominican Republic:** Equal rights and opportunities between genders is a principle that is constitutionally established and reinforced in the general legal system, including the National Development Strategy Law (END-2030). However, implementation and enforcement is something missing so far. The participation of women in decision-making positions, including climate-related decision making, is still low: In the Senate of the Dominican Republic in the period 2010-2016, women represented 13%; in the Chamber of Deputies, 21%; and Mayors, 7.7% in the same period. In 2018 the Ministry of Environment issued "The Gender and Climate Change Action Plan for the Dominican Republic" (PAGCC-RD). The PAGCC-RD is the result of a consultative process that brought together more than 80 representatives of the government, the civil society, academic institutions, research centers, foundations and international organizations. The PAGCC-RD includes a 2030 vision in order to generate differentiated information by sex in the context of climate change to be able to define more concrete actions, and build thus the bases to implement the NDCs and achieve the mainstreaming of the gender perspective in the planning process, even beyond 2030. The PAGCC-RD establishes competencies over the Dominican Federation of Municipalities for the municipalities to include the country's climate change policies and management instruments under a gender perspective, specifically for the waste management sector.

**In Ecuador,** among the 3,8M households at the national level, 28.7% are headed by women, and of these, 80.8% are in urbanized sectors<sup>41</sup>. It is however important to note that the female poor population represents 50.6% of the national poor population located in urban areas. A Technical Table of Gender and Climate change was established, formed by public entities, NGOs, international cooperation and academia. With the support of the ministry of Environment and Water, this table has the mandate to elaborate an Environment Plan on Gender and Climate Change at the National level. Currently, no city has implemented a Gender Action Plan, but the National Gender Equality Council (CNIG) is working on the integration of Climate change and gender as transversal issues into PDOT and other related strategies. In the meantime, through the revision of its PDOTs, the SENPLADES has elaborated a guideline for the inclusion of an equality approach in the GAD's governance.<sup>42</sup>

**In Cuba** there is not a gender and climate change plan at the country level, but there are some sectoral gender strategies that deal with climate change, such as the National Gender Strategy of Agriculture. IPF has no specific gender plan, but gender equality is addressed in a transversal way in each action, including projects that address the issue of climate change. The urban resilience project between IPF and UNDP (2016) developed the document "Gender in Urban Resilience: from theoretical reflections to our practices. Approaches for validation, construction and approval of the Methodological Instruction". In many sectors, gender parity is favorable to women, and women are very present in decision-making roles.

<sup>36</sup> Chant, S. (2013). Cities through a "gender lens": a golden "urban age" for women in the global South? Environment & Urbanization International Institute for Environment and Development (IIED). Londres. <https://journals.sagepub.com/doi/pdf/10.1177/0956247813477809>

<sup>37</sup> CEPAL, 2019 Transversalización del enfoque de género en políticas públicas frente al cambio climático

<sup>38</sup> SICA – Política Regional de Igualdad y Equidad de Género (PRIEG)

<sup>39</sup> ONU Habitat, 2016, Informe Habitat III - Honduras

<sup>40</sup> <http://extwprlegs1.fao.org/docs/pdf/hon157565.pdf>

<sup>41</sup> <https://uploads.habitat3.org/hb3/National-Report-Ecuador-spanish.pdf>

<sup>42</sup> <https://www.planificacion.gob.ec/wp-content/uploads/downloads/2019/08/Documento-Enfoques-de-Igualdad-final.pdf>

### **Problem statement and main barriers for the adoption of Nature Based solution for adaptation and mitigation in urban planning**

Under the described context, cities are becoming poles of environmental degradation and loss of ecosystem services that in turn generate increasing levels of vulnerability for urban population and urban assets to the effects of climate change. Despite the existence of regional and global initiatives focused on urban sustainability and resilience, national and local governments still have limited capacity, information and tools to develop planning strategies that recognize the value of ecosystem services in ensuring the potential of cities to mitigate the impacts of climate change mainly related to flood and landslide control, drought prevention, coastal erosion or heatwaves.

Given the flaws in land use planning and the provision of basic services, urbanization in LAC continues to be one of the main challenges in terms of sustainable and equitable development. NbS methods, as a central element of urban planning and building resilience, include participatory processes to generate joint actions based on the needs and demands of the actors, as well as legitimizing processes for the appropriation of the actors and achieving incidence in decision making <sup>43</sup>.

#### **Barriers to NbS for adaptation and mitigation at city level**

General adaptation barriers that the participant countries share are: i) limited institutional and technical capacity to coordinate and carry on adaptation actions under the planned processes; ii) lack of interlinkage between the National Adaptation Plan and the Adaptation NDC; iii) limited access to adaptation financial funds; iii) limited access to well-organized knowledge management to inform climate-resilient planning; iv) insufficient monitoring and reporting systems to comply with the transparency international commitments under the Paris agreement and make available the implementation results. Therefore, there is a general need for sustainable country capacity and strengthening stakeholder engagement to plan, finance, implement, monitor and report strategic national adaptation processes and communicate knowledge about climate change adaptation.

This project will focus mainly on the limited access to well-organized knowledge management to inform climate-resilient planning at the city level and access to innovate finance, specially for green infrastructure and NbS when cost-effective. Derived from the above context analysis the following key common barriers to implement effectively NbS in urban areas can be identified: (i) the limited knowledge base on the potential of NbS for adaptation and mitigation at the city level; (ii) the inadequate governance structures for NbS; (iii) the balancing of the multiple goals and co-benefits NbS can deliver; (iv) effective citizen involvement; (v) insufficient social inclusion and participation ; (vi) lack of political and financial support; (vii) the challenges for monitoring NBS; and, (viii) the difficulties in upscaling NBS. The solutions to these challenges and barriers show that the interactions of environmental, economic and social systems must be integrated at all stages of co-creation, implementation, evaluation and upscaling of NbS <sup>44</sup>.

In LAC, the scientific-knowledge gap represents a clear barrier to the implementation of NbS, limiting the proper use and application of concepts, such as urban ecosystem services (UES), city and urban definition, NbS, Ecosystem based Adaptation (EbA), etc., that are in fact site and context specific. For instance, the geographical scope applied for the definition of NbS must go beyond the built environment of cities, and consider a more integrated landscape approach including also adjacent peri-urban and non-urban spaces to reflect on the natural flow of the ecosystem and population dynamics<sup>45</sup>. This integrated definition of urban, peri-urban and non-urban spaces city can then lead to relevant NbS identification, implementation and governance.

Moreover, the complex economic valorisation of NbS often limits its political consideration and there is still a low number of scientific studies exploring implemented projects in LAC cities and demonstrating NbS cost-benefits.. A first response to this challenge is to integrate, within the evaluations of NbS, co-benefit analysis within and between the implementation stages, the assessment of intersectoral impacts and the integration of decision levels <sup>46</sup>.

<sup>43</sup> Hardoy, Gencer, Winograd, 2019, Ciudades Resilientes al Clima, Reporte de Investigación, Planeamiento Participativo para la Resiliencia Climática en ciudades de América Latina, CDKN-FFLA/IDRC

<sup>44</sup> Schmalzbauer, A., 2018, Barriers and success factors for effectively co-creating nature-based solutions for urban regeneration. Deliverable 1.1.1, CLEVER Cities, H2020 grant no. 776604.

<sup>45</sup> Schmalzbauer, A., 2018, Barriers and success factors for effectively co-creating nature-based solutions for urban regeneration. Deliverable 1.1.1, CLEVER Cities, H2020 grant no. 776604.

<sup>46</sup> Raymond C., N. Frantzeskaki, N. Kabisch et al., 2017, A framework for assessing and implementing the co-benefits of nature-based solutions in urban areas, Environmental Science and Policy 77 (2017) 15–24

**Table 3 - Common barriers to adaptation identified for the participant countries, baseline and complementarity of the Nature4Cities proposal<sup>47</sup>**

<b>Main common barriers</b>	<b>Baseline: homogenous and common examples of work done to date</b>	<b>Specific Outputs that will address the barriers</b>
Non-existence of Land Use Plans in many municipalities	The only Planning Programs for Climate Adaptation, and territorial planning instruments in participant countries for the adaptation of municipal cities were formulated in the cities of Santo Domingo (National District) and Santiago which developed climate vulnerability assessments for Territorial Planning Plans (2016)	Through outputs 2.2 and 2.4 the project will support the generation of critical information and analysis for the integration of NbS into urban planning identifying key vulnerabilities and opportunities for climate change adaptation and mitigation. Output 5 will also provide cities with specialized exchange opportunities and training material on NbS analysis and implementation
Gaps in the interrelation of different instruments relevant for the territorial planning and climate change	As mentioned, the Cuba's national institute for physical planning (IPF) developed between the years 2013-2016 a first project on urban resilience in three provinces with practical examples in the cities of Bayamo, Havana and Santiago de Cuba. However, climate change and NbS are not yet mainstreamed in the in Provincial and Municipal territorial planning instruments	Mainly through output 2.2 the project will support participating cities in the identification of opportunities for NbS mainstreaming into key legal and policy frameworks at the local level Also through output 5 participant cities will have the opportunity to define monitoring frameworks for the appropriate implementation of Nb Urban planning as an instrument to also enhance institutional coordination and monitoring of planning implementation
NbS measures are not mainstreamed in the national strategies, neither in the adaptation and DRR tools, nor in the territorial planning documents	The project "Addressing Climate Change Risks on Water Resources in Honduras: Increased Systemic Resilience and Reduced Vulnerability of the Urban Poor" as well as the project "Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa" started increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of for Tegucigalpa and surroundings. Both projects lessons learnt have been received by the NAP.	Mainly through output 2.2 the project will support participating cities in the identification of opportunities for NbS mainstreaming into key legal and policy frameworks at the local level Also through output 5 participant cities will have the opportunity to define monitoring frameworks for the appropriate implementation of Nb Urban planning as an instrument to also enhance institutional coordination and monitoring of planning implementation. Output 5 will also provide cities with specialized exchange opportunities and training material on NbS analysis and implementation
Limited municipal capacity to raise municipal fees, to manage investments, or attract private capital, especially considering 4	As mentioned in general, all four countries have adopted a strong unitary government system, which difficulties decentralization needs, mainly for taxing and budgeting independence in	The project will support cities in the development of financial strategies to support investment in climate action considering all

<sup>47</sup> These barriers are based on consultation with national focal points (See Annex I for details) and national frameworks, including NDC and 3<sup>o</sup> National Communications, and national UN Habitat reports from 2016

years electoral management periods	order to timely address local climate change priorities.	public, private and international financing options
Strong public management centralization (mostly DR, Cuba and Honduras) limits financial and political autonomy at the local-level	In Dominican Republic adaptation initiatives at the city-level, specially Santo Domingo and Santiago, could promote the establishment of Municipal Environmental Management Units (UGAM) in cities, for the deployment and coordination of plans, programs or actions of this type, which directly link the Ministry of Environment and Natural Resources, and so could help the decentralization process.	All participating countries are going through strong decentralization processes for urban planning that require equivalent efforts in capacity building at the local level. The project will provide important opportunities for capacity building for key identified stakeholders in the analysis of NbS potential and urban planning through outputs 2.2, 2.4 and 5.2
Insufficient social inclusion and social acceptance.	The NAP Readiness project in the Dominican Republic has a comprehensive scope, integrating climate change adaptation in development policies, plans and actions across sectors. Importantly, the Dominican Republic NAP process prioritizes ecosystem-based adaptation, identifying synergies between socio-economic benefits and environmental benefits in the medium and long term.	Through output 5.2 knowledge products and training about the opportunities of NBS in urban areas will be disseminated to citizens and local governments through regional mechanisms.
Lack of capacities and tools to implement and get appropriation of national strategies down to the local level	The GIZ Sustainable Intermediate Cities' Ecuador's project in Cuenca, Lago Agrio, Loja, and Portoviejo, and the Adaptation Fund project " <i>Reducing Climate Vulnerability and Flood Risk in Urban and Semi-Urban Coastal Areas of Latin American Cities</i> " started building some capacities in urban adaptation in all these cities on climate risks management.	Through output 2.2 cities will have an enhanced capacity to link urban planning with national climate change strategies and through output 5.2 Knowledge products and training about the opportunities of NBS in urban areas are disseminated to citizens and local governments through regional mechanisms
Limited awareness restrains public appropriation of local climate change adaptation needs	Thanks to the Dominican Republic Adaptation Fund project: "Enhancing Climate Resilience in San Cristóbal province, Dominican Republic Integrated Water Resources Management and Rural Development Programme" there has been some progress on local adaptation, with progress in five main cities (Santo Domingo, San Pedro de Macoris, Santiago and Las Terrenas) and the establishment of the National Coalition for Resilient Cities	Output 5.2 will focus on the dissemination of knowledge products and training about the opportunities of NBS in urban areas to citizens and local governments through regional mechanisms. Public awareness will also be raised through audio-visual products and online open trainings
Limited access to financial resources for NbS integration into urban planning	According to all countries NAPs and NDCs there is a clear national limited access to adaptation financial funds, that is also reflected in local governments, mainly due to the unitary government systems adopted. Moreover, at the local level there is clear limited access to well-organized knowledge management to inform climate-resilient planning at the city level and access to innovative finance, specially for green infrastructure and NbS when cost-effective.	Through outputs 2.4 and 4.1 participating cities will enhance their capacity to define financial strategies to access innovative financial mechanisms

### **Project's scope**

Based on the aforementioned challenges of integrating NbS for adaptation and mitigation to climate change in urban development planning in the Latin American region, the current GCF readiness proposal aims to support Cuba, Ecuador, Honduras and the Dominican Republic's local governments in reducing the vulnerability to climate change of urban areas through Nature based Solutions (NbS) and innovative financing opportunities..

There is great potential to increase climate change resilience to climate change using NbS in urban areas. The participant countries will greatly benefit from assessments, methodologies and guidelines that could guide the definition of resilient development in line with their NDCs, National Adaptation Plans (NAPs) and Long-Term Strategies.

Additionally, participation allows the co-creation of knowledge and thus helps to incorporate all the actors in the process of diagnosis, exploration and implementation of NbS. The chosen adaptative measures must be supported by participatory processes to generate credibility, sustainability and appropriation in order to enable scales of action (farm, home, neighbourhood, commune, city, watershed) compatible with the interests and capacities of the actors involved in decision-making (community leaders, members of cooperatives, local authorities, national government, private sector, traditional knowledge). This makes it possible to ensure the escalation of the multiple co-benefits linked to the good use of urban and peri-urban ecosystems so that they translate into economic, social and health dividends for all inhabitants. Furthermore, this facilitates validating actions, evaluating and visualizing costs, benefits and compensation needs of each of the measures.

Moreover, the inclusion of a gender perspective enables the development of differentiated analysis on how the effects of climate change and the underlying causes of vulnerability affect the social groups present in different urban contexts. Current underrepresentation of women and minority groups in decision making schemes, in city planning offices and key institutions result in biased assumptions and conclusions from urban needs assessments and planning decisions continue to reflect an incomplete perspective on the urban realm. As a result, cities continue to be designed to "reflect traditional gender roles and the gendered division of labour, especially through modern zoning".<sup>48</sup> Resilient cities will need to integrate communities in the planning dialogue and to mainstream their perspective when integrating NbS in city planning.

To achieve gender-inclusive climate action more women are needed in leadership positions, bringing their perspectives and experiences into the decision-making processes, greater consultation with women during policy making, and better analysis of the differentiated gendered needs within cities. There is limited information about gender disaggregated vulnerability to climate change in urban areas, and this project will build on the efforts of initiatives like C40 or CityAdapt in generating more information and analysis to support more 27 inclusive decision making.

Making gender gaps visible in the diagnosis, exploration and implementation of NbS constitutes an opportunity to plan actions that include all actors and thus promote the necessary transformations for a more resilient future<sup>49</sup>.

The **objective of this readiness proposal** is to help participating countries explore the potential to develop city level nature-based adaptation and mitigation plans, financing strategies and implementation capacities. The complexity of urban development requires the cooperation and coordination of many actors; this proposal will also support countries identify the key actors in urban development and streamline dialogue and action among them through participation and exchange networks and the identification of partnerships. This integrated approach to urban development will also allow for the identification of innovative financial mechanisms leveraging resources from the public and private sector as well as from international climate funding.

The results from this project will be disseminated through a regional platform and funds will be leveraged from the EUROCLIMA initiative that has identified Urban NBS as one of the key priority areas for the Latin America Region to support the development of regional assessments derived from this project and to foster the engagement of additional countries to replicate and upscale the results from this project.

### **Preselection of cities in each country**

<sup>48</sup> World Bank, 2020, Handbook for gender inclusive urban planning and design

<sup>49</sup> Villamarín et al., 2019, Documento de Síntesis - Aportes de la Iniciativa Ciudades Resilientes al Clima, FFLA, Quito - Ecuador

Following the criteria included in the Annex 1, a series of cities were pre-identified in each participating country through consultations with the NDAs. Their selection will be validated at the initial stage of the project (activity 2.2.1.1) and more information about their characteristics, main stakeholders and regulatory framework can be found in Annex 1.

**In Cuba**, three cities are being proposed, of which two will be selected.

First, **Santa Clara** (217.556 inhabitants, 2019), capital of Villa Clara Province, has studies on the urban climate and the microclimate of buildings, aspects of interest to provide solutions for human comfort. It also has a Climate Center, University, Provincial Delegation of CITMA (The Ministry of Science, Technology and Environment), and has experience in the execution of local Agenda 21 projects. Santa Clara also applies UNEP's GEO Cities methodology. The NbS approach is necessary for resilience in the face of negative effects of recurring droughts and flooding due to the rivers through the city, the impact of high temperatures by areas, the problems of the types of housing under development and resilience from green solutions in the interior and surroundings of the city.

**Camagüey** (310.162 inhabitants, 2019), located in the center and capital of the province of the same name, is the second city considered. It's an expanded city, the third largest in the country, and has high growth potential. It has a reference Climate Center, a Provincial Delegation of CITMA and a University that will be linked to the project. Its Urban Planning is being updated, and includes risks of socio-natural and anthropic origin. The city faces recurring droughts and flooding due to the overflowing of rivers and is deficient in three areas. The project could provide new or alternatives solutions based on the characteristics of the surrounding natural ecosystem and the city itself to achieve greater resilience, for a more comfortable environment for its inhabitants.

Finally, **Manzanillo** (96.072 inhabitants, 2019), is a municipal capital and the second most important city of the Granma Province. Located next to the sea in a low area susceptible to flooding (drainage deficit) due to accumulated rain mostly during summer storms, and from sea flooding during cyclonic upwelling. The city suffers recurring droughts and salinization of the coastal aquifers due to saltwater intrusion. In addition, its lower areas are exposed to the sea level rise, and has been identified as a priority city in the Tarea Vida, the National State Plan to address Climate Change. It has also the support of the provincial institutions, which benefited from an Urban Resilience project in Bayamo (the capital of the Province) ending in 2016. Manzanillo can assimilate national experience of the AF's mangrove recovery project, among others, and build synergies with the project proposal to the GCF on "Coastal ACC through EbA".

In these three cities, main actors are the **Institute of Physical Planning (IPF)** attached to the Council of Ministers, the Provincial and Municipal Directions of Physical Planning (attached to the corresponding Provincial and Municipal Governments), the Provincial and Municipal Governments, the Ministry of Science, Technology and Environment (CITMA), through the Environment Agency (AMA) and its Hazard, Vulnerability and Risk Study Group, and the Provincial Delegations of CITMA. Other participating institutions include the National, Provincial and Municipal, such as the National Institute of Hydraulic Resources (INRH), Civil Defense, Ministry of Agriculture, Universities, Ministry of Transport and Ministry of Construction (Housing Direction). Within its role, the IPF develops a Technical Manual of Urban Resilience with a system of indicators for resilience and disaster risk reduction. In addition to the local Government, environmental monitoring functions can be covered by different institutions at the city level such as CITMA representations, Meteorology or Universities, thanks to their own data or information from other institutions, such as forestry or industries.

**Ecuador** will carry out this pilot phase of this project in only one city, due to the tied budget constraints and decision from its ministry. The identified city is **Machala**, a coastal city in South Ecuador (252,739 inhabitants). The city is currently implementing two projects in its urban area; the one of environmental, risk and housing recovery, called The El Macho Urban Recovery – Canal El Macho, and the other of a socio-economic and tourist nature, the beach recovery for the city, called Machala Ciudad Marítima; projects that would change the city's sense of growth towards a sustainable pathway. The city has previously been confronted to extreme phenomena of droughts and floods caused by the incidence of the Humboldt Cold Current and the el Niño (ENSO) Phenomenon, with 54.47% of the urban area prone to flooding caused by river overflow due to heavy rainfall. The city has both a Development and Territorial Planning approved in October, 2013 and updated in 2015<sup>50</sup>. The Plan aims to find adequate densities to have a more sustainable city, considering that 94% of the canton's population is based in the urban area. The Plan also defines a series of environmental indicators to monitor the evolution of identified environmental issues, among which are mangrove degradation, Affectation of water channels by

<sup>50</sup> <https://www.machala.gob.ec/features/plan-de-desarrollo-y-ordenamiento-territorial/>

release of not-treated sewage, Loss of biodiversity or expansion of the agricultural areas. More information can be found in its PDOT.

Pilot cities pre-selected for **Honduras** would be the capital Tegucigalpa and Choluteca. Both cities participated in the IADB-ESC and City Resilience programme (World Bank, GFDRR) and the CDKN: Resilient cities "*Climate change adaptation and social protection in agroforestry systems: enhancing adaptive capacity and minimizing risk of drought in Zambia and Honduras*". In Honduras, key stakeholders to work with in Tegucigalpa include the Municipal Environmental Management Unit (UGAM), and in Choluteca the Municipal Environmental Unit (UMA).

**Tegucigalpa.** The city's climate risks include flooding in slums near streams or rivers, landslides in the neighborhoods that are located in the surrounding hills of the city, damages to road infrastructure and urban sprawl over territories without territorial ordering standards. Meanwhile, its institutional capacities also lack. There is a weak political willingness to establish environmental compensation mechanisms, and there is a lack of environmental education and awareness of citizens. In regards to its monitoring system, the definition of its environmental diagnosis (previously mentioned DIM) included the definition of a baseline of indicators, which represent the key variables to achieve an adequate adaptation capacity, effective reduction of vulnerability and increase of the resilience of the municipality and its population<sup>51</sup>.

**Choluteca.** The city's climate risks include an upstream water flow that can go from 11m<sup>3</sup> / sec. to 2,700 m<sup>3</sup> / sec. in a single rainy night, causing floods. The city also suffers from severe drought in summer, saline intrusion due to well drilling pressure, damage to road infrastructure, and the shift of cultivation green areas to grey urban housing and infrastructure. Meanwhile, institutional capacities to cope with these risks rely on a clear lack of education on the topic of climate change adaptation. There is also a need to improve the organizational structure of the municipality, and creating environmental compensation mechanisms

In the **Dominican Republic**, one city will be selected from the two pre-selected in consultation with the IPF: **Santo Domingo** (National District or DN) and **Santiago**. Both cities form part of national and global initiatives such as CLIMA (Info, Plan, Adapt). In the case of Santiago, the City has participated in the IDB-ESC initiative and the 100 Resilient Cities of the Rockefeller Foundation. Santo Domingo, with its Urban Population of around 965,040 inhabitants, and Santiago, with 594,539 inhabitants have both developed their Land use plan (POT) and Risk Management Plan (PGR), and share high risks of flooding and landslides, and the City of Santo Domingo (DN) adds the risk of sea level rise.

Main barriers to be addressed in these cities include the lack of specific legal provisions and incentives for the application of NbS. In other words, the approach that has been given to programs related to protected areas and the system of payment and compensation for environmental services, for example, has not been literally related to the concept of NBS and to the unfolding of the multiple functionalities that it has in the ecosystem approach to address problems and creation of resilience capacity. Also, the lack of data collection regarding current regulations with opportunities for inclusion of NBS.

In the Caribbean island, main actors in the municipalities outside the Mayors' office, are the Provincial Governors, Provincial Directors of the Environment, Responsible for Protected Areas, Municipal Environmental Management Units (UGAM), Local Representatives of: Ministry of Agriculture, Ministry of Public Health, Ministry of Culture, National Institute of Hydraulic Resources (INDRHI), Basin Councils, Irrigation Boards, Dominican Municipal League, Mancomunidades, Risk Management Committees, Development Councils at the municipal or provincial level, etc., Community Leaders (in the most specific sense of social entrepreneurship and innovation) and churches.

As for the environmental monitoring systems, in the city of Santiago, as part of the IDB's ICES initiative, indicators are included in the environmental sustainability and climate change dimension. The city has developed only one GHG Inventory and a mitigation group but has not been systematized so far. In Santo Domingo, there are ongoing initiatives, especially in the academic field, for the monitoring of air quality in the National District, quantification of ecosystem services provided by urban woodland.

The legal gaps are also followed by lack of specific capacities of the abovementioned stakeholders for NbS to be considered and implemented. There is a clear lack of knowledge of the existence, functionality and advantages of the application of NbS. Also, UGAM have not been implemented in these municipalities with the goal of the deployment and coordination of plans, programs or actions regarding NbS, to link the Ministry of Environment and Natural Resources. In essence, the lack of inter-institutional coordination for the development of joint actions that avoid duplication of efforts and that guarantee greater effectiveness in the envisaged enforcements within

<sup>51</sup> ANED, MiAmbiente, INVESTH, 2020, Plan local de Adaptación al cambio climático, AMDC

this area of work. There is also a lack of clear division of competencies for the implementation of actions of this nature by decision makers. Finally, there is a lack of necessary training for decision makers to implement this type of measures.

### **Main areas of work**

The GCF regional readiness project will contribute to its key objectives through five main areas of work:

1. **Diagnosis: Capacity to assess Nature Based Adaptation and Mitigation Solutions potential in key urban areas is strengthened in the context of broader climate change strategies (GCF Objective 2. Outcome 2.2)**

The main objective of this component is to improve understanding by local, national and regional stakeholders of the vulnerability to climate change and potential for NbS for adaptation and mitigation in urban areas through pilot examples in 6 key cities in the participating countries. This will be achieved through three different areas of work.

Initially, the project will support countries in the identification of regulatory frameworks at the city level with potential to incorporate NbS, including: i) review of existing regulations, policies and standards related to public infrastructure planning and identification of gaps and opportunities to mainstream NbS; ii) review and propose regulations, policies and standards most suitable for beneficiary countries; and iii) environmental and social safeguards associated to technology adoption iv) review of existing regional and national platforms that could be built upon with the results of this project; In addition, the project will also support the analysis at the city level and a regional comparative analysis of opportunities for public and private funding for NbS at the urban level including: i) baseline of actual processes for public funding allocation in urban planning, ii) review and propose improvements for resilient public procurement and tenders of public infrastructure, and iii) Identification of private investment opportunities. The analysis will be conducted at the city-level, leading to the identification of pilot areas, and upscaled to a comparative regional analysis. The results from these analysis will be shared and validated with key stakeholders at the city level including the NbS Task group defined for each city.

Secondly, the project will support countries in the definition of a baseline and assessment on NbS opportunities at the city level. This baseline will include an assessment of the state of NbS integration into urban planning in each participant city, key planning process for urban development; key actors in the urban planning and an estimation of the feasibility of NbS integration into urban planning and development processes. This baseline assessment will be undertaken by local experts in NbS, urban development policy and urban financial planning with support from the Regional Coordinator. The objective of these baseline assessments is to define the state of nature based solutions integration into urban planning in each participant country/city, including: i) gap analysis on key planning process for urban development; ii) identification and characterization of key actors in the urban planning and urban development process and their potential role in integrating NbS; iii) estimation of the feasibility of NbS integration into urban planning and development processes, mainly in terms of ecosystem services provided, avoided climate risks, number of beneficiaries and other environmental and social co-benefits (e.g. air quality and temperature & public health)

Thirdly, climate change and vulnerability assessments will be developed for each of the pilot cities in terms of the potential impacts of ecosystem services loss due to climate change and identification of critical hotspots for action, these analysis will be based on an Urban Growth Model of the main urban area showing historical trends and future projections as well as a downscaled climate model to estimate climate change impacts. The assessments will also consider the results of a GHG emissions analysis based on the methodologies developed at local scale, such as the Global Protocol for Community-scale GHG Emission Inventories (GPC) including analysis of mitigation potential through NbS for the selected cities with different scenarios. The participating countries have undertaken national GHG inventories included in their Third National Communications (Ecuador, 2017; Honduras, 2019; Dominican Republic 2015 (BUR, 2020) Cuba has an inventory from 1990 to 2015, and the one for 2016 is in process. The biannual BUR update report has just concluded, dated 2020. The 3<sup>rd</sup> NC is in process of printing, to be delivered in 2020), The vulnerability analyses will be gender sensitive considering variables that represent differentiated vulnerability and adaptation opportunities. The assessments will include an identification of the most appropriate NbS for each city.

Results from these analyses will be shared with key stakeholders through a participatory process to address barriers to NbS integration into urban planning and development processes including the NbS Task Group. This analysis will include but not limited to legal, financial, technological, industry, business, innovation (including local

materials, manufacturing capacities, local content requirements) and social (including skills and labour and gender perspective)

These assessments at the city level will also be used as input for regional comparative analysis that will highlight the similarities or differences among the city level assessments and will be used to engage other cities in the region that have also identified the need to develop resilient development plans.

The results from all these assessments at the city level and regional comparative analysis will be disseminated through the regional online urban NBS platform and will serve as inputs for audio-visual products for each city to bring attention on the potential of NbS for resilient urban planning.

The city-level assessment will be done with technical support from Wageningen Environment Research (WENR) and local consultants with expertise on urban planning, finance and NbS. The regional comparative assessments will be co-financed by EUROCLIMA with the objective of fostering dissemination of results across the region and engagement with other countries and cities in Latin America.

## **2. Strengthening enabling conditions: policy and institutional frameworks to integrate NBS in urban planning (GCF Objective 2 and 5. Outcomes 2.2 and 5.2):**

This component aims to support participating cities in the design and validation of action plans to integrate the NbS approach for urban planning.

Based on the results from the diagnosis and the policy framework and funding opportunities assessment, the information will be used to develop Nature Based Urban adaptation and mitigation Plans for the 6 pilot cities creating a link with each country's Nationally Determined Contributions (NDC), and National Adaptation Plans including a comparative scenario analysis (current and projected) of NBS with traditional grey infrastructure strategies).

These plans will also include a Monitoring and Evaluation (M&E) framework that will be guided by local experts and an international expert to identify commonalities among cities on urban indicators for adaptation and mitigation. In addition, the Nature Based Urban Development Plans will also include the financial strategy developed under Outcome 4 including public-private partnerships and other financing mechanisms which can demonstrate coherence and complementarity among different funding sources. The M&E will be designed in coordination with existing national MRV frameworks and in accordance to UNFCCC guidelines, to help countries assess the effectiveness of specific interventions, increase comparability across different NBS, improve NBS design into the future, and create a robust evidence base which will help to mainstream NBS as an alternative or complement to traditional grey solutions.

The definition of these Nature based Urban Development Plans will be developed reflecting on the results from the diagnosis and with technical support from Wageningen Environment Research (WENR) and local consultants and guided by the NbS Task Groups in each city and will be validated at the city level through a workshop.

## **3. Fostering partnerships: Emerging economic opportunities for NBS in urban areas are identified through innovative partnerships (GCF Objective 2. Outcome 2.4)**

This component aims to increase collaboration and coordination among key stakeholders in urban planning to streamline dialogue and action among them, as well as the analysis and recommendations on public, private and blended funding for urban development. This component will finally enhance citizen and private sector engagement through the creation of dialogue structures that bring together public and private stakeholders engaged to identify most appropriate partnerships for NBS scale-up. This approach is critical for ownership and local buy-in, possibilities for systemic change and scaleup, and supporting city-level capacity to engage with the private sector.

International experts on NbS urban policy and finance will support the 6 participating cities to establish and/or strengthen, as appropriate, an NbS task group in each city with a clear workplan including representatives from all relevant actors (public, private, civil society, etc). The local and international experts will also support cities in the development of a private sector engagement plan that identifies the key private sector representatives such as water utilities, construction companies, farming companies, entrepreneurs, etc. and identifies key gaps and opportunities for private sector engagement in terms of: knowledge and information sharing, policy dialogue, technical assistance, capacity development and finance gaps and opportunities.

A consultation platform will be developed at the regional level and available for the participating cities to identify opportunities for public-private partnerships and validate most appropriate partnerships for NbS adoption in urban areas. The online tool will include consultation workshop materials, and reports with participating countries and will be hosted at the Urban NbS platform based in the existing regional adaptation network and platform: REGATTA. It is expected that this consultation platform will allow for stakeholders to keep updated on the results from the project, the work undertaken in all other cities and help strengthening collaboration among actors at the city level and between different cities for NbS implementation and scale-up.

The private sector engagement plan and set up of the regional consultation tool for private sector will be financed by the EUROCLIMA initiative aiming at ensuring access from private sector from other countries in the region and building a critical mass of users and examples that can contribute to the mobilization of private sector engagement into urban NbS strategies.

**4. Generating impact: climate finance strategies and regional project pipeline strengthened (GCF Objective 4. Outcome 4.1)**

Through this component, participating countries will be able to identify innovative public and private financial mechanisms for NbS to be integrated into the 6 Nature Based Urban Development Plans. In the context of the post-COVID-19 economic recovery, the investment pipeline to be developed will focus on identifying and prioritizing investments which utilize multiple innovative financial instruments (loans, grants, guarantees, equity) that encourage economic recovery through NbS. As Governments design economic stimulus packages to incentivize economic activities post-COVID, this component will help countries ensure investments are directed towards green, resilient actions to achieve their climate goals.

The development of city finance guidelines for NbS will also focus in bringing on board private sector organizations, given the interests, capacities and benefits these organizations can reap from the deployment of NbS in urban contexts.

A comparative analysis will allow to present to other cities in the region with a set of different alternatives of financial plans adapted to the specific conditions of each city that can be of use for cities with similar characteristics. A comparative analysis also provides information on the benefits of combining different types of financing mechanisms.

The Nature Based Urban Development Plans and long-term financial guidelines will provide countries with valuable insights for the definition of a pipeline of transformative investments on NbS for urban areas, aligned to the GCF Country Programme when available. The prioritization of the investment pipeline will be an inclusive process involving the participation of potential AEs to facilitate the match-making of ideas with the track record and capabilities of the different entities and will be validated by the NDAs. This process will be led by the national coordinators and the NbS task groups, with the support of the international NbS and urban finance experts. Identified interested cities would be invited to the virtual consultation process.

Four national concept notes will be developed to scale-up the implementation of NbS for adaptation and mitigation in urban areas based on the results from the results of the diagnosis, the Nature Based Urban Development Plans, the private sector engagement plans and the long-term financial guidelines and with co-financing from EUROCLIMA.

**5. Replication and knowledge: An online regional Urban NbS platform created to foster exchange, learning and monitoring of Urban NbS (GCF Objective 5. Outcome 5.2)**

The creation of an online regional platform will be a central element of this proposal aiming at expanding the dissemination of knowledge and tools related to NbS among public technical officers and key stakeholders including individual citizens across the region. This regional Urban NbS online platform will foster capacity building, knowledge sharing and will include online tools to enable replication and upscaling of the results of this project into other cities. The regional platform will be based in the already existing regional platform REGATTA hosted by UNEP and will be linked to the Global Platform for Sustainable Cities for broader international dissemination and exchange. Its sustainability will be ensured by been included in this regional platform where several climate change initiatives are hosted and regularly maintained and updated by UNEP.

Under this component, a regional online Community of Practice will be launched to share results from all activities in the project, trainings and knowledge exchange including webinars derived from the results of the project and

inviting also external participants and other interested cities. One online training will be developed addressed to local level decision makers for the development and implementation of Urban NbS for adaptation and mitigation.

Four (4) technical experience exchanges will be held over a two year period through this regional online platform under a virtual workshop format based on strategic regional collaboration fields of work prioritized, based on results derived from previous activities and defined by Steering Committee of the Project focusing on:

- Vulnerability assessments
- NBS opportunities in urban areas
- Private sector engagement in Urban NBS
- Financial mechanisms to promote NBS in urban areas

Annual regional meetings of the national teams including city representatives, NDAs, the national coordinators and the regional coordinator will be held to track progress of readiness project and share experiences and lessons learned. These annual meetings will also be aligned with wider regional meetings on Urban NBS in the context of the EUROCLIMA initiative.

A set of audio-visual products will be developed at the city and regional level to capture and disseminate results from the project to enhance citizen and local governments' knowledge about the opportunities of NBS in urban areas.

Practical Action will play a key role in the implementation of this component considering their wide expertise in knowledge management, online tools and development of communication products and will be directly responsible for the establishment and management of the community of practice, online trainings and exchanges and the production of audiovisual products. EUROCLIMA will be co-financing these activities for the project due to their relevance and potential interest at the wider regional level in Latin America.

### 3. LOGICAL FRAMEWORK

Outcomes	Baseline	Targets	Outputs	Activities (brief description)	Deliverables
<p><b>Outcome 2.2:</b> GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF programming in low-emission investment</p>	<p>Most countries have developed climate change policies and strategies with limited definition of targets and strategies at the local level. There is no Identification of NbS opportunities at the city level in the participating countries and GHG inventories at the city level have only been attempted for some cities in the Dominican Republic. There is no analysis of the potential for NbS financing opportunities at the urban level in the participating countries</p>	<p>6 city-level assessments on opportunities for NbS for adaptation and mitigation produced and comparative analysis elaborated at the regional level. These assessments will include:</p> <ul style="list-style-type: none"> <li>- Analysis of relevant policy frameworks</li> <li>- Analysis of financial flows to selected cities</li> <li>- GHG emissions analysis</li> <li>- Gender sensitive vulnerability assessments</li> <li>- Nature Based urban Development Plans</li> </ul>	<p><b>Output 2.2.1:</b> 6 city level assessments elaborated to determine the baseline, vulnerability and GHG emissions and to identify potential NbS opportunities for adaptation and mitigation, validated by city level stakeholders including the NbS Task group for the 6 selected cities.</p>	<p><b>Activity 2.2.1.1</b> Validation of city selection in each country and virtual inception meeting conducted with regional actors and coordination team.</p>	<p><b>Deliverable 2.2.1.1:</b> Report of online meeting with coordination team, NDAs and local stakeholders, containing City selection validated by national ministries.</p>
				<p><b>Activity 2.2.1.2</b> Conduct a city-level stakeholder analysis and identify key actors to be integrated in the NbS task group in each of the 6 participating cities</p>	<p><b>Deliverable 2.2.1.2</b> 6 mapping reports including list of identified NbS task groups members to feed into Deliverable 2.2.1.3.</p>
				<p><b>Activity 2.2.1.3</b> Consultation workshop in each participating city to define a clear workplan and engagement strategy including representatives from all relevant actors (public, private, civil society, etc) for the NbS task groups</p>	<p><b>Deliverable 2.2.1.3:</b> 6 city level reports with (1) Officialization of NbS task groups in each participating city, and (2) Workplan for NBS task groups (3) stakeholder engagement plan</p>
				<p><b>Activity 2.2.1.4</b> Carry out city-level assessments and regional comparative analysis of relevant policy and legal frameworks and barriers to public and private sector finance for each of the 6 selected cities</p>	<p><b>Deliverable 2.2.1.4a:</b> 6 city-level policy and legal frameworks assessments and barriers reports for each of the participating cities</p> <p><b>Deliverable 2.2.1.4b:</b> 1 multi-city comparative policy and legal frameworks assessment and barriers report, based on deliverable 2.2.1.3.a<sup>52</sup></p>
				<p><b>Activity 2.2.1.5</b> Carry out city-level and regional comparative assessment analysis based on a specific assessment for each of the 6 selected cities</p>	<p><b>Deliverable 2.2.1.5a:</b> 6 city-level climate finance assessments reports for each of the participating cities</p>

<sup>52</sup> The assessment would include recommendations of policy and legal frameworks to scale up NbS and would be integrated into the Urban NBS Platform.

				of public and private funding for urban development	<b>Deliverable 2.2.1.5b:</b> 1 multi-city comparative report on climate finance for NBS in urban areas <sup>53</sup> .
				<b>Activity 2.2.1.6</b> Carry out a study to develop a greenhouse Gas emission assessment to identify the main emission sources in urban areas, with potential for NBS mitigation for the 6 selected cities and baseline assessment.	<b>Deliverable 2.2.1.6:</b> One Greenhouse gas inventory regional online tool developed, including analysis of mitigation potential through NBS for the 6 selected cities with different scenarios
				<b>Activity 2.2.1.7</b> Carry out 6 gender sensitive climate change risk and vulnerability assessment for each of the pilot cities in terms of the potential impacts of ecosystem services loss due to climate change and identification of critical hotspots for action with baseline assessment.	<b>Deliverable 2.2.1.7:</b> Gender sensitive vulnerability assessments for the 6 selected cities
				<b>Activity 2.2.1.8:</b> Organise 6 City-level workshops to present the results from the analysis carried out in activities 2.2.1.1 and 2.2.1.3 and to set the baseline for output 2.2.2	<b>Deliverable 2.2.1.8:</b> 6 workshops' reports, containing validation of deliverables 2.2.1.1 and 2.2.1.2 <sup>54</sup> .
			<b>Output 2.2.2:</b> Nature Based Urban adaptation and mitigation Plans developed and validated by city level stakeholders including the NbS Task group for the 6 selected cities.	<b>Activity 2.2.2.1:</b> Commission work to develop the Nature Based Urban adaptation and mitigation Plans for 6 pilot cities, including NBS Monitoring and Evaluation Frameworks at the city-level, taking into consideration inputs from output 2.2.1.	<b>Deliverable 2.2.2.1:</b> 6 Draft City level Nature Based Urban adaptation and mitigation Plans validated by NbS Task groups
				<b>Activity 2.2.2.2:</b> Hold one workshop per city to design and validate the Nature Based urban Adaptation and mitigation plans involving the NbS task groups	<b>Deliverable 2.2.2.2:</b> 6 workshop reports including participants lists and validation of deliverable 2.2.2.1. <sup>55</sup>
<b>Outcome 2.4:</b> Strategies for transforming and attracting private	There are no city level strategies for private sector engagement	Strategies for the engagement of the private sector are	<b>Output 2.4.1:</b> Financial guidelines to support investment in climate action	<b>Activity 2.4.1.1:</b> Develop a private sector engagement plan in each of the 6 participating cities comprising a regional online consultation tool to engage	<b>Deliverable 2.4.1.1:</b> 6 city-level private sector engagement plans developed

<sup>53</sup> It will include mapping out the flow of funds for both public and private investments towards NBS in urban areas with recommendations for public funding and resilient procurement and private funding investments to scale up NBS adoption in cities including

<sup>54</sup> The 6 workshops' reports will include participant lists, pre and post-event survey of participants to account for the impact of the workshops and expectations on the participants.

<sup>55</sup> The 6 workshops' reports will contain participants lists and pre and post-event survey of participants to account for the impact of the workshops and expectations on the participants, as well as 6 City level Nature Based Urban Adaptation and mitigation Plans validated by the NbS task groups

sector investment for low emissions and resilience developed and being used	for Nature based urban planning.	established for the 6 participating cities	developed for the 6 participating cities and incorporated into the Nature Based Urban Development Plans	private sector representatives, socialized through the online consultation platform and validated during urban NbS validation workshop (activity 2.2.2.2)	
				<b>Activity 2.4.1.2:</b> Develop one Consultation platform at the regional level for private sector engagement and hosted at the Urban NBS platform, hosted in the existing regional adaptation network and platform: REGATTA	<b>Deliverable 2.4.1.2:</b> Report on the design and specifications of the platform with user manual.
				<b>Activity 2.4.1.3</b> Development of long-term innovative financial guideline for the 6 NbS and included into the Nature Based Urban Development Plans and validated by the NbS Task Groups based on the findings from activity 2.2.1.4.	<b>Deliverable 2.4.1.3</b> 6 city- level financial guidelines to support investment in climate action developed and 1 comparative final report.
				<b>Activity 2.4.1.4</b> 6 City-level validation workshops lead by the NbS task Groups for the long-term innovative financial plans.	<b>Deliverable 2.4.1.4</b> 6 validation workshop reports including participants list and validation of deliverable 2.4.1.3
<b>Outcome 4.1:</b> An increase in the number of quality project concept notes developed and submitted	There are currently no approved proposals on NbS with the GCF for the participating countries. One regional proposal focused on resilient agriculture CAMBIO II (including Honduras and Dominican Republic)	Four project concept notes developed for each of the participating countries and validated by the relevant NDAs submitted to GCF	<b>Output 4.1.1:</b> Four project concept notes developed of a fundable quality	<b>Activity 4.1.1.1</b> Develop four prioritized national pipelines of transformative investments on NBS for urban areas derived from the Nature Based Urban Development Plans and the long-term financial strategies, aligned to the GCF Country Programme when available	<b>Deliverable 4.1.1.1:</b> Four country reports containing prioritized national pipelines of transformative investments on NbS for urban areas
				<b>Activity 4.1.1.2</b> Hold 4 virtual national meeting for the validation of the pipelines elaborated in activity 4.1.1.1., with local cities and national stakeholders, including potential AEs,	<b>Deliverable 4.1.1.2:</b> Four national online meetings reports for the pipeline validation
				<b>Activity 4.1.1.3</b> Hold a consultation participatory workshop for the elaboration of four concept notes, one per country, based on the results from Outcome 2 and the pipeline prioritized under activity 4.1.1.2	<b>Deliverable 4.1.1.3:</b> Four workshop reports including agreements and recommendations for the elaboration of concept notes as well as participants lists.

				<p><b>Activity 4.1.1.4</b> Develop four national concept notes on Urban NbS</p>	<p><b>Deliverable 4.1.1.4:</b> Four national concept notes submitted to GCF</p>
<p><b>Outcome 5.2:</b> Partnerships established to foster development and dissemination of methods, frameworks, and information systems for enhanced climate finance programming at subnational, national, and regional levels</p>	<p>There are a number of platforms undertaking global or regional initiatives on climate action for urban areas focused mainly on mitigation and greening options for cities. There is no regional platform specifically for Latin America. UNEP has developed two regional communities of practice on National Adaptation Plans and Ecosystem based Adaptation through its REGATTA and CityAdapt platforms. Some countries have developed MRV frameworks but usually not focused on adaptation at the city level.</p>	<p>City-city cooperation to promote knowledge on NBS for urban areas and experience exchange is strengthened through knowledge products, virtual exchanges and annual meetings.</p>	<p><b>Output 5.2.1.</b> Knowledge products and training about the opportunities of NBS in urban areas disseminated to citizens and local governments through regional mechanisms.</p>	<p><b>Activity 5.2.1.1:</b> Design a Regional online Urban NBS platform, hosted in UNEP’s platform REGATTA, to promote capacity building and knowledge sharing on NBS in urban areas based on outcomes from the different activities on the project with participation from other interested cities in the region in the web platform.</p>	<p><b>Deliverable 5.2.1.1:</b> Report on specifications and design of the platform with a user manual.</p>
				<p><b>Activity 5.2.1.2.</b> Develop 6 city-level and two regional audio-visual products showing results from outcomes 2.2. and 4.1, and 2 regional audio-visual products disseminated through the online Urban NbS platform</p>	<p><b>Deliverable 5.2.1.2:</b> 6 city-level and 2 regional audio-visual products disseminated through the online Urban NbS platform</p>
				<p><b>Activity 5.2.1.3:</b> Establish and operate a Regional online Community of Practice to share results from all activities in the project, trainings and knowledge exchange</p>	<p><b>Deliverable 5.2.1.3:</b> Regional report on the results of the Community of Practice, including number of people trained and use of the available online tools, initial and final survey of participants to account for the impact of the community of practice and expectations on the participants.</p>
				<p><b>Activity 5.2.1.4:</b> Develop a Massive Open Online Course (MOOC) on the development and implementation of Urban NbS for adaptation and mitigation in LAC</p>	<p><b>Deliverable 5.2.1.4:</b> Report containing MOOC learning methodology, syllabus, and learning materials.</p>
				<p><b>Activity 5.2.1.5:</b> Design and hold four (4) technical experience exchanges (through the Community of practice) over a two year period under a virtual workshop format based on strategic regional collaboration fields of work prioritized, based on results derived from previous activities and defined by Steering Committee of the Project.</p>	<p><b>Deliverable 5.2.1.5:</b> Four (4) Technical reports on exchange experiences at the regional level focused on:</p> <ul style="list-style-type: none"> <li>- Vulnerability assessments</li> <li>- NBS opportunities in urban areas</li> <li>- Private sector engagement in Urban NBS</li> <li>- Financial mechanisms to promote NBS in urban areas</li> </ul> <p>pre and post-event survey of participants to account for the impact of the exchange and expectations on the participants.</p>
				<p><b>Activity 5.2.1.6:</b></p>	<p><b>Deliverable 5.2.1.6:</b></p>

				Facilitation of annual regional meetings to exchange experience and track progress of readiness project, with participation of designated representatives from the participating cities, NDA offices	Report from bi-annual regional meetings (24)
			<b>Output 5.2.2:</b> Urban NBS M&E guidelines are developed at the regional level	<b>Activity 5.2.2.1.</b> Preparation of a regional guideline for the design of M&E plans on Urban NbS.	<b>Deliverable 5.2.2.1</b> Regional report including guidelines and recommendations for the development of M&E frameworks for urban NbS.

## 4. THEORY OF CHANGE

The Theory of Change diagram (Figure 1) illustrates the linkages between the project's goals and the proposed project's outputs and outcomes. It also shows how the chosen project's structure contributes towards overcoming the current barriers to the implementation of the regional readiness proposal and work on an identified base of risks and assumptions. In doing so, the proposed project will aim at supporting Cuba, Ecuador, Honduras and the Dominican Republic's local governments in reducing the vulnerability to climate change of urban areas through Nature based Solutions (NbS) and innovative financing opportunities.

The vision of the project is to create an enabling science-based policy environment with increased access to finance to achieve the scale up of Nature-based Solutions (NbS) in urban contexts as a means to create resilience to climate as well as opportunities for economic and social development. Through this, Cuba, Ecuador, Honduras and the Dominican Republic will be able to promote priority investment and mainstream NbS into urban development planning because NbS opportunities to reduce urban vulnerability will have been identified and integrated by among decision makers.

As described in section 2, one of the main barriers for the integration of NbS in the LAC region is the limited scientific knowledge base among local decision-makers and stakeholders, considering the complexity of the multiple goals and co-benefits NbS can deliver. The first component will thus aim at improving local, national and regional stakeholders' understanding of the vulnerability to climate change and the potential for NbS for adaptation and mitigation in urban areas. The outputs under this component 2.2 will contribute to assess the existing regulatory framework and policies in order to contribute to their development and to create an enabling environment for the elaboration of NbS urban plans.

The lack of understanding is linked to the lack of political and financial support, and the implementation of NbS in medium-sized cities is also limited by access to climate change adaptation finance. The second component of this project (2.4) will thus support the 6 selected cities in the design and validation of action plans to integrate the NbS approach for urban planning, engaging with the domestic private sector to incentivize climate investment into urban NbS, and thus foster efficient deployment of climate finance at a local level.

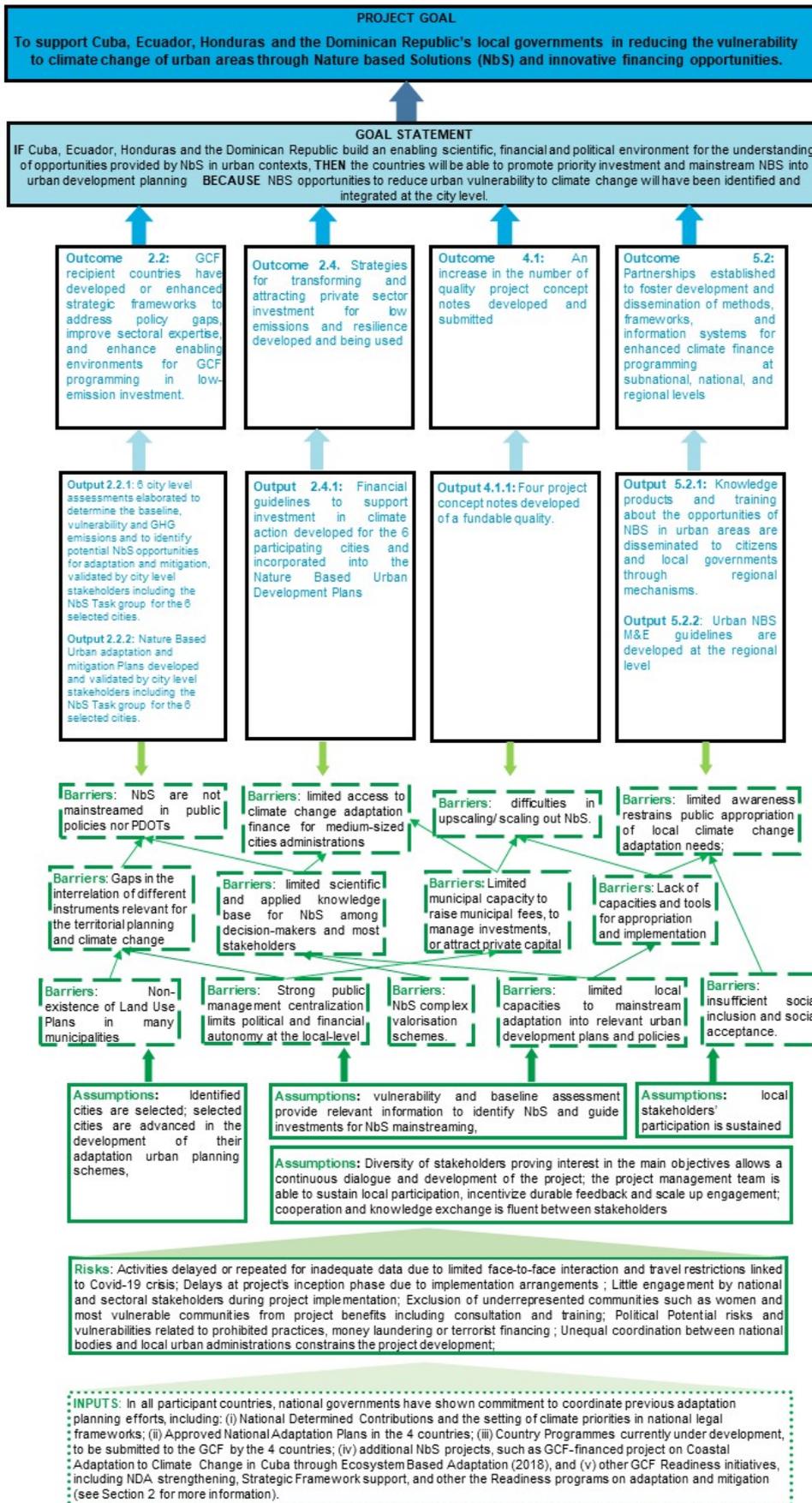
Furthermore, as this project will be implemented in pilot cities, it will address directly a key issue of difficulties in upscaling and scaling out NbS. Component 4.1 will identify most appropriate partnerships for NBS scale-up. It will work on the prioritization of transformational pipeline to further developed one concept notes per country, thus increasing the rate of submission of concept notes for submission to the GCF and ensuring country-ownership of the challenge faced.

Finally, local capacities to mainstream adaptation into relevant urban development plans and policies will be strengthened through component 5.2, with online trainings and an online regional platform aiming at expanding the dissemination of knowledge and tools related to NbS among public technical officers and key stakeholders including individual citizens across the region. This will also contribute to strengthening governance structures and institutional processes for NbS mainstreaming, with inputs gained from an M&E framework development processes. This will be conducted in parallel to awareness raising activities, to ensure public appropriation of local climate change adaptation needs and address the insufficient social inclusion and social acceptance observed until now. Knowledge sharing and learning activities will contribute to increase local awareness and to identify innovative public and private financial mechanisms for NbS.

The implementation of this project will be conducted on the basis of a series of assumptions and risks further detailed in section 6.3. Among these assessments are the selected cities on a tentative basis, as well as political support and stakeholders' engagement. The assessment included in the diagram will however be completed by the baseline exercise at the inception phase of the project, that will provide a much more complete assessment of specific risk at the cities' level.

The project will feed from all existing initiatives of urban NbS and will ensure complementarity with other projects been implementing. It will be aligned with Country Programme funded by GCF when available and will contribute to integrating national climate change priorities into local development planning processes. Through this alignment, the project will improve the country's ability to implement actions identified in NDCs, NAPs and all national adaptive frameworks.

Figure 1. Diagram of the theory of change



## 5. BUDGET, PROCUREMENT, IMPLEMENTATION AND DISBURSEMENT PLAN

### 5.1 Budget plan

Please see the Budget Plan in Excel.

Overall financial management and procurement of goods and services under this Readiness request will be guided by the UNEP regulations, rules, policies, and procedures as well as its programme manual.

### 5.2 Procurement plan

Procurement of goods and services follow the general principles stated under clause 7 “*Procurement Policies and Processes*” of Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement entered into between UNEP and GCF on 2 June 2020. For this Readiness and Preparatory Support proposal, procurement of USD 933,090.00 will be directly managed by UNEP. Procurement of USD 303,000.00 will be undertaken by the WENR and USD 104,000.00 by Practical Action, in accordance with the approved Procurement Plan.

### 5.3 Implementation Plan

Please complete the Implementation Plan in Excel using the template available in the [Library](#) page of the GCF website.

### 5.4 Disbursement schedule

**Readiness Proposal that falls within a Framework Agreement with the GCF**

Disbursements will be made in accordance to Clause 4 “*Disbursement of Grants*” and Clause 5 “*Use of Grant Proceeds by the Delivery Partner*” of the Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement between GCF and UNEP dated 2 June 2020 (Framework Agreement). The Delivery Partner is entitled to submit 2 request(s) for disbursement each year and is also entitled to request one interim request for disbursement within 30 days of notification of approval.

## 6. IMPLEMENTATION ARRANGEMENTS AND OTHER INFORMATION

### 6.1 Implementation arrangements

Please describe how implementation arrangements will be made and how funds will be managed by the NDA and/or the Delivery Partner.

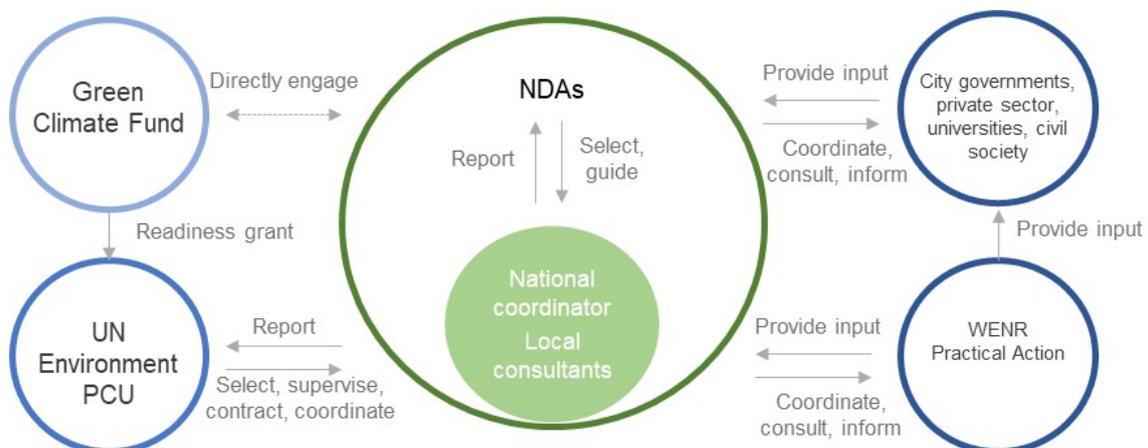
As the Delivery Partner, UNEP will carry out fiduciary and safeguards oversight and provide the necessary scientific expertise and technical support to the project formulation, start up, implementation, evaluations and closure. UNEP will be responsible for implementation of the readiness support and will carry out all fiduciary and financial management, procurement of goods and services, monitoring and reporting activities under this proposal in compliance with UNEP's policies and procedures and with the Framework Agreement

UNEP will implement the project at the regional level from UNEP's Office for Latin America and the Caribbean (ROLAC). Implementation of the activities under this proposal will be in accordance with a Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement entered into on 2 June 2020.

Two additional Implementing Entities will be directly engaged for the execution of specific activities in the project, as follows:

- **The Wageningen Environment Research (WENR) for outputs 2.2.1, 2.2.2 and 5.2.2.**  
WENR is currently technically supporting the CityAdapt project in Mexico, El Salvador and Jamaica implemented by UNEP. WENR holds a transdisciplinary 'Science for Impact' systems approach, addressing aspects such as heat islands, flooding, food supply, air quality, urban agriculture and livability, as well as urban policy and urban planning. In the context of this proposal WENR would be guiding with support from the regional, national coordinators and local consultants the execution of the city level assessments under output 2.2 and the development of the NbS Urban Development Plans.
- **Practical Action – Perú, for output 5.2.1**  
Practical Action - Perú is a regional organization working towards three main objectives: farming that works for everyone, resilience that protects and energy access for everyone. They have worked with UNEP for seven years proving to be an organization that adds value to adaptation to climate change initiatives in LAC and they have specifically supported the Regional Office through their experience in knowledge management and learning platforms for the last 5 years.

These two organizations have a strong proven experience of work with UNEP in the region and their due diligence documentation is available in Annex II to this proposal.



The Implementing Entities will report to UNEP on progress of implementation of the activities outlined above; and will ensure that project activities are well coordinated and aligned with national priorities. UNEP, as Delivery Partner, has undertaken a due diligence of the Implementing Entities, particularly by reviewing the elements of governance and public accountability. UNEP is confident that WENR and Practical Action have the relevant fiduciary and financial management capacity to act as the Implementing Entities.

UNEP will sign a Project Cooperation Agreement with the Implementing Entities to establish clear roles and responsibilities for the execution of the above-mentioned project activities; and to ensure that the activities are executed in line with GCF and UNEP rules, policies and requirements. The agreement will pass down the relevant implementation-related responsibilities under the Framework Agreement to the entity and the transfer of funds to the entities for the implementation of the relevant activities will also be carried out under the regulation of the Framework Agreement. **Audit costs will be covered by the partners from the total transferred amount as regulated by UNEP Project Cooperation Agreements'.**

All operating procedures will align with the UNEP’s programme manual, which includes provisions for financial management and procurement.

A UNEP Programme Officer (PO) will be responsible for project supervision to ensure consistency with GCF and UNEP policies and procedures. The functions of the PO will include but will not be limited to the following: a) participating in the Annual PSC meetings; b) the clearance of periodic Progress Reports and Project Implementation Reviews; and c) the technical review of project deliverables, d) providing input to periodic readiness portfolio reporting to GCF; and e) preparing requests for disbursements.

The Regional Project Steering Committee (PSC) will be composed of the NDAs of Ecuador as the Chair, Cuba, Honduras, Dominican Republic and UNEP as a co-chair.

The Regional PSC will have high decision-making capacity and will primarily serve to provide project oversight and advisory support, including a) overseeing project implementation, and b) reviewing the annual budget and work plan. The Regional PSC will meet at least every six months with ad hoc meetings held as and when necessary to deal with emerging issues – to discuss the projects main performance indicators and provide strategic guidance.

The NDAs will be the leading institution at the national level for this proposal engaging with other ministries and institutions as needed and establishing direct communication with the city governments to ensure alignment of the results with the approved proposal and with key actors.

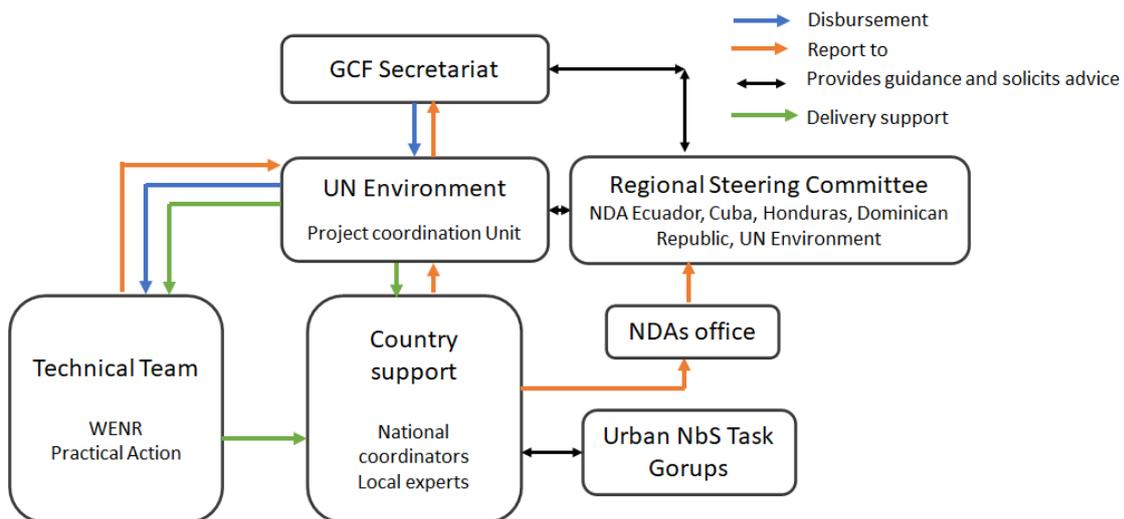
A national coordinator (NC) will be hired by UNEP in each participating country to support the day to day implementation of the project, ensure stakeholder engagement and proper reporting of activities to the NDAs.

Local consultants will be hired to assist implementation of activities. Local consultants will be selected by the Delivery Partner with approval from the corresponding NDA. The location of the local consultants will be previously defined by the NDA.

National products are to be approved by the relevant NDA together with the PCU. Meanwhile, regional products are to be approved by the PSC.

**6.2 Implementation and execution roles and responsibilities**

The project implementation arrangements are described here. The figure below provides the funding flows and reporting lines between the entities involved in the project.



- i. **NDAs** will be responsible for the leadership, coordination and stakeholder engagement at the national level. The engagement of local consultants and approval of national/city-level products will be directly approved by the NDAs and regional products will be approved through the PSC. The NDAs will also be

responsible for the validation of national pipelines and the definition of priorities for the development of concept notes to the GCF

- ii. **The Regional Project-Steering Committee (PSC)** will be set up to provide oversight and guidance to the project implementation. The PSC will have decision-making capacity and will primarily serve to provide guidance and advisory support, including (a) provide guidance and support project implementation, and (b) reviewing annual budget and work plans (c) ensure synergy and coordination as well as avoid any overlaps with ongoing projects including GCF readiness projects. The PSC will meet at least once a year – with ad hoc meetings held as and when necessary – to discuss the project’s main performance indicators and provide strategic guidance. The PSC will be integrated by a representative designated by each NDA and a representative of the DP. The PSC will be co-chaired by DP/ UNEP and a representative of the NDA in Ecuador as the leader country for this proposal and final decisions will be approved by consensus among the NDAs.
- iii. **A Project Coordination Unit (PCU)** will be established for day to day management of the project. The PCU will be internally executed by UN Environment’s Office for Latin America and the Caribbean. Under the supervision of the Project Board-Steering committee, the PCU will be responsible for the overall implementation of this readiness proposal. The PCU will draw detailed terms of reference, perform procurement and human resources duties, manage funds according to the terms in the grant agreement, provide technical inputs, organize events, oversee that all deliverables are provided by individual consultants or consulting firms in a timely and efficient way, and report progress to the GCF. The PCU will consist of a Project Manager, Project Coordinator and an administrative Assistant (AA).
- iv. **City Level NbS Task groups** will be integrated by Representatives from each participating city and will be approved by the respective NDA. The NbS Task groups will participate and validate the assessments and work undertaken at the city level and will play a key role in the definition of priorities at the city level and the engagement with key stakeholders.
- v. **A national coordinator (NC)** will be hired by UNEP in each participating country to support the day to day implementation of the project, ensure stakeholder engagement and proper reporting of activities to the NDAs. The National coordinator will be based in the NDAs office and will report directly to the NDA and to the PCU for national and regional alignment.
- vi. **Local consultants** will be hired to assist implementation of activities. Local consultants will be selected by the DP with consultation from the corresponding NDA. The location of the local consultants will be previously defined by the NDA.
- vii. National products are to be approved by the relevant NDA together with the PCU. Meanwhile, regional products are to be approved by the PSC.

### 6.3 Risks and mitigation measures

Please include a set of identified risks and mitigation actions for each. Please utilize the risk table below that identifies the probability of a given risk occurring and the entity that will manage the risk. Please refer to Part III Section 6.3 of the Readiness Guidebook for further information on how to complete this section.

Risk category	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s)	Entity(ies) responsible to manage the risk(s)
Institutional coordination	Institutional and technical weaknesses that may interfere in the effective implementation of the activities	Medium	High	The project will include: (i) several gap analyses that will enable an early identification of needs and recommendations as first steps for implementation; and (ii) a project execution unit	UNEP and NDAs

Risk category	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s)	Entity(ies) responsible to manage the risk(s)
				following an adaptive management approach with a dual pursuit of management and learning	
Stakeholder engagement	Little engagement by national and sectoral stakeholders during project implementation	Low	High	The project will ensure from an early start a high political buy-in by including relevant stakeholders and establishing a coordination platform including a non-binding advisory committee, the NbS task groups. Similarly, the project considers participative processes to consult and validate all the analyses and plans produced and the regular upload of the project's products in the Regional Platform	UNEP and NDAs
Exclusion of underrepresented communities	Exclusion of underrepresented communities such as women and most vulnerable communities from project benefits including consultation and training	Medium	Medium	To avoid exclusion of underrepresented communities such as women the project will use practical guidelines to integrate gender into activities and outputs correctly, as well as criteria and activities checklists (IUCN 2011). Gender aspects will also be also taken into consideration when i) procuring consultants, ii) establishing the composition of the Project Steering Committee, and iii) designing indicators within the	UNEP and NDAs

Risk category	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s)	Entity(ies) responsible to manage the risk(s)
				monitoring and reviewing system	
Covid-19 risk	Activities delayed or repeated for inadequate data due to limited face-to-face interaction and travel restrictions	Medium	Medium	UNEP will provide tools for remote collaboration and engagement.	UNEP
Delays at project's inception phase	Delays that may be experienced such as putting in place arrangements to start project implementation e.g. procurement given the number of consultants/consultancy firms to be procured	Medium	Medium	Engagement of implementing entities for the execution of the project will ensure an efficient inception phase	UNEP
Prohibited Practices money laundering or terrorist financing	Potential risks and vulnerabilities related to prohibited practices, money laundering or terrorist financing.	Low	Low	The Project will be implemented in accordance with UN regulations, rules and policies including the Anti-Fraud and Anti-Corruption Framework of the United Nations Secretariat. The financial management and procurement in project will be guided by UN Financial Regulations, Rules and practices, as well as UNEP's operations manual.	UNEP

#### 6.4 Monitoring

UNEP as the Delivery Partner will agree on a plan with the NDA to monitor the implementation of the activities using the grant proceeds. The activities included in the proposal pay significant attention to monitoring, reporting, and evaluation of the process. The project will create an M&E framework and build capacity to conduct M&E activities. In this sense, the project will establish mechanisms to learn from the process of preparing, developing and implementing the Country Programme. Indeed, the project will undertake a midterm evaluation before this support concludes.

The Project Steering Committee (PSC) will play a key role in the monitoring of project progress providing project oversight and advisory support, including a) overseeing project implementation, and b) reviewing the annual budget and work plan. The PSC will meet once a year with ad hoc meetings held as and when necessary to deal with emerging issues – to discuss the projects main performance indicators and provide strategic guidance

UNEP will submit Interim Progress Reports and Project Completion Report to the GCF, in accordance with the terms of the Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement entered into between UNEP and GCF on 2 June 2020

## 6.5 Other Relevant Information

The sustainability and replicability of the results of this readiness proposal will be ensured through six elements, namely: i) building long-term community (city) ownership; ii) integrating EbA into urban planning; iii) promoting and structuring private sector investments into EbA iv) building evidence of the potential contribution of resilient urban planning to national adaptation targets v) monitoring and evaluation.

By engaging closely with target cities — particularly local governments, private sector and civil organizations— throughout the project implementation process, the project will instill a sense of ownership in these cities, which will contribute to the long-term sustainability of project interventions after project closure.

Training, monitoring, evaluation and the comparative analysis and best practices from project activities will provide national- and local-level decision-makers with relevant knowledge and information to adopt climate-resilient policies and incentives in the long-term for resilient urban planning.

The project will promote private sector investments into EbA through capacity-building and awareness-raising interventions targeting the private sector.

The analysis of opportunities for EbA integration into urban planning will also allow to determine the potential for contribution to national adaptation targets established through the NDCs and NAPs.

Lessons learned from project activities will be collated by the M&E Specialist in the Regional Project Management Unit and made available to development planners through the regional platform.

**No Conflict of Interest:** To avoid any possible conflict of interest deriving from the Delivery Partner's role as an accredited entity, the prioritization of investments and projects in the context of this readiness grant will be made through a broad consultation process with relevant stakeholders, under the leadership of the NDA. The final validation of these priorities will be carried out by the country's mechanism of coordination and related institutional arrangements, with the participation of other government agencies, as well as representatives from civil society and private sector, to ensure that chosen priorities are fully aligned with national plans and strategies and adequately include inputs from consulted stakeholders.

**Prohibited Practices:** The proposed project will be implemented in accordance with UN regulations, rules and policies, including the Anti-Fraud and Anti-Corruption Framework of the United Nations Secretariat. The financial management and procurement for the project will be guided by UN Financial Regulations, Rules and Practices, as well as UNEP's operations manual.

The risk of GCF proceeds being utilised for prohibited practices, money laundering or terrorist financing will be mitigated through appropriate legal instruments which will include warranties and caveats by the Implementing Entities to inter alia ensure compliance with the Anti-Fraud and Anti-Corruption Framework of the United Nations Secretariat, as well as the Green Climate Fund Policy on Prohibited Practices. Further information on UNEP's Misconduct and Anti-fraud Policies is available at: <https://www.unenvironment.org/about-un-environment-programme/policies-and-strategies/misconduct-and-anti-fraud-policies>

**Money Laundering/Financing of Terrorism:** Consistent with numerous United Nations Security Council resolutions, including S/RES/1269 (1999/S/RES/1368 (2001), and S/RES/1373 (2001), UNEP is firmly committed to the

international fight against terrorism, and in particular, against the financing of terrorism. In accordance with UN Regulations, Rules and Policies, UNEP undertakes to use reasonable efforts to ensure that none of the GCF funds provided under the award are used to provide support to individuals or entities associated with terrorism.

**Sanctions:** UNEP confirms there are no United Nations Security Council (UNSC) restrictive measures in force within the the four countries involved in the project. In addition, no individual, entity or other group listed on the UNSC sanctions list, including the consolidated list, will be involved in any manner with the project or its activities, either as a counterparty, implementer or beneficiary

**Environmental and Social Sustainability:** UNEP screens all its projects for environmental, social, and economic risks and impacts as established under the UNEP's Environmental and Social Sustainability (ESS) Framework. The Compliance Review and Grievance Redress processes provide a Stakeholder Response Mechanism that informs and guides staff, implementing and executing partners and people affected by UNEP

projects in bringing and responding safeguard-related stakeholder responses concerning compliance review and dispute resolution in the context of the. The Stakeholder Response Mechanism provides a direct link for third parties or anonymous persons who are negatively affected by the projects to report their concerns directly to the Independent Office for Stakeholder Safeguard-related Response. Further information on UNEP ESS Framework and Stakeholder Response Mechanism is available at: <https://www.unenvironment.org/resources/report/uneps-environmental-social-and-economic-sustainability-stakeholder-response>

**Intellectual Property and title:** In accordance with UN regulations and practices, title to any equipment and supplies that may be purchased during the implementation of the project shall rest with UNEP after consultation and/or agreement of NDA. Upon completion of the project, the disposal of the equipment and supplies will be effected in accordance with UN Regulations and practices and in the best interest of the sustainability of the activities. UNEP shall hold the intellectual property rights to any publications and materials developed during project implementation, and will provide worldwide royalty free license to the NDA. Any reports and publications prepared as a deliverable from this project will be posted on the both UNEP and NDA websites and will be freely accessible to all relevant stakeholders.

Any project-related concerns and complaints can be raised through the UNEP website (at <https://www.unenvironment.org/about-un-environment/why-does-un-environment-matter/un-environment-project-concern> ) or mailed to [unenvironment-iossr@un.org](mailto:unenvironment-iossr@un.org). Step by step guidance on the compliance or grievance matters, such as eligibility, process and contact information, are available in the [Environmental and social sustainability Framework: Stakeholder Response Mechanism](#).

Outcomes / Outputs		Detailed Budget (in US\$)						Expenditure Plan							
		Budget Categories <small>choose from the drop-down list</small>	Unit	# of Unit	Unit Cost	Total Budget <small>(per budget category)</small>	Finance source	Total Budget <small>(per sub-outcome)</small>	Total Budget GCF <small>(per outcome)</small>	Total budget with co-financing	6m	12m	18m	24m	
Outcome 2.2: GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF programming in low-emission investment	Output 2.2.1: 6 city level assessments elaborated to determine the baseline, vulnerability and GHG emissions and to identify potential NBS opportunities for adaptation and mitigation	Consultant - Individual - Regional coordinator	W/Day	80	200.00	16,000.00	GCF	408,890.00			16,000.00				
		Consultant - Individual - National coordinator	W/Day	136	160.00	21,760.00	GCF				21,760.00				
		Consultant - Individual - National coordinator	W/Day	136	160.00	21,760.00	GCF				21,760.00				
		Consultant - Individual - National coordinator	W/Day	136	160.00	21,760.00	GCF				21,760.00				
		Consultant - Individual - National coordinator	W/Day	136	160.00	21,760.00	GCF				21,760.00				
		Consultant - Individual - Local NBS policy	W/Day	40	250.00	10,000.00	GCF				10,000.00				
		Consultant - Individual - Local NBS policy	W/Day	40	250.00	10,000.00	GCF				10,000.00				
		Consultant - Individual - Local NBS policy	W/Day	20	250.00	5,000.00	GCF				5,000.00				
		Consultant - Individual - Local NBS policy	W/Day	20	250.00	5,000.00	GCF				5,000.00				
		Consultant - Individual - Local Urban finance	W/Day	40	250.00	10,000.00	GCF				10,000.00				
		Consultant - Individual - Local Urban finance	W/Day	40	250.00	10,000.00	GCF				10,000.00				
		Consultant - Individual - Local Urban finance	W/Day	20	250.00	5,000.00	GCF				5,000.00				
		Consultant - Individual - Local Urban finance	W/Day	20	250.00	5,000.00	GCF				5,000.00				
		Workshop/Training	Two day workshop	6	2,500.00	15,000.00	GCF				15,000.00				
		Consultant - Individual - International NBS Policy	W/Day	40	350.00	14,000.00	Co-Financing				14,000.00				
		Consultant - Individual - International Urban finance	W/Day	40	350.00	14,000.00	Co-Financing				14,000.00				
		Consultant - Individual - Urban Growth modeller	W/Day	125	400.00	50,000.00	GCF					50,000.00			
		Consultant - Individual - GHG modeller	W/Day	125	400.00	50,000.00	GCF					50,000.00			
	Consultant - Individual - Climate modeller	W/Day	125	400.00	50,000.00	GCF		50,000.00							
	Consultant - Individual - web developer of city models	web developer for city models	35	350.00	12,250.00	GCF		12,250.00							
	Workshop/Training	Two day workshop	6	2,500.00	15,000.00	GCF		15,000.00							
	Travel - International	International flights	8	3,200.00	25,600.00	GCF		25,600.00							
	Output 2.2.2: Nature Based Urban adaptation and mitigation Plans developed and validated by city level stakeholders including the NBS Task group for the 6 selected cities	Consultant - Individual - Regional coordinator	W/Day	80	200.00	16,000.00	GCF	149,520.00			16,000.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - Local M&E Expert	W/Day	8	250.00	2,000.00	GCF					2,000.00			
Consultant - Individual - Local M&E Expert		W/Day	8	250.00	2,000.00	GCF					2,000.00				
Consultant - Individual - Local M&E Expert		W/Day	4	250.00	1,000.00	GCF					1,000.00				
Consultant - Individual - Local M&E Expert		W/Day	4	250.00	1,000.00	GCF					1,000.00				
Consultant - Individual - M&E Expert		W/Day	20	350.00	7,000.00	Co-Financing					7,000.00				
Consultant - Individual - City Planner		W/Day	75	400.00	30,000.00	GCF						30,000.00			
Travel - International		International flights	8	4,000.00	32,000.00	GCF						32,000.00			
Workshop/Training		Two day workshop	6	2,500.00	15,000.00	GCF						15,000.00			
Outcome 2.4: Strategies for transforming and attracting private sector investment for low emissions and resilience developed and being used		Output 2.4.1: Financial guidelines to support investment in climate action developed for the 6 participating cities and incorporated into the Nature Based Urban Development Plans	Consultant - Individual - Regional coordinator	W/Day	80	200.00	16,000.00				GCF	106,020.00	74,520.00	106,020.00	16,000.00
	Consultant - Individual - National coordinator		W/Day	68	160.00	10,880.00	GCF	10,880.00							
	Consultant - Individual - National coordinator		W/Day	68	160.00	10,880.00	GCF	10,880.00							
	Consultant - Individual - National coordinator		W/Day	68	160.00	10,880.00	GCF	10,880.00							
	Consultant - Individual - National coordinator		W/Day	68	160.00	10,880.00	GCF	10,880.00							
	Consultant - Individual - International NBS Policy		W/Day	35	350.00	12,250.00	Co-Financing		12,250.00						
	Consultant - Individual - International Urban finance		W/Day	35	350.00	12,250.00	Co-Financing		12,250.00						
	Consultant - Individual - web developer		W/Day	20	350.00	7,000.00	Co-Financing		7,000.00						
Workshop/Training	Two day workshop	6	2,500.00	15,000.00	GCF		15,000.00								
Outcome 4.1: An increase in the number of quality project concept notes developed and submitted	Output 4.1.1: Four project concept notes developed of a fundable quality	Consultant - Individual - Regional coordinator	W/Day	80	200.00	16,000.00	GCF	222,020.00	157,520.00	222,020.00	16,000.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF				10,880.00				
		Consultant - Individual - International NBS Policy	W/Day	15	350.00	5,250.00	Co-Financing						5,250.00		
		Consultant - Individual - International Urban finance	W/Day	15	350.00	5,250.00	Co-Financing						5,250.00		
		Professional Services – concept note development	Contract	4	17,500.00	70,000.00	GCF							70,000.00	
		Professional Services – concept note development	Contract	4	13,500.00	54,000.00	Co-Financing							54,000.00	
		Workshop/Training	Two day workshop	4	2,000.00	8,000.00	GCF							8,000.00	
		Travel - International	International flights	8	2,500.00	20,000.00	GCF							20,000.00	
Outcome 5.2: Knowledge products and training about the opportunities of NBS in urban areas are disseminated to citizens and local governments through regional mechanisms.	Output 5.2.1: Knowledge products and training about the opportunities of NBS in urban areas are disseminated to citizens and local governments through regional mechanisms.	Consultant - Individual - Regional coordinator	W/Day	80	200.00	16,000.00	GCF	216,770.00				8,000.00		8,000.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF							10,880.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF							10,880.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF							10,880.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF							10,880.00	
		Audio Visual & Printing	Professional services audiovisual	6	2,000.00	12,000.00	GCF						6,000.00		6,000.00
		Audio Visual & Printing	Professional services audiovisual	2	7,500.00	15,000.00	Co-Financing						7,500.00		7,500.00
		Consultant - Individual - web developer	W/Day	55	350.00	19,250.00	Co-Financing						19,250.00		

Partnerships established to foster development and dissemination of methods, frameworks, and information systems for enhanced climate finance programming at subnational, national, and regional levels		Professional Services – online trainings	Contract	1	35,000.00	35,000.00	Co-Financing	136,540.00	304,790.00			17,500.00	17,500.00	
		Professional Services – Community of practice	Contract	1	40,000.00	40,000.00	Co-Financing					40,000.00		
		Travel - International	Participation in annual meetings	26	2,000.00	52,000.00	Co-Financing				26,000.00		26,000.00	
	Output 5.2.2: Urban NBS M&E guidelines are developed at the regional level	Consultant - Individual - Regional coordinator	W/Day	80	200.00	16,000.00	GCF			72,020.00			16,000.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF						10,880.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF						10,880.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF						10,880.00	
		Consultant - Individual - National coordinator	W/Day	68	160.00	10,880.00	GCF						10,880.00	
		Consultant - Individual - Local M&E Expert	W/Day	7	250.00	1,750.00	GCF						1,750.00	
		Consultant - Individual - Local M&E Expert	W/Day	7	250.00	1,750.00	GCF						1,750.00	
		Consultant - Individual - Local M&E Expert	W/Day	4	250.00	1,000.00	GCF						1,000.00	
		Consultant - Individual - Local M&E Expert	W/Day	4	250.00	1,000.00	GCF						1,000.00	
		Consultant - Individual - M&E Expert	W/Day	20	350.00	7,000.00	Co-Financing						7,000.00	
<b>Total Outcome Budget</b>									<b>891,990.00</b>	<b>1,191,240.00</b>	<b>265,560.00</b>	<b>448,140.00</b>	<b>230,520.00</b>	<b>247,020.00</b>
<b>Project Management Cost (PMC)</b> Up to 7.5% of Total Activity Budget	Project Manager	Month	24	1,450.00	34,800.00	GCF	Actual amount and % of PMC requested: (do not change the formula)	Maximum PMC that can be requested: (do not change the formula)		17,400.00		17,400.00		
	Finance and administrative officer	Month	24	1,200.00	28,800.00	GCF	✓ 66,200.00	66,899.25		14,400.00		14,400.00		
	IT Equipment	LumpSum	2	1,300.00	2,600.00	GCF	✓ 7.42%	7.50%		2,600.00				
											34,400.00		31,800.00	

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

Breakdown (per budget category)	Financing source	Total (per budget category)
Audio Visual & Printing	Co-Financing	15,000.00
Audio Visual & Printing	GCF	12,000.00
Finance and administrative officer	GCF	28,800.00
Project Manager	GCF	34,800.00
Consultant - Individual - National coordinator	GCF	304,640.00
Consultant - Individual - Local NBS policy	GCF	30,000.00
Consultant - Individual - Local Urban finance	GCF	30,000.00
Consultant - Individual - Local M&E Expert	GCF	11,500.00
Consultant - Individual - International NBS Policy	Co-Financing	31,500.00
Consultant - Individual - International Urban finance	Co-Financing	31,500.00
Consultant - Individual - web developer	Co-Financing	26,250.00
Consultant - Individual - web developer of city models	GCF	12,250.00
Consultant - Individual - M&E Expert	Co-financing	14,000.00
Consultant - Individual - City Planner	GCF	30,000.00
Consultant - Individual - Urban Growth modeller	GCF	50,000.00
Consultant - Individual - GHG modeller	GCF	50,000.00
Consultant - Individual - Climate modeller	GCF	50,000.00
Professional Services – concept note development	GCF	70,000.00
Professional Services – concept note development	Co-Financing	54,000.00
Professional Services – online trainings	Co-Financing	35,000.00
Professional Services – Community of practice	Co-Financing	40,000.00
Consultant - Individual - Regional coordinator	GCF	96,000.00
IT Equipment	GCF	2,600.00
Travel - International	GCF	77,600.00
Travel - International	Co-financing	52,000.00
Workshop/Training	GCF	68,000.00
<b>Total Outcome Budget + PMC</b>		<b>1,257,440.00</b>

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FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

<b>Total Outcome Budget</b>			891,990.00
<b>Project Management Cost (PMC)</b>	7.4%	requested	66,200.00
<b>Contingency</b>	1%	requested	8,919.90
<hr/>			
<b>Sub-Total (Total Outcome Budget + Contingency + PMC)</b>			967,109.90
<b>Delivery Partner Fee (DP) -</b>			82,204.34
<b>Co-financing</b>	22.2%	optional	299,250.00
<hr/>			
<b>Total Project Budget (Total Activity Budget + Contingency + PMC + DP)</b>			1,049,314.24
<b>Total Project Budget with Co-Financing (Total Activity Budget + Contingency + PMC + DP + co-financing)</b>			1,348,564.24
<hr/>			
<b>Total Project Budget rounded to thousand</b>			1,049,000.00
<b>Total Project Budget with Co-Financing rounded to thousand</b>			1,349,000.00

B N	Unit 1	Unit 1 Cost	Unit 2	Unit 2 Cost	Total	Detailed Description
A	W/D	480	Daily fee	\$ 200.00	\$ 96,000.00	One (1) full-time (24 months) Regional Consultant as "Regional Project Support Consultant" @ US\$250 per day and 20 working days per month to support on all project outcomes.
B	W/D	1904	Daily fee	\$ 160.00	\$ 304,640.00	Four (4) Full-time (24 months) Local Consultants in Cuba, Ecuador, Honduras and Dominican Republic @ US\$160 per day (US\$76,160 each for two years) and 20 days per month to support all project outcomes. Local consultants will work in close cooperation and under the supervision of the Regional Project Support Consultant, the Project Manager and CN development Consultants. Local consultants will act as local liaisons between the project and participating countries (including relevant stakeholders), will be in charge of assisting in the development of the aforementioned sub-outcomes by (1) researching, identifying and compiling relevant data; (2) contributing to project deliverables by writing or revising country-specific deliverables; and (3) leading the organization, identification of participants and reporting of country-workshops, as well as contributing to the organization of regional events.
C	W/D	120	Daily fee	\$ 250.00	\$ 30,000.00	Four (4) local NBS policy experts to support output 2.2.1 for two cities in each country
D	W/D	120	Daily fee	\$ 250.00	\$ 30,000.00	Four (4) local Urban planning finance experts local to support output 2.2.1 for two cities in each country
E	# wks	6	Cost	\$ 2,500.00	\$ 15,000.00	Six (6) workshops (1ws/city). 2 day workshop 30 people to launch the project, validate methodologies for activity 2.2.1.3
F	W/D	90	Daily fee	\$ 350.00	\$ 31,500.00	One (1) international NBS policy expert to support the regional analysis in outputs 2.2.1 (40 days), 2.4.1 (35 days) and 4.1.1. (15 days)
G	W/D	90	Daily fee	\$ 350.00	\$ 31,500.00	One (1) international Urban planning finance expert to support the regional analysis in outputs 2.2.1 (40 days), 2.4.1 (35days) and 4.1.1. (15 days)
H	W/D	125	Daily fee	\$ 400.00	\$ 50,000.00	International experts in GHG modeller to develop output 2.2.1 @ US\$400 per day
I	W/D	125	Daily fee	\$ 400.00	\$ 50,000.00	International experts in urban growth modeller to develop output 2.2.1 @ US\$400 per day
J	W/D	125	Daily fee	\$ 400.00	\$ 50,000.00	International experts in climate modeller to develop output 2.2.1 @ US\$400 per day
K	W/D	35	Daily fee	\$ 350.00	\$ 12,250.00	One (1) Web developer to support output 2.2.1 designing and developping a visualization tool for GHG model, urban growth, climate model
L	# wks	6	Cost	\$ 2,500.00	\$ 15,000.00	Six (6) workshops (1ws/city). 2 day workshop 30 people to consult and validate results for activity 2.2.1.8
M	# travel	8	Cost	\$ 3,200.00	\$ 25,600.00	Four (4) international travel for 2 city planning experts (1 visit per country for 2 experts) to support development of outputs 2.2.1 for 6 days per travel visiting 2 cities in each country @US\$ 3,200 per travel
N	W/D	46	Daily fee	\$ 250.00	\$ 11,500.00	Four (4) national M&E expert to support output 5.2.2 @ US\$250 per day for 15 and 8 days each
O	W/D	40	Daily fee	\$ 350.00	\$ 14,000.00	One (1) international M&E intl expert to support output 5.2.2 @ US\$350 per day for 45 days
P	W/D	75	Daily fee	\$ 400.00	\$ 30,000.00	One (1) international City planner expert to support the development of NBS Urban development plans @ US\$400 per day for output 2.2.2
Q	# travel	8	Cost	\$ 4,000.00	\$ 32,000.00	Four (4) international travel for 2 city planning experts (1 visit per country for 2 experts) to support development of outputs 2.2.2 for 15 days per travel visiting 2 cities in each country @US\$ 4,500 per travel
R	# wks	6	Cost	\$ 2,500.00	\$ 15,000.00	Six (6) workshops (1ws/city). 2 day workshop 30 people @ US\$2000/ws to consult and validate results from output 2.2.2.
S	W/D	75	Daily fee	\$ 350.00	\$ 26,250.00	One (1) regional Web developer to support output 2.4.1 (20 days) and 5.2.1 (55) for a regional online consultation tool to engage private sector representatives and maintain the online platform
T	# wks	6	Cost	\$ 2,500.00	\$ 15,000.00	Six (6) workshops (1ws/city). 2 day workshop 30 people @ US\$2000/ws to consult and validate results from output 2.4.1
U	#	4	Contract	\$ 17,500.00	\$ 70,000.00	Professional services for the development of four concept notes (1/contract) for activity 4.1.2.2
V	#	4	Contract	\$ 13,500.00	\$ 54,000.00	Co-financing for the professional services for the development of four concept notes (1/contract) for activity 4.1.2.2
W	# wks	4	Cost	\$ 2,000.00	\$ 8,000.00	Four (4) workshops (1ws/country). 2 day workshop 30 people @ US\$2000/ws to consult and validate results from activity 4.1.2.2
X	# wks	8	Daily fee	\$ 2,500.00	\$ 20,000.00	Four international round trip (8 travels) for experts developing concept notes including Flight and DSA for concept note development @ US\$2,500 per travel for output 4.1.2.2.

**Breakdown by financing source**

GCF	958,190.00	76%
Co-financing	299,250.00	24%
<b>Total</b>	<b>1,257,440.00</b>	<b>100%</b>
	TRUE	

**Breakdown by Executing Entity**

UNEP	UN Environment Programme	876,590.00
WENR	Wageningen Environmental Research	278,850.00
PA	Practical Action - Peru	102,000.00
	<b>Total</b>	<b>1,257,440.00</b>
		TRUE

Description	Unit	Unit Cost	Total
One (1) Regional Consultant as "Regional Project Support Consultant"	1	\$ 200.00	\$ 200.00
Local Consultants in Cuba, Honduras, Dominican Republic and Ecuador to support all project outcomes.	1	\$ 160.00	\$ 160.00
NBS policy experts local	1	\$ 250.00	\$ 250.00
NBS policy expert intl	1	\$ 350.00	\$ 350.00
Urban planning finance experts local	1	\$ 250.00	\$ 250.00
Urban planning finance expert intl	1	\$ 350.00	\$ 350.00
M&E local expert	1	\$ 250.00	\$ 250.00
M&E intl expert	1	\$ 350.00	\$ 350.00
Web developer	1	\$ 350.00	\$ 350.00
Web developer for city planning	1	\$ 350.00	\$ 350.00
International planning expert on Urban development plans (city planner)	1	\$ 400.00	\$ 400.00
International experts on GHG	1	\$ 400.00	\$ 400.00
International experts on barriers	1	\$ 400.00	\$ 400.00
International experts on urban growth modelling	1	\$ 400.00	\$ 400.00
One (1) half time (24 months) Project Manager based in UN Environment's Office for Latin America and the Caribbean	1	\$ 1,450.00	\$ 1,450.00
One (1) two-third time (24 months) Administration and Finance Assistant (AFA) based in UN Environment's Office for Latin America and the Caribbean	1	\$ 1,200.00	\$ 1,200.00
2 day national workshop 30 people	1	\$ 2,000.00	\$ 2,000.00
2 day city-level workshops for 30 people with transportation and DSA	1	\$ 2,500.00	\$ 2,500.00
Concept note developers	1	\$ 31,000.00	\$ 31,000.00
Online trainings	1	\$ 35,000.00	\$ 35,000.00
Community of practice	1	\$ 40,000.00	\$ 40,000.00
International travel for annual meetings, including regional flights	1	\$ 2,000.00	\$ 2,000.00
International travel for concept notes	1	\$ 2,500.00	\$ 2,500.00
International flights with 6 days DSA @200	1	\$ 3,200.00	\$ 3,200.00
International flights with 15 days DSA @200	1	\$ 4,000.00	\$ 4,000.00
Two (2) IT equipment consisting on a portable laptop computer, a laptop doc and an external monitor each	1	\$ 1,300.00	\$ 1,300.00
Audiovisual products per city	1	\$ 2,000.00	\$ 2,000.00
Audiovisual products for dissemination in regional platform	1	\$ 7,500.00	\$ 7,500.00

5.2 Procurement Plan

Item	Item Description	Estimated Cost (US\$)	Procurement Method	Thresholds	Estimated Start Date	Projected Contracting Date
				(Min-Max monetary value for which indicated procurement method must be used)		
<b>Goods and Non-Consulting Services</b>						
IT equipment	Two laptops for the Project Manager and the Administration and Finance Assistant (AFA).	2,600.00	<b>Low Value Procurement:</b> 1. Two informal quotations must be obtained by the requisitioner with relevant information (price, quantity, delivery, time) via email, fax, etc. 2. Awarded to lowest cost vendor determined by the best value for money approach.	\$0 - \$10,000	Q1Y1	Q1Y1
Audio Visual & Printing	Communication and dissemination audiovisual material for the regional platform for output 5.2.1	27,000.00	<b>Invitation to Bid:</b> 1. At least 10 Vendors must submit bids with technical specifications via email to a centralized email address 2. Evaluation criteria are pass/fail basis only. 3. Vendors needs to pass all criteria to be considered. 4. Awarded to lowest cost vendor determined by the best value for money approach.	>\$40,000	Q3Y1	Q2Y2
Travel - International	International travel tickets for activities under output 2.2.1, 2.2.2 and 5.2.1	129,600.00			Q2Y1	Q4Y2
Workshop/Training	4 Two day city-level workshops for 30 people for outputs 2.2.1., 2.2.2., 2.4.1, and and 1 national workshop for 30 people for output 4.1.2	68,000.00	<b>Low Value Procurement:</b> 1. Three informal quotations must be obtained by the requisitioner with relevant information (price, quantity, delivery, time) via email, fax, etc. 2. Awarded to lowest cost vendor determined by the best value for money approach.	\$0 - \$10,000	Q2Y2	Q4Y3
<b>Sub-Total (US\$)</b>		\$ 227,200.00				
<b>Consultancy Services</b>						
Consultant - Individual - National coordinator	Four (4) Full-time (24 months) Local Consultants in Honduras, Dominican Republic, Ecuador and Cuba, for the entire project implementation	304,640.00	<b>Recruitment:</b> 1. Formulation of Terms of Reference (ToRs) and job opening for a minimum of 7 working days. 2. Desk review of applications followed by shortlisting. 3. Interview of shortlisted applicants followed by selection by the hiring manager.		Q1Y1	Q4Y2
Consultant - Individual - Local NBS policy	Four (4) local NBS policy experts to support output 2.2.1 for two cities in each country	30,000.00			Q1Y1	Q2Y1
Consultant - Individual - Local Urban finance	Four (4) local Urban planning finance experts local to support output 2.2.1	30,000.00			Q1Y1	Q2Y1
Consultant - Individual - Local M&E Expert	Four (4) local M&E experts local to support output 2.2.2 and 5.2.2	11,500.00			Q1Y1	Q4Y2
Consultant - Individual - International NBS Policy	One (1) international NBS policy expert to support the regional analysis in outputs 2.2.1, 2.4.1 and 4.1.1	31,500.00			Q1Y1	Q4Y2
Consultant - Individual - International Urban finance	One (1) international Urban planning finance expert to support the regional analysis in outputs 2.2.1, 2.4.1 and 4.1.1	31,500.00			Q3Y1	Q4Y1
Consultant - Individual - web developer	One (1) Web developer to support outputs 2.4.1 and 5.2.1	26,250.00			Q1Y2	Q2Y1
Consultant - Individual - web developer of city models	One (1) Web developer to support output 2.2.1	12,250.00			Q1Y2	Q2Y2
Consultant - Individual - M&E Expert	One (1) international M&E intl expert to support output 2.2.2 and 5.2.2	14,000.00			Q3Y1	Q4Y1
Consultant - Individual - City Planner	One (1) international City planner expert for output 2.2.1.	30,000.00			Q3Y1	Q4Y1
Consultant - Individual - Urban Growth modeller	International expert on urban growth modelling to develop output 2.2.1	50,000.00			Q3Y1	Q4Y1
Consultant - Individual - GHG modeller	International expert on GHG modelling to develop output 2.2.1	50,000.00			Q3Y1	Q4Y1
Consultant - Individual - Climate modeller	International expert on climate modelling to develop output 2.2.1	50,000.00			Q3Y1	Q4Y1
Consultant - Individual - Regional Coordinator	One (1) full-time (24 months) Regional Consultant as "Regional Project Support Consultant" for 20 working days per month	96,000.00			Q1Y1	Q4Y2
Professional Services – concept note development	For output 4.1.1	124,000.00			<b>Competitive based request for proposals:</b> 1. Open call for Expression of interest. 2. Call for proposals. 3. Evaluation of technical and financial proposals. 4. Selection of the most adequate based on best value for money.	\$30,000 - \$200,000
Professional Services – online trainings	For output 5.2.1.	35,000.00	Q3Y1	Q4Y1		
Professional Services – Community of practice	For output 5.2.1	40,000.00	Q3Y1	Q4Y1		
Project Manager		34,800.00	<b>Recruitment:</b> 1. Formulation of Terms of Reference (ToRs) and job opening for a minimum of 7 working days. 2. Desk review of applications followed by shortlisting. 3. Interview of shortlisted applicants followed by selection by the hiring manager.		Q1Y1	Q4Y2
Finance and administrative officer		28,800.00			Q1Y1	Q4Y2
<b>Sub-Total (US\$)</b>		\$ 1,030,240.00				

