



## ADAPTATION FUND

### PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	INCREASING CLIMATE RESILIENCE THROUGH RESTORATION OF DEGRADED LANDSCAPES IN THE ATLANTIC REGION OF CENTRAL AMERICA
Countries:	Belize, Guatemala and Honduras
Thematic Focal Area:	Disaster risk reduction and early warning systems
Type of Implementing Entity:	Multilateral Development Organization
Implementing Entity:	UNEP
Executing Entities:	WRI and CATIE
Amount of Financing Requested:	12.260 Millions (in U.S Dollars Equivalent)

#### Project Background and Context:

Central America is one of the most vulnerable regions to climate change world-wide. As warming of the atmosphere continues, the impacts of weather extremes in the exposed Atlantic coastal area of Central America pose a major risk for the region. A surge in land-falling hurricanes and an increase in average tropical cyclone wind speeds has been linked to increases in sea-surface temperature. Also, there is a documented shift toward a greater number of Category 4 and 5 hurricanes (Curry et al. 2009). Hurricanes in coastal areas cause heavy rainfall, massive river flooding, soil erosion and mudslides which destroy crops, affect infrastructure, limit potential for the expansion of coastal tourism and disrupt conservation and management of coastal vegetation. These climate extremes negatively affect people's livelihoods, economic activity, and drive-up migration and resettlement. Smallholder farmers and indigenous minorities are most vulnerable to these extremes. A report on the financial consequences of global warming (Vergara et al, 2013), concludes that the anticipated costs of weather extremes are amongst the most onerous in the region. Toba (2009), for example, places the annual costs of intensified hurricane activity in the region by 2050 at approximately \$5 billion.

In view of this situation, coastal restoration is key to protect natural capital and social welfare as it strengthens resilience to climate impacts. The consensus on this approach is reflected in the region's involvement in Initiative 20x20—an effort to change the dynamics of land degradation in Latin America and the Caribbean. To develop restoration as an adaptation action, there is a need to address: **a.** The lack of a conducive framework that enables adaptation actions on the ground; **b.** the lack of coordination among different local stakeholders; and **c.** information gaps that could lower the impact of extreme weather events and ensure adaptive planning.

#### Project Objectives:

Building on Initiative 20x20, the project's objective is to strengthen resilience in the coastal Atlantic region of Belize, Honduras and Guatemala to the impacts induced by the intensification of weather extremes. This will be pursued through the promotion of sustainable landscape restoration efforts (restoration of degraded natural forest, reforestation, optimal management of vegetation, sustainable use of mangrove and coastal swamp forests) with an emphasis in poor rural areas in the region. Efforts on coastal restoration align to the Central America Commission on Environment and Development's strategies (CCAD 2014).

#### Project Components and Financing in Belize, Honduras and Guatemala (5 years):

Components	Expected Outputs	Expected Outcomes	Amount (US\$)
1. <b>Supporting a conducive regulatory framework and conditions for adaptation implementation</b>	<ul style="list-style-type: none"> <li>- Assessments by technical partners and authorities of policy and regulatory measures for sustainable land restoration for adaptation</li> <li>- Assessments by technical partners and authorities of fiscal and other economic incentives for the adoption of adaptation measures</li> <li>- Promotion by technical partners of coordination of actions between social organizations, communities and private parties to steer the process of restoration as an adaptation measure to extreme weather events in coastal areas of the Atlantic region</li> </ul>	<p><b>At national level</b> in Belize, Honduras and Guatemala:</p> <ul style="list-style-type: none"> <li>-Improved use of available <b>technical, extension and financial services</b> in support of restoration projects in coastal areas vulnerable to the intensification of extreme weather events.</li> <li>-Public authorities have increased awareness of reinforcing or contradicting policies that reflect on adaptation activities in the coastal landscape.</li> </ul>	800,000
2. <b>Addressing key information gaps</b>	<ul style="list-style-type: none"> <li>- Regional information system covering the three participating countries, focused on land-use based management, adaptation-based response systems to the intensification of extreme weather events for adaptive planning purposes (technical authorities and national governments)</li> </ul>	<p><b>At national level</b> in Belize, Honduras and Guatemala:</p> <ul style="list-style-type: none"> <li>-Improved and timely <b>access to information</b> reducing the damages caused by extreme weather events.</li> <li>-Local authorities and experts know of climate risks and impacts and inform adaptive land use planning processes and restoration efforts.</li> </ul>	650,000
3. <b>Implementing restoration measures</b>	<ul style="list-style-type: none"> <li>- Design and deployment of specific measures in coastal land ecosystems with significant potential for replication by the private sector.</li> <li>- Participation of <b>private sector in financing of restoration as adaptation measures.</b></li> <li>- Design of monitoring processes to capture increased resilience of projects and landscapes adopting land-based adaptation measures (technical partners and government authorities).</li> <li>- Produce a <b>pipeline of adaptation projects based on land restoration</b> (technical partners, private sector and communities).</li> </ul>	<p><b>At regional level</b> across Belize, Honduras and Guatemala:</p> <ul style="list-style-type: none"> <li>-With restoration for adaptation investments in place, sustainable land use measures are recognized to have the potential to reduce vulnerability and improve social welfare through improved resilience, improved conditions for private investment in adaptation and protection of critical habitat for biodiversity conservation.</li> <li>-Local communities benefit from engaging in restoration productive processes. Technical know-how on land-use based adaptation methods flows to communities and enables them to contribute to the restoration process while improving their livelihoods.</li> </ul>	8,400,000
4. <b>Dissemination of results</b>	<ul style="list-style-type: none"> <li>- Results are disseminated for a wider set of actors in the region through an information campaign and a knowledge management plan (technical partners and authorities).</li> </ul>	<p><b>At national level</b> in Belize, Honduras and Guatemala and <b>regionally</b>:</p> <ul style="list-style-type: none"> <li>-Increased awareness of proposed measures for adaptation.</li> </ul>	500,000
6. Project/Programme Execution cost			950,000
7. Total Project/Programme Cost			475,000 WRI 475,000 CATIE
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			11,300,000
			960,000
<b>Amount of Financing Requested</b>			12,260,500

## PART II: PROJECT / PROGRAMME JUSTIFICATION

**Target sites and communities involved in the project.** The project has a focus in biomes and rural communities in the Atlantic coast of Belize, Honduras and Guatemala (the coastal area from Izabal lake in Guatemala, Amatique Bay shared by Guatemala, Honduras and Belize to the northern coastal and Cay areas of Belize

**Adaptation activities.** The project proposes enabling activities for adopting land restoration as an adaptation measure through regulatory, information and technical actions leading to investments in

improved resilience to intensifying weather extremes. Currently, public policies and resources, technical capacities and sectorial development trends hamper resilience across coastal landscapes. Adding to this, a lack of information on the vulnerability and losses hinders the acknowledgment of scale of losses from extreme weather events, and the adaptive planning that stems from this information's use.

The project seeks to promote restoration methods that include revegetation and restoration of coastal areas, which have been shown to reduce risks of soil erosion, floods, mudslides, contribute to maintain stable surface hydrology and stabilize runoffs associated to heavy rain fall linked to extreme weather events (UNFCCC, 2012).

**Expected economic, environmental and social benefits** Local communities and producers would benefit by improving their land use practices, avoiding further degradation, engaging in projects that increase the source of sustainable livelihoods and by allowing them to become more climate resilient and exploit business opportunities that maintain or improve the functionality of their lands. Promoted restoration of major wildlands, watersheds, areas lived in and governed by Miskito and Garifuna peoples, and the negative effects of climate extremes and land degradation, are all trans-frontier.

**A regional approach** however, can inform ongoing adaptation processes in the Central American coastal region where results can benefit from cross-dissemination of the sector's activities. Dissemination among countries is also required in the deployment of early-warning systems and management responses for climate extremes. Additionally, the regional approach of this project will permit intensive comparative multi-disciplinary monitoring of restoration in different political contexts.

**Nature and scope of likely activities** include: a) **Reforestation of deforested coastal areas** using native species with economic timber and non-timber value. Examples of areas where reforestation activities could take place include the Honduras' Mosquitia; b) **Restoration of degraded mangroves**. Mangrove recovery efforts will dampen the impacts of sea surges and shoreline protection against extreme weather events, again justifying the use of resources from the AF. Working to support partnerships between local communities, landholders, local government authorities and civil society, mangrove recovery efforts would be promoted in areas of significant mangrove loss (Placencia Peninsula in Belize, Amatique Bay in Honduras and Guatemala); private sector involvement would add resources to yield financial benefits through eco-tourism initiatives and the set-up of sustainable fisheries; c) **Restoration of Coastal swamp forest**. Coastal swamp forest in Honduras and Guatemala in Amatique Bay as well as in delta of the Patuca River have been heavily degraded. The recovery of coastal swampy forests, remnants of humid tropical forests and flooded savannah would contribute to maintain vegetation, recover natural drainage that would alleviate run offs during extreme weather events and maintain avifauna and flora unique to the area. Sustainability of the efforts could be achieved by promoting ecotourism and harvest of non-timber products with involvement from private sector. Local communities will participate as direct beneficiaries and shareholders as appropriate in these activities.

**The regional approach** is justified on the basis of: a) The Atlantic corridor of Guatemala, Honduras and Belize experiences similar climate impacts (these areas constitute the prime landing area of tropical storms, depressions and hurricanes in the Caribbean Sea); b) further, as indicate elsewhere in the document, there is considerable evidence that weather events in the area will intensify in strength and frequency as the sea surface temperature in the area increases as a result of climate change; c) the coastal area in the three countries has a similar biophysical make up, and d) posts cultural similarities in the local populations, who are among the most vulnerable in the area. A regional approach will add in economies of scale and sharing of experiences across participating countries. Additionally, it will provide improved adaptation benefits in the area as a whole and provide co-benefits (e.g. improved habitats for key species, and mitigation co-benefits).

**Innovation.** The use of restoration approaches as adaptation measures in coastal areas is innovative. Linking private impact investment to support restoration as adaptation efforts will be a first in the region. The cross fertilization between private and public inputs in three countries exposed to the same risks is

also innovative. The project will initiate a regional communication program and form a regional information center that will collect, analyse and disseminate information generated through the project and from other sources. The information will support decision-making and allocation of resources in the participating nations.

**Cost effectiveness.** The involvement of three nations exposed to the same level of risks and sharing an area of high risks of weather extremes (Amatique Bay, part of Hurricane Alley) improves the costs effectiveness of the solutions. Also, the cultural and social proximity of the coastal areas in the two countries calls for a regional approach. The use of restoration approaches rather than hard infrastructure is expected to yield lower costs. Involvement of the private sector will ensure that solutions deployed are cost effective. Dissemination of lessons learned will contribute to drive future costs lower.

**Development strategies alignment.** At a regional level, the three target countries are part of a regional strategy for the conservation and sustainable use of biodiversity in Mesoamerica as well as a Regional Strategy for Rural Development<sup>1</sup>. These are complemented by a Regional Climate Change Strategy (CCAD 2010a) and a Regional Strategy for the Integrated Management of Water Resources (CCAD 2010b). Also, Central America has also adopted a Regional Strategic Program for the Management of Forest Ecosystems, which calls for sustainable use, conservation and restoration of forest resources (Programa Estratégico Regional para el Manejo de los Ecosistemas Forestales - Perfor (CCAD y CAC, 2014)).

**Guatemala** The project supports the implementation of the National Forest Landscape Restoration Strategy, the National Strategy on Biological Diversity (Objective 11) and the Action Plan 2012-2022 from the National Council of Protected Areas (CONAP). Additionally, it contributes to the National Strategy for the Reduction of the Deforestation and the goals of the National Development Plan K'atun 2032.

**Honduras** The project supports the National Strategy for Productive Landscapes; the Country Vision Plan for 2038 (Goal 3.6 on sustainable use of natural resources to reduce environmental vulnerability); the National Plan 2010-2022; the National Plan for a Better Life; the National Law for Climate Change, the National Strategy for Climate Change, and the National Adaptation Plan.

**Belize** The project is consistent with key national and sectoral policies, strategies and action plans to incorporate climate change to enhance Belize's resilience. Priority actions are outlined in the National Climate Change Policy, Strategy and Action Plan (2015-2020)<sup>2</sup>. The project will contribute to address Belize's information gap on the role of best land-use practices and enabling investments in restoration.

**Knowledge management.** The project is proposing a dissemination component for knowledge capture and sharing of progress and results with local and regional stakeholders.

**Consultative process.** WRI and the executing entities have consulted stakeholders including national authorities for all three countries in the region, technical and financial partners, local organizations and communities using the network of partners and government institutions involved in Initiative 20x20<sup>3</sup>. At the current conceptual stage an initial contact with local communities has been undertaken and some organizations have expressed their interest in participating in the project<sup>4</sup>. However, a comprehensive

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<sup>1</sup> Estrategia Regional para la Conservación y Uso Sostenible de la Biodiversidad en Mesoamérica (CCAD 2003) and Estrategia Centroamericana de Desarrollo Rural Territorial - ECADERT (CAC, 2010)

<sup>2</sup> The action plan calls for, inter alia, the reviewing of national strategies and regulations, designing monitoring and evaluation frameworks, improving mangrove and habitat conservation and management, institutional strengthening, integrated water resource management through restoration and the undertaking of comprehensive assessments on human settlements and infrastructure. More specific climate change adaptation needs in the sectorial plans include the need to educate different stakeholder groups about climate change adaptation measures and to help them develop capacity to research, develop and implement adaptation strategies.

<sup>3</sup> Consulted stakeholders include: FUNDAECO; Caribbean Community Climate Change Center (CCCCC), INAB in Guatemala, Defensores de la Naturaleza, Althelia, American Bird Conservancy.

<sup>4</sup> Organizations and communities contacted include: Organization of Garifunas Communities in Belize and Guatemala (OFRANEH, Miriam Miranda, representative) based in Honduras; Organization of coastal communities in Guatemala (Ut'che), based in Guatemala; and Ramiro Batzin, a local expert and contact with Indigenous Communities on the coastal zone of Belize. Expressions of interest for participation in project activities have been received from local indigenous communities and organizations including, Organización Ak' Tenamit in Guatemala and Organización Maya Leaders Alliance and Julian Cho Society in Belize.

consultation process will be launched in the region once the concept stage of the project is approved by the Secretariat of the AF, so that expectations are not raised if the project is not to take place. The consultation will involve the local communities and other stakeholders working on site with population at risk. **Sustainability.** The project relies on the long-term involvement of the private sector to expand and complement the financing from the adaptation fund for the restoration activities. The involvement of the private sector is anticipated to provide a 2:1 leverage on the Fund financing. The private sector resources will ensure that the restoration activities are also productive systems that will continue to deliver the adaptation benefits. This will include for example: reforestation through agroforestry and sustainable use of secondary forests as well as sustainable use of restored mangroves.

### PART III: IMPLEMENTATION ARRANGEMENTS

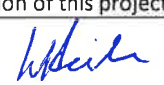
UN Environment is the Implementing Agency. The institutional framework of Initiative 20x20 through WRI and its technical partners and investments partners (ALTHELIA, FCF) will assist in the execution of the project components. Investors will bid for expansion and operation of the adaptation measures designed under the project leveraging 2:1 the resources from the Fund. CATIE will lead in the assessment on policy and regulation for adaptation measures through restoration. At a country level, a coordinating body with representation from the Ministry of Agriculture and INAB in Guatemala, the Ministry of Environment in Honduras and the Ministry of Environment in Belize. These bodies plus the technical institutions above will form a steering committee for purposes of project implementation. The committee will use the members from the Initiative 20x20 network of technical partners to support project activities when relevant. Local communities will be engaged by the technical partners to facilitate private partnerships and investment projects in specific landscapes. A consultation process has occurred but will continue to assess collaboration opportunities between communities and the private investors.

### PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

#### A. Record of endorsement on behalf of the government

<i>Mr. Alfonso Rafael Alonzo Vargas, Minister, Ministry of Environment and Natural Resources, Guatemala</i>	October 5 <sup>th</sup> , 2018
<i>Dr. Joseph Waight, Financial Secretary, Ministry of Finance, Belize</i>	September 7 <sup>th</sup> , 2018
<i>José Galdamés, Minister, Ministry of Energy, Natural Resources, Environment, and Mines, Honduras</i>	September 28 <sup>th</sup> , 2018

#### B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Belize's National Climate Change Policy, Strategy and Action Plan 2015-2020, Guatemala's National Forest Landscape Restoration Strategy, and Honduras' National Adaptation Plan) and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
<div style="display: flex; justify-content: space-between;"> <div> <b>Leo Heileman</b>            Director and Regional Representative, UN Environment            Clayton, City of Knowledge-Morse Avenue, Building 103, Corregimiento de Ancón-Panama City, PANAMA            Implementing Entity Coordinator         </div> <div style="text-align: right;">  </div> </div>	
Date: October 29 <sup>th</sup> , 2018	Tel. and email: (507) 305 -3133; <a href="mailto:heileman@un.org">heileman@un.org</a>
Project Contact Person: Gustavo Máñez	
Tel. And Email: (507) 305-3127, <a href="mailto:gustavo.manez@un.org">gustavo.manez@un.org</a>	

## Annex I.- Additional information

### Consultation processes

#### Initial consultation discussions (June 2018)

Individual calls with country representatives, organizations' and communities' leaders were held to gauge interest and level of progress within the focus countries and themes. (see contacted participants list below).

#### **Representatives**

**Table 1.- Initial consultation discussions**

<b>Countires</b>	<b>Name</b>	<b>Institution</b>	<b>e-mail</b>
Belize	Wilber Sabido, CFO	Forest Department	<a href="mailto:cfo@forest.gov.bz">cfo@forest.gov.bz</a>
	Percival Cho, CEO	Ministry of Agriculture, Fisheries, Forestry, Sustainable Development, the Environment, Climate Change and Solid Waste Management Authority	<a href="mailto:ceo@environment.gov.bz">ceo@environment.gov.bz</a>
	Miriam Miranda	OFRANEH	
	Filiberto Penados	-Organización Maya Leaders Alliance -Julian Cho Society	<a href="mailto:fpenados@gmail.com">fpenados@gmail.com</a>
Guatemala	Ramiro Batzin	Alianza Mesoamericana	<a href="mailto:batzinr@gmail.com">batzinr@gmail.com</a>
	Rudy Virgilio Bautista Miranda	Defensores de la Naturaleza	<a href="mailto:rbautista@defensores.org.gt">rbautista@defensores.org.gt</a>
	Juan Carlos Diaz Contreras, Coordinador de la Unidad de Cooperación Intencional	MARN	<a href="mailto:jcdiaz@marn.gob.gt">jcdiaz@marn.gob.gt</a> / <a href="mailto:juancarlosdiaz.marn@gmail.com">juancarlosdiaz.marn@gmail.com</a>
	Jose Roman Carrera	Rainforest Alliance	<a href="mailto:jcarrera@ra.org">jcarrera@ra.org</a>
	Miriam Miranda	OFRANEH	
	Ronnie de Camino	FCCF	<a href="mailto:ronnie@funcostarica.org">ronnie@funcostarica.org</a>
	Dolores de Jesus Cabnal	Organización Ak' Tenamit	<a href="mailto:mujer.maya@gmail.com">mujer.maya@gmail.com</a>
Honduras	Julio Carrillo, Oficina Coordinadora de Proyectos	MiAmbiente (Secretaria de Recursos Naturales y Ambiente)	
	Miriam Miranda	OFRANEH	
	Ana Fortin	Rainforest Alliance	<a href="mailto:fpenados@gmail.com">fpenados@gmail.com</a>

## Companies or investors who have provided letters of interest

Impact Investors and private sector companies who are partners to Initiative 20x20 have been consulted to assess interest in investing in the region of focus

Table 2.- Investors and private sector companies

Private Sector	Name	Letter of interest	e-mail
Forestry and Climate Change Fund	Kaspar Wansleben	Yes	<a href="mailto:kaspar@lmdf.lu">kaspar@lmdf.lu</a>
Althelia funds	Juan Carlos Gonzalez Aybar	Yes	<a href="mailto:jcgonzalez.aybar@althelia.com">jcgonzalez.aybar@althelia.com</a>
AndGreen Fund	Johnny Brom	Regional interest	<a href="mailto:brom@sailventures.com">brom@sailventures.com</a>
EcoEnterprises Fund	Tammy Newmark	Regional interest	<a href="mailto:tnewmark@ecoenterprisesfund.com">tnewmark@ecoenterprisesfund.com</a>
Root Capital	Elicia Carmichael	Regional interest	<a href="mailto:ecarmichael@rootcapital.org">ecarmichael@rootcapital.org</a>
Pomona Impact	Richard Ambrose	Regional interest	<a href="mailto:rich@pomonaimpact.com">rich@pomonaimpact.com</a>

## Stakeholder analysis

Main stakeholders include the Central American Commission on Environment and Development (CCAD, Spanish acronym), national governments and their ministries, "mancomunidades" and municipalities, NGOs, communities, financial institutions and private investors as well as the academia and research centers.

Table 3:- Stakeholders

Stakeholder	Roles
Environment and Agriculture Ministries across the three countries in the project	The ministries are working to regulate environmental and agricultural production management and promote sustainable development in countries in a participatory way. Initiative 20x20 collaborates with the governments to identify areas where technical assistance and a link to technical expertise will be of value. For the current project, government leaders will engage with the project to ensure a coordinated action between the project and the ministries' work.
National Designated Authorities (NDAs)	The NDAs will track progress of the program and engage to support national processes according to needs.
Central American Commission on Environment and Development (CCAD, Spanish acronym)	The three countries that are part of this proposal belong to a supranational integration system, the Central American Integration System (SICA, Spanish acronym). The preparation of this concept note responds well to the priority activities that the countries have outlined in a regional strategy for the conservation and sustainable use of biodiversity in Mesoamerica (Estrategia Regional para la Conservación y Uso Sostenible de la Biodiversidad en Mesoamérica (CCAD 2003)) as well as a Regional Strategy for Rural Development (Estrategia Centroamericana de Desarrollo Rural Territorial - ECADERT (CAC, 2010). These are complemented for purposes of the proposed project by a Regional Climate Change Strategy (Estrategia Regional de Cambio Climático - ERCC (CCAD 2010a)) and a Regional Strategy for the Integrated Management of Water Resources (Estrategia y Plan para la Gestión Integrada de Recursos Hídricos en Centroamérica – ECGIRH, created in collaboration with CEPREDENAC (CCAD 2010b)). All of these are set in the context of a Regional Environmental Strategy (Estrategia Regional Ambiental Marco 2015-2020 – ERAM (CCAD 2014)). The region has also adopted a Regional Strategic program for the Management of Forest Ecosystems, which calls for sustainable use, conservation and restoration of forest resources (Programa Estratégico Regional para el Manejo de los Ecosistemas Forestales - Perfor (CCAD y CAC, 2014))
"Mancomunidades", municipalities	Local authorities within each country will be able to support convening activities and mediation between authorities and communities. Municipalities will ensure adoption of adaptation activities and benefit of
Communities	Communities will be instrumental in supporting the project in the identification of investment proposals for potential investment from the financial partners within local territories. Members of the communities will engage in projects to scale up practice in the region.

	Communities will also be beneficiaries
Private impact investors / Financial institutions	Financial institutions include 20x20 investment partners from the private sector, but other financial institutions working in the region as well. Local financial institutions will include sectorial banks, cooperatives, local development banks and micro financial institutions. These institutions will be beneficiaries from workshops on investment on resilient practice in the land use sector in coastal areas.
Academia, research centers, existing climate change platforms	Regional (e.g UN Environment-REGATTA), CATIE

## Community engagement

Local communities are a key target of the proposed concept. Landowners in coastal areas are amongst the most vulnerable to extreme weather events in the region. The project components would seek to improve resilience in these groups by engaging them and promoting adoption of sustainable land use practices; ensuring the adoption of response systems to extreme weather events and facilitating discussions with interested investors that can potentially support restoration in agricultural and forestry practice that simultaneously improves the livelihoods of people and achieves resilient landscapes. The following are some of the community groups that will be engaged in the project.

Table 4.- Some of the community groups that will be engaged in the project

Group	Location
Miskito	Honduras (Gracias a Dios) Miskito are Central American indigenous people of the lowlands along the Caribbean coast of northeastern Nicaragua and western Honduras. The modern Miskito are agricultural, their staple crop being cassava. They also keep poultry, cattle, and other farm animals.
Garifuna	Belize, Guatemala (Izabal, Zacapa), Honduras The Afro-Caribbean Garifuna people originated with the arrival of West African slaves. Garifuna communities along the Caribbean Sea live mostly in coastal towns and villages in the Central American countries of Belize, Guatemala, Honduras and Nicaragua.



## Expected positive environmental, economic and social impacts

Table 5.- Expected positive environmental, economic and social impacts of coastal restoration

<i>Environmental</i>	<i>Economic</i>	<i>Social</i>
<p>Restoration of degraded and climate vulnerable coastal ecosystems through different strategies (e.g. reforestation, forest management, agroforestry systems, sustainable fuelwood practices) will result in an improvement and enhancement of ecosystem services (Harvey et al. 2016), including under future climate conditions (de Sousa et al. 2017). Expected benefits are, among others:</p> <ul style="list-style-type: none"> <li>Enhanced soil fertility by progressive accumulation of organic matter through leaf-litter to replenish top soil and improve its structure.</li> <li>Reduced soil erosion from water runoff. Enhanced water infiltration, and soil moisture retention.</li> <li>Improved water quality and availability.</li> <li>Enhanced biodiversity, increased ecosystem services from bees, birds, insects and wildlife, and improved landscape connectivity.</li> <li>Risk management: conserved or restored wetlands, mangroves, forests and agroforestry systems act as natural barriers, controlling and mitigating the impact of floods, droughts, extreme temperatures and wildfires.</li> <li>Maintenance of carbon sinks.</li> </ul>	<p>The implementation of adaptation measures along coastal land ecosystems will result in a reduction of rural poverty in the region, job diversification and improved incomes:</p> <ul style="list-style-type: none"> <li>Opportunities to develop green business and alternative livelihoods, according to the results of climate scenarios and demand for products and services in local and international markets will be identified.</li> <li>Training will be provided in supply and maintenance of EbA and adaptation activities promoted by the project, including manufacture, distribution and repair of water-efficient technologies, establishment of mixed nurseries for forest restoration, sustainable wood extraction, and other EbA-related economic activities.</li> <li>Finally, access to finance to establish small green businesses and alternative livelihoods will be facilitated.</li> </ul> <p>Savings will be made from avoided damage in comparison with other alternatives: Measures such as conserved wetlands, forests and agroforestry systems that act as natural barriers, controlling and mitigating the impact of floods, droughts, extreme temperatures and wildfires represent savings compared to grey adaptation alternatives such as dams or infrastructure works (De Groot et al. 2013, Rao et al. 2013).</p>	<p>The project will contribute to financial inclusion and contribution to national goals in rural poverty reduction.</p> <ul style="list-style-type: none"> <li>Increased food and nutritional security, by promoting the diversification of sources of income.</li> <li>Maintenance of traditional knowledge, complemented with other types of knowledge.</li> <li>Empowerment and social cohesion enhanced by participative processes conducted.</li> <li>Positive impacts in migration expected: In absence of alternative livelihoods, younger population, which shows little inclination or preference for remaining anchored to the rural-agricultural world, tends to opt for migration.</li> <li>The adoption of water efficient technologies such as rainwater harvest systems will increase the availability of water within the household.</li> <li>The use of species considering their suitability under future climate conditions contributes also to the sustainability of local livelihoods.</li> </ul>

Source: Own formulation using inputs from various entities that have documented the environmental, economic and social co-benefits of EbA in tropical ecosystems (UN Environment-WCMC, UNDP, USAID, UICN, Conservation International, CIRAD and CATIE, as well as international academia and cooperation entities), including Central American countries.





ADAPTATION FUND

## ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Pre-Concept for a Regional Project

Countries/Region: **Belize, Guatemala and Honduras/ LAC**

Project Title: **Increasing climate resilience through restoration of degraded landscapes in the Atlantic region of Central America**

Thematic focal area: **Disaster risk reduction and early warning systems**

Implementing Entity: **UN Environment**

Executing Entities: **WRI and CATIE**

AF Project ID: **LAC/MIE/DRR/2018/PPC/1**

IE Project ID:

Reviewer and contact person: **Daouda Ndiaye**

IE Contact Person(s): **Gustavo Máñez Gomis**

Requested Financing from Adaptation Fund (US Dollars): **12,009,125**

Co-reviewer(s): **Martina Dorigo**

Review Criteria	Questions	Comments	Response
Country Eligibility	1. Are all of the participating countries party to the Kyoto Protocol?	Yes.	-
	2. Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?	Yes. Central America is one of the most vulnerable regions in the world to climate change.	-

Project Eligibility	<p>1. Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme?</p>	<p>A letter from the government of Honduras was submitted, signed 08 June 2018. However, the letter for Honduras was signed by an authority who is not the designated authority registered on the AF website. Also, letters from Belize and Guatemala are now obsolete and need to be renewed. <b>CR1:</b> Please provide a letter of endorsement from the designated authorities of Belize and Guatemala. Also, please provide a letter of nomination of the new designated authority for Honduras, signed by a minister, <u>or</u> provide official notification that the secretary of state who signed the letter is the minister of SERNA (or MIAMBIENTE) and is replacing the designated authority on file.</p>	<p>Please find new letters attached.</p>
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	<p>2. Has the pre-concept provided necessary information on the problem the proposed project/programme is aiming to solve, including both the regional and the country perspective?</p>	<p>The project seeks the use of land restoration as an adaptation measure through regulatory, information and technical actions leading to investments to improve resilience in biomes and rural communities in the Atlantic coast of Belize, Honduras and Guatemala to the intensification of weather extremes. This will be done through (i) reforestation of deforested coastal areas using native species with economic timber value and the potential for non-timber products, (ii) restoration of degraded mangrove, (iii) restoration of Coastal swamp forest, (iv) strengthening regional information system covering the three participating countries, and improving the use of available technical, extension and financial services in support of restoration projects in coastal areas vulnerable to the intensification of extreme weather events, among others.</p> <p><b>CAR1:</b> Please limit the text of the pre-concept to five pages, as per the requirements of the Fund.</p> <p>The concept document should elaborate on the target sites and communities involved in the project, and further explain the expected economic, environmental and social benefits of the project.</p>	<p>Location: The concept now specifies that: “The project has a focus in biomes and rural communities in the Atlantic coast of Belize, Honduras and Guatemala (the coastal area from Izabal lake in Guatemala, Amatique Bay shared by Guatemala, Honduras and Belize to the northern coastal and Cay areas of Belize.”</p> <p>It further details that: “Local communities and producers would benefit by improving their land use practices, including avoiding degradation of their landscape, by engaging in projects that increase the source of sustainable livelihoods and by allowing them to become more climate resilient and exploit business opportunities that maintain or improve the functionality of their lands.” Detailed information is attached in Annex 1</p> <p>We have started a consultation with multiple</p>
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			communities and organizations supporting indigenous groups and will define specific beneficiaries in a later stage.
	3. Have the project/programme objectives, components and financing been clearly explained?	Yes.	-

	<p>4. Has the project/programme been justified in terms of how:</p> <ul style="list-style-type: none"> <li>- it supports concrete adaptation actions?</li> <li>- it builds added value through the regional approach?</li> <li>- it promotes new and innovative solutions to climate change adaptation?</li> <li>- it is cost-effective?</li> <li>- it is consistent with applicable strategies and plans?</li> <li>- it incorporates learning and knowledge management?</li> <li>- it will be developed through a consultative process with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund?</li> <li>- it will take into account sustainability?</li> </ul>	<p>Please further demonstrate the added value of the regional approach by clarifying whether activities and/or plans, including the regional information system, will be carried out at regional level to address the shared climate impacts. Also, please clarify which regional institutions or bodies will be potentially involved. <b>CR2</b></p> <p>Evidence of a consultation process is provided. However, it is not clear if national and local governments have been consulted. Also, the private sector, including through companies which have provided letters of interest, is not mentioned in the consultation process description. <b>CR3</b></p> <p><b>CR3:</b> Please clarify if national and local governments have been consulted, including through Initiative 20x20. Also, the private sector, including through companies which have provided letters of interest, is not mentioned in the consultation process description.</p>	<p><b>CR2</b> Regionality is now defined under expected outcomes.</p> <p><b>CR3</b> At this stage, the three national governments have been approached for consultation as specified in the corresponding section. Detailed information is also included in Annex 1. The project will eventually engage local (or relevant) authorities to implement an information system and activities from other components at a later stage.</p> <p>We have now specified that financial partners (impact investors that are partners to Initiative 20x20) have been consulted. Their engagement will be detailed at a later stage.</p>
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	5. Does the pre-concept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/sub-national level, and how coordination would be arranged? Does it explain how national institutions, and when possible, national implementing entities (NIEs) would be involved as partners in the project?	<p>Please specify which ministry will be involved from Honduras. <b>CR4</b></p> <p>At the concept stage, please clarify the budget structure of the execution costs, given the different layers of international, regional, national and eventually local organizations that will be involved in the execution of the project.</p>	<p><b>CR4</b></p> <p>Please note that the pre-concept now specifies that the Ministry of Environment from Honduras will be engaged.</p>
Resource Availability	6. Is the requested project / programme funding within the funding windows for regional projects/programmes?	Yes. <b>CAR2:</b> Please correct the amount of financing requested in page 1.	Done. Amount requested is now consistent with the components and expected outputs. The requested amount is 12.26 million.
	7. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget?	Yes.	-
Eligibility of IE	8. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes. UN Environment is an accredited Multilateral Implementing Entity of the Fund.	-



<p>Technical Summary</p>	<p>Building on Initiative 20x20, the project's objective is to strengthen resilience in the coastal Atlantic region of Belize, Honduras and Guatemala to the impacts induced by the intensification of weather extremes. This will be pursued through the promotion of sustainable landscape restoration efforts (restoration of degraded natural forest, reforestation, optimal management of vegetation, sustainable use of mangrove and coastal swamp forests) with an emphasis in poor rural areas in the region. Efforts on landscape restoration in coastal areas align to the Central America Commission on Environment and Development's strategies (CCAD 2014).</p> <p>The initial review finds that the proposal includes reforestation activities supported with involvement of private sector and local communities that would help address extreme events in coastal areas. However, a few clarification and corrective action requests were made including on issues related to the regional approach soundness of the project, the consultation process and implementation arrangements, as follows:</p> <p><b>CAR1:</b> Please limit the text of the pre-concept to five pages, as per the requirements of the Fund.</p> <p><b>CR1:</b> Please provide a letter of endorsement from the designated authorities of Belize and Guatemala. Also, please provide a letter of nomination of the new designated authority for Honduras, signed by a minister, <u>or</u> provide official notification that the secretary of state who signed the letter is the minister of SERNA (or MIAMBIENTE) and is replacing the designated authority on file.</p> <p><b>CR2:</b> Please further demonstrate the added value of the regional approach by clarifying whether activities and/or plans, including the regional information system, will be carried out at regional level to address the shared climate impacts. Also, please clarify which regional institutions or bodies will be potentially involved.</p> <p><b>CR3:</b> Please clarify if national and local governments have been consulted, including through Initiative 20x20. Also, the private sector, including through companies which have provided letters of interest, is not mentioned in the consultation process description.</p> <p><b>CR4:</b> Please specify which ministry will be involved from Honduras.</p> <p><b>CAR2:</b> Please correct the amount of financing requested in page 1.</p>
<p>Date:</p>	<p>12 August 2018</p>



# GOVERNMENT OF BELIZE

*Ministry of Finance  
Belmopan, Belize*

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**Please Quote:**

Ref:

G/GGEN/120/01/18

07 September 2018

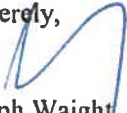
**The Adaptation Fund Board**  
c/o Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptation-Fund.org](mailto:Secretariat@Adaptation-Fund.org)  
Fax: 202 522 3240/5

**Subject: Endorsement for the Regional Proposal: Increasing climate resilience through restoration of degraded landscapes in the Atlantic region of Central America**

In my capacity as designated authority for the Adaptation Fund in Belize, I confirm that the above regional project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Atlantic Region of Central America.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by UNEP and executed by WRI and CATIE.

Sincerely,

  
Joseph Waight  
Financial Secretary  
Ministry of Finance



cc: National Climate Change Office

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*Ministro*

**MINISTERIO DE AMBIENTE Y RECURSOS NATURALES  
GUATEMALA, C.A.**

Guatemala, 05 de octubre del 2018

Oficio MI-1162-2018/ARAV-gpvg

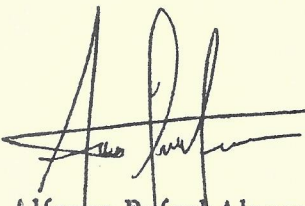

To: The Adaptation Fund Board  
c/o Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptation-Fund.org](mailto:Secretariat@Adaptation-Fund.org)  
Fax: 202 522 3240/5

Subject: Endorsement for the project INCREASING CLIMATE RESILIENCE THROUGH  
RESTORATION OF DEGRADED LANDSCAPES IN THE ATLANTIC REGION OF CENTRAL AMERICA

In my capacity as designated authority for the Adaptation Fund in Guatemala, I confirm that the above regional programmer proposal is in accordance with the government's priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the region.

Accordingly, I am pleased to endorse the above programme proposal with support from the Adaptation Fund. If approved, the project will be implemented by the United Nations Environment Program and executed by WRI and CATIE.

Sincerely,

  
  
 **Lic. Alfonso Rafael Alonzo Vargas**  
**Ministro**  
**Ministerio de Ambiente y Recursos Naturales**



Tegucigalpa, M.D.C., 28 de Septiembre de 2018

Oficio No. **UCEMR-DMA- 0918-2018**

To: The Adaption Fund Board  
c/o Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptacion-Fund.org](mailto:Secretariat@Adaptacion-Fund.org)  
Fax: 202 5223240/5

Subject: **ENDORSEMENT FOR INCREASING CLIMATE RESILIENCE THROUGH RESTORATION OF DEGRADED LANDSCAPES IN THE ATLANTIC REGION OF CENTRAL AMERICA**

In my capacity as designated authority for the Adaptation Fund in Honduras, I confirm that the above regional programme proposal is in accordance with the government's priorities in implementing adaptation activities to reduce adverse impact of, and risk, posed by climate changes in the region.

We wish to provide our endorsement and support for the project proposal submitted by World Resources Institute (WRI) and Centro Agronomico Tropical para la investigacion y Enseñanza (CATIE) which support or National, The Implementing Agency for the Project would be the United Nations Environment Program.

  
**ING. JOSE ANTONIO GALDAMES FUENTES**  
SECRETARY OF STATE



C.c. JAG/FDD  
Cc: Archivo