

Belize's Country Programme for engagement with the Green Climate Fund

April 2021



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BELIZE
Country Strategic Framework
including a Country Programme
for engagement with the Green
Climate Fund



This document was prepared by Willis Towers Watson for the Belize's Ministry of Finance Economic Development and Investment (MFEDI) and the Caribbean Community Climate Change Centre (CCCCC) under the Green Climate Fund (GCF)-funded Readiness and Preparatory Support project "Support for the accreditation of the Development Finance Cooperation and Social Investment Fund of Belize".

Authors: Sara Venturini, Serena Odianose, Virginie Fayolle (Acclimatise), and Dennis Gonguez (independent consultant).
Updated in 2020-2021 by: Caroline Fouvet, Maya Dhanjal, Maribel Hernandez, and Ann Gordon (independent consultant)

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Foreword

While Belize is a small country reflecting relatively small influences on the global greenhouse gas emission, climate change has undoubtedly affected the lives and livelihoods of Belizeans. Our country, nonetheless, is committed to playing its role in the global effort to respond to the imminent threat posed by climate change. As such, the Government of Belize (GOB) has moved towards the transformation of the country's economy along a low-emission, climate-resilient pathway towards sustainable development.

To achieve its objectives, Belize has proactively engaged with the Green Climate Fund (GCF), the largest global fund created to support the efforts of developing countries to respond to the challenge of climate change. There are various climate change mitigation and adaptation related challenges to be addressed across various sectors. Moreover, country capacity has been enhanced and financial resources have already been mobilised through GCF financed projects and programmes.

As the National Designated Authority to the GCF, the Ministry of Finance, **Economic Development** & Investment (MFEDI), has led a substantial consultative process since its appointment in 2015. Through this process, and in simultaneous engagement with the GCF, the country's capacity to mobilise climate finance has been enhanced through GCF project development workshops, the accreditation of our first Direct Access Entity - the Protected Areas Conservation Trust, the nomination of new DAEs, and the development of Belize's First Strategic Framework and Country programme in 2019.

This updated Country Programme presents Belize's engagement strategy with the GCF, and sets national priorities, building on existing climate change and development frameworks and policies, such as the *Nationally Determined Contributions* to the Paris Agreement, as well as *Horizon 2030: National Development Framework for Belize 2010-2030*. In addition, the COVID-19 pandemic has taken a serious toll on the health of many Belizeans and resulted in a devastating blow to the Belizean economy. Therefore, through our engagement with the GCF, we would be in a better position to confidently recover, across all sectors in alignment with the implementation of Plan Belize.

The Country Programme highlights priority sectors and measures for adaptation and mitigation, including a pipeline of fast-track and non-fast-track project and programme proposals to be submitted by Belize for funding by the GCF. These projects meet the fund criteria and are also aligned with national priorities, economically feasible, and are expected to have transformational impacts. It also identifies institutional, technical, financial, and capacity gaps for which GCF resources are needed.

Conceived as a living document, the current Country Programme covers a five-year period and will be updated as projects are developed and implemented, and new policy frameworks are established.

The GOB considers the GCF as an important source of funding for initiatives that move the country further along the path to true sustainable development. It is my sincere hope that this document, and all its future updates, will serve as the bridge between Belize's mitigation and adaptation goals and vital climate finance that will assist the GOB and the Belizean people in our efforts to address the impacts of climate change. Lastly, I acknowledge and express appreciation for MFEDI's Policy and Planning Unit, the Caribbean Community Climate

Change Centre, Willis Towers Watson and other stakeholders who participated in consultations and made recommendations to further develop and strengthen this document.

Yours Truly,

A handwritten signature in black ink, appearing to read 'Rami F...' with a stylized flourish at the end.

**National Designated Authority & Chief Executive Officer
Ministry of Economic Development – Belize**

-Acronyms

ACCC	Adaptation to Climate Change in the Caribbean
AE	Accredited Entity
AF	Adaptation Fund
AgREADY	Strengthening the foundation for a climate responsive agricultural sector in the Caribbean
AMA	Accreditation Master Agreement
AOSIS	Alliance of Small Island States
APAMO	Association of Protected Areas Management Organizations
APR	Annual Performance Report
BAHA	Belize Agricultural Health Authority
BBS	Belize Bureau of Standards
BCC	Belmopan City Council
BCCI	Belize Chamber of Commerce and Industry
BCUL	Belize Credit Union League
BECOL	Belize Electric Company Limited
BEL	Belize Electricity Limited
BELCOGEN	Belize Co-Generation Energy Limited
BELTRAIDE	Belize Trade and Investment Development Service
BEST	Belize Enterprise for Sustainable Technology
BFD	Belize Fisheries Department
BNCCC	Belize National Climate Change Committee
BNCF	Belize Nature Conservation Fund
BOOST	Building Opportunities for Our Social Transformation in Belize
BPO	Business Process Outsourcing
BSI	Belize Sugar Industry Limited
BSWMA	Belize Solid Waste Management Authority
BWSL	Belize Water Services Limited
BTIA	Belize Tourism Industry Association
BUR	Biennial Update Report
CABEI	Central American Bank for Economic Integration
CA-BRIC Caribbean	Climate Actions for Building Resilience in Coastal Communities in the Caribbean
CAEP	Climate Action Enhancement Package
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community
CBA	Central Building Authority
CI	Conservation International
CITO	Central Information Technology Office
CCCCC	Caribbean Community Climate Change Centre
CCD	Climate Change Department
CCFC	Climate Change Finance Committee
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CCTF	Climate Change Trust Fund
CDB	Caribbean Development Bank
CDF	CARICOM Development Fund
CDEMA	Caribbean Disaster Emergency Management Agency
CFE	Federal Electricity Commission of Mexico
CGA	Citrus Growers Association
CIF	Caribbean Investment Facility
COP	Conference of the Parties
CP	Country Programme
CPACC	Caribbean Planning for Adaptation to Climate Change
CPS	Country Partnership Strategy
CRAF	Credit Risk Abatement Facility
CREI	Citrus Research and Education Institute
CRIS	Climate Risk Information System
CRMI	Caribbean Risk Management Initiative
CSF	Country Strategic Framework
CSO	Civil Society Organisation
CTCN	Climate Technology Centre & Network
CZMAI	Coastal Zone Management Authority and Institute

<i>DA</i>	Direct Access
<i>DAE</i>	Direct Access Entity
<i>DFC</i>	Development Finance Corporation
<i>DFI</i>	Development Finance Institution
<i>DoE</i>	Department of Environment
<i>DP</i>	Delivery Partner
<i>DRM</i>	Disaster Risk Management
<i>DRR</i>	Disaster Risk Reduction
<i>E&S</i>	Environmental and Social
<i>EDA</i>	Enhanced Direct Access
<i>EDC</i>	Economic Development Council
<i>EE</i>	Executing Entity
<i>EIA</i>	Environmental Impact Assessment
<i>EIB</i>	European Investment Bank
<i>ERI</i>	Environmental Research Institute
<i>EV</i>	Electric Vehicle
<i>ESIA</i>	Environment and Social Impact Assessment
<i>ESMF</i>	Environmental, Social and Management Framework
<i>ESMP</i>	Environmental and Social Management Plan
<i>ESMS</i>	Environmental and Social Management System
<i>ESS</i>	Environmental and Social Safeguards
<i>EU</i>	European Union
<i>EWP</i>	Entity Work Programme
<i>EWS</i>	Early Warning System
<i>FAA</i>	Funded Activity Agreement
<i>FAO</i>	Food and Agriculture Organization
<i>FoN</i>	Friends of Nature
<i>FMCA</i>	Financial Management Capacity Assessment
<i>FOLU</i>	Forest and Other Land Use
<i>FOSC</i>	Friends of Swallow Caye
<i>FP</i>	Funding Proposal
<i>GCCA</i>	Global Climate Change Alliance
<i>GCF</i>	Green Climate Fund
<i>GCF-TF</i>	GCF Task Force
<i>GDI</i>	Gross Domestic Income
<i>GDP</i>	Gross Domestic Product
<i>GEF</i>	Global Environment Facility
<i>GHG</i>	Greenhouse gas
<i>GIS</i>	Geographic Information System
<i>GIZ</i>	Deutsche Gesellschaft für Internationale Zusammenarbeit
<i>GNI</i>	Gross National Income
<i>GoB</i>	Government of Belize
<i>GSDS</i>	Growth and Sustainable Development Strategy
<i>HDI</i>	Human Development Index
<i>IDB</i>	Inter-American Development Bank
<i>IE</i>	Implementing Entity
<i>IF</i>	Investment Framework
<i>IFAD</i>	International Fund for Agricultural Development
<i>IFC</i>	International Finance Corporation
<i>IFI</i>	International Financial Institution
<i>IICA</i>	Inter-American Institute for Cooperation on Agriculture
<i>IPCC</i>	Intergovernmental Panel on Climate Change
<i>IPP</i>	Independent Power Producers
<i>INDC</i>	Intended Nationally Determined Contribution
<i>ICT</i>	Information and Communication Technology
<i>ICZM</i>	Integrated Coastal Zone Management
<i>ITAP</i>	Independent Technical Advisory Panel
<i>ITO</i>	Information Technology Outsourcing
<i>IUCN</i>	International Union for Conservation of Nature
<i>IUS</i>	Integrated Utilities Services
<i>IWRM</i>	Integrated Water Resources Management
<i>J-CCCP</i>	Japan Caribbean Climate Change Partnership project
<i>JICA</i>	Japan International Cooperation Agency

KBA	Key Biodiversity Areas
KfW	German Development Bank
KPO	Knowledge Process Outsourcing
LDC	Least Developed Country
LEDS	Low-emission Long-Term Development Strategy
LIC	Lands Information Centre
LIDAR	Light Detection and Ranging
M&E	Monitoring and Evaluation
MACC	Mainstreaming Adaptation to Climate Change
MaCREAS	Mainstreaming Coral Reef Resilience and Restoration as an Ecosystem-based Adaptation Strategy to Climate Change in the Caribbean Region
MBECA	Ministry of Blue Economy and Civil Aviation
MECST	Ministry of Education, Culture, Science & Technology
MFEDI	Ministry of Finance Economic Development and Investment
MHDFIPA	Ministry of Human Development, Families & Indigenous Peoples' Affairs
MNRPM	Ministry of Natural Resources, Petroleum & Mining
MFESD	Ministry of Fisheries, Forestry, the Environment, and Sustainable Development (<i>prior 2020 election</i>)
MSDCCDRM	Ministry of Sustainable Development, Climate Change, and Disaster Risk Management
MAFSE	Ministry of Agriculture, Food Security, & Enterprise
MHW	Ministry of Health and Wellness
MHEWS	Multi-Hazard Early Warning Systems
MIDH	Ministry of Infrastructure Development & Housing
MoW	Ministry of Works
MPUL	Ministry of Public Utilities and Logistics
MRLF	Monitoring, Reporting, Learning and evaluation Framework
MRTCDLLG	Ministry of Rural Transformation, Community Development, Labour & Local Government
MRV	Monitoring, Reporting and Verification
MSME	Micro Small and Medium Enterprise
MTDR	Ministry of Tourism & Diaspora Relations
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
NPAS	National Protected Areas System
NBB	National Bank of Belize
NBS	Nature-Based Solution
NCCO	National Climate Change Office
NCCPSAP	National Climate Change Policy, Strategy and Action Plan
NCRIP	National Climate Resilience Investment Plan
NDA	National Designated Authority
NDC	Nationally Determined Contribution
NEMO	National Emergency Management Organization
NGO	Non-Governmental Organisation
NLUPO	National Land Use Planning Office
NOL	No-Objection Letter
NPAS	National Protected Areas System
NPASA	National Protected Areas System Act
OECS	Organisations of Eastern Caribbean States
OAS	Online Accreditation System
OAS	Organization of American States
OPM	Office of the Prime Minister
PACT	Protected Areas Conservation Trust
PAHO	Pan American Health Organization
PCM	Project Cycle Management
PGIA	Philip Goldson International Airport
PMF	Performance Measurement Framework
PPAM	Public Policy Analysis and Management
PPD	Public Private Desk
PPF	Project Preparation Facility
PPP	Public Private Partnership
PPU	Policy and Planning Unit
PS	Performance Standards
PSIP	Public Sector Investment Programme
PSF	Private Sector Facility

PV	Photovoltaic
RCP	Representative Concentration Pathway
REDD+	Reducing Emissions from Deforestation and Forest Degradation (+ foster conservation, sustainable management of forests, and enhancement of forest carbon stocks)
RfP	Request for Proposal
RMF	Results Management Framework
RPIU	Regional Project Implementation Unit
SAP	Simplified Approval Process
SATIM	Sarstoon Temash Institute for Indigenous Management
SCCF	Special Climate Change Fund
SDU	Sustainable Development Unit
SEA	Southern Environmental Association
SIB	Statistical Institute of Belize
SICB	Sugar Industry Control Board
SIDS	Small Island Developing States
SIF	Social Investment Fund
SIRDI	Sugar Industry Research and Development Institute
SLR	Sea Level Rise
SME	Small and Medium-sized Enterprise
SRES	Special Report on Emissions Scenarios
TAP	Technology Action Plan
TASTE	Toledo Association for Sustainable Tourism and Empowerment
TBC	To be determined
TIDE	Toledo Institute for Development and Environment
TNA	Technology Needs Assessment
ToR	Terms of Reference
UNE	United Nations Environment
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNOPS	United Nations Office for Project Service
WHO	World Health Organization
WWF	World Wildlife Fund

Executive summary

As Belize's Green Climate Fund (GCF) Country Programme (CP), this document establishes **the basis for the country's engagement with the fund**. First drafted in 2019, and updated in 2020-2021, the CP provides **country-owned investment guidance to the GCF**, thanks to the inputs and validation of Belizean public, private sector and civil society stakeholders. The document enables the GCF to know the country's climate, development situation and associated needs, which climate projects and programmes can help to overcome identified challenges, as well as how GCF engagement in the country is monitored and evaluated. **Belizean project proponents and developers** and GCF **Accredited Entities (AEs)** **can also refer to this document** to understand how their project ideas can address the country's climate needs, and/or to identify on-going GCF projects they could contribute to.

Belize's Country Programme is built around three main sections, which detail the following elements:

- 1. The Country profile provides an overview of** Belize's tropical climate and location within the hurricane belt. **Observed** (rising temperatures (air and sea), changes in rainfall, sea-level rise, coastal erosion) and **expected climate change** (such as a +1.78°C to +3.89 °C rise in temperature by 2070, projected reduced annual rainfall by -124.59mm to -68.24mm for 2040-2059, rise in sea level of 0.18 to 0.56m by the 2090s, leading to increased coastal erosion) are described. In the context of a **small island developing state (SIDS)** faced with increasingly devastating extreme events, as shown during the November 2020 torrential rains that hit Belize, the **country is vulnerable to climate change from multiple aspects**. With its **low-lying geography** and 45% of the population concentrated along the coast, the country and Belizeans are exposed to sea- level rise, flooding and erosion, while lacking adequate protection infrastructure. Belize's indigenous population, who largely depend on natural resources, along with fragile demographic segments (under five years old, women, and elderly) are all exposed to increasing food, livelihood, and health risk due to climate change.

The latter is a large threat to **Belize's development**, which small, open, and service-based economy primarily depends on natural resources. In the wake of **the COVID-19 crisis effects on key economic and climate-sensitive sectors**, namely agriculture and tourism, a deep recession in 2020 is expected, followed by a gradual recovery. **The financial sector remains largely undeveloped**, despite growth and diversification since the 1980s, which has **negative implications for private sector development** due to lack of credit availability. However, efforts such as the establishment of the Economic Development Council (EDC) to promote public-private cooperation, alongside development partners' work to foster private sector growth, have been undertaken.

In this context, mitigation and adaptation-related challenges are described, along with their respective Nationally Determined Contribution (NDC) targets. In 2017, Belize emitted a total of 1,194.71 Gg of carbon dioxide equivalent (CO₂eq), with **energy** being the largest emitting sector. Since 2012, the sector has shown increases in emissions from transport, electricity generation, and residential purposes due to the rise in the use of petroleum fuels. Although the country remains a net carbon sink, economic dependence on natural resources to sustain economic growth, combined with a growing and urbanising population and increasing energy demands account for the emission level. With the aim to achieve 85% renewable energy by 2030, the Government of Belize (GoB) will need international support in this endeavour.

Regarding adaptation, **coastal and marine resources, agriculture, water** and **tourism** remain particularly vulnerable given their sensitivity to a broad range of climate impacts, from sea level rise, fluctuating water availability, hurricanes, and ocean acidification. Ambitious NDC targets have been set for these sectors, and include capacity-building of relevant stakeholders, climate resilience mainstreaming into sectoral plans along with the implementation of adaptation measures (e.g., mangrove restoration to protect the coast, water and soil management to improve crops' yield). Further, **disaster risk reduction (DRR)** is an essential aspect to embed across sectors, given climate impacts on critical infrastructure.

These sectoral adaptation and mitigation-related challenges reflect Belize's climate-related needs that could be addressed via GCF-funded projects and programmes, and can constitute the basis for project/programme ideas.

Besides, the CP includes the **country's climate change response**, which embeds all of its climate-related **national frameworks**, with a focus on the National Climate Change Policy, Strategy and Action Plan 2015-2020 and first Nationally Determined Contribution targets, which are both being updated. Belize also counts with a series of national entities from different sectors, which are actively involved in climate change issues, and participated in elaborating and updating the CP. These include **ministries and ministerial agencies**, such as the Ministry of Sustainable Development, Climate Change, and Disaster Risk Management (MSDCCDRM) and the National Climate Change Office (NCCO), **private sector** associations (Belize Chamber of Commerce) and companies, including Belize Sugar Industries Limited (BSI). **Civil society** representatives include academia, through the University of Belize, and conservation non-governmental organisations (NGOs) such as Fragments of Hope. Belize also counts with a nation-wide coordinating mechanism on climate change, the **Belize National Climate Change Committee (BNCCC)**, which works together with the NDA on GCF engagement.

As part of its response to climate impacts, Belize is receiving **international support to increase its resilience** from additional sources to the GCF, with public climate finance flows totalling USD 26.55 million as of November 2020, including the Adaptation Fund project "Marine Conservation and Climate Adaptation Initiative", aimed to strengthen the climate resilience of Belize's barrier reef system through ecosystem-based marine conservation and adaptation measures. The country also intends to mobilise domestic climate finance, in particular disaster risk financing, although no action has been taken to date. .

Finally, the **gaps and opportunities** section highlights Belize's strengths and weaknesses **to access the GCF and climate finance**, with regards to its **institutional set-up and policy framework, financing, capacity and technology needs**. The main gaps identified that would benefit from GCF support include, among others, lack of ministries' staff capacities to work on climate change, along with weak coordination between public agencies on the matter, creating duplication of climate-related activities, low levels of private sector participation in climate finance, together with high upfront, operational and maintenance costs of technology equipment.

- 2. Belize's agenda and GCF engagement** focus on two central elements. First, increasing the capacity of Belize's **National Designated Authority (NDA)**, the Ministry of Finance, Economic Development and Investment (MFEDI), to fulfil its role and mandate as GCF's strategic partner in Belize. Remaining capacity constraints include limited human capacity and lack of a communication team for stronger

stakeholder outreach, and the need for BNCCC's full subcommittees operationalisation to support the coordination of the NDA's climate activities.

Second, the focus is on the development of Belize's **portfolio for engagement with the GCF**, reflecting upcoming funding requests and potential support needed. It includes one **existing GCF-funded project**, eight approved Readiness support projects, and three Project Preparation Facility (PPF) requests. A **pipeline of project/programme ideas** (including 30 projects/programmes, seven Readiness and two PPF support requests) reflects concept notes and funding proposals that are being developed for submission to the GCF. The pipeline was **built following a programmatic approach** that identified key sectoral needs and most advanced project/programme ideas, supported by key stakeholders actively involved in the elaboration of the pipeline. The 17 most advanced projects cover agriculture, fisheries, coastal and marine resources, disaster risk management (DRM) (adaptation), transportation, energy (mitigation), natural resources and biodiversity, and construction (cross-cutting). Among the Readiness projects, five are national, with two focusing on National Adaptation Plans (NAPs) development (water and multi-sector), two on climate integration respectively in the coastal zone and fisheries as well as building sector, and finally one supporting the Development Finance Corporation (DFC) in its accreditation process to the GCF. PPF support is being requested for a national mitigation project in the land use and forestry sector, and for a regional cross-cutting project on fisheries in Caribbean SIDS.

Finally, Belize is responsible for **Monitoring, evaluating (M&E) and updating the Country Programme implementation**. This is done through the **Monitoring Reporting and Learning Framework (MRLF)**, which keeps track of the progress to date in the implementation of GCF projects/programmes in the country. Belize will also **review and update the CP** to ensure the document is continuously brought up to date and reflects the latest climate and GCF-related developments. This is operationalised through a review and updating procedure, that describes a minor and major updating process to be regularly implemented.

A longer version of the country profile section, including climate-related challenges and development profile is included in the annexes. Methodological considerations and the role and names of stakeholders involved in the CP's update and validation are also represented. Completed GCF projects and programmes that were removed from the country's portfolio are included for the record.

1. Belize Country Profile

Country overview

Table 1. Summary of Belize’s geographic, demographic and climate change profile.

Summary of Belize’s geographic, demographic and climate change profile	
Geographical location	Between 15.9° and 18.5° north latitude and 87.25° and 89.25° west longitude. Bounded by Guatemala to the west and south and Mexico to the north. To its east lies the Caribbean Sea.
Land area	8,867 square miles
Population	324,528
Type of climate and seasons	Characterised by a wet and a dry season with intermediate cool spells between the two seasons.
GHG emissions profile ¹	Total Emissions of 1,194.71Gg ² (2017)
Key emitter sectors ^{3 4}	Agriculture, Land use and Forestry, Energy, Transport, Solid Waste Management,
Key climate risks	<p>Mean annual temperature of Belize has increased by 0.45°C (1960-2016), an average rate of 0.10°C per decade. Mean annual rainfall over Belize has decreased at an average rate of 3.1 mm per month per decade since 1960. This trend however is not statistically significant. Detailed climate modelling projections for Belize show:⁵</p> <ul style="list-style-type: none"> • an increase in average atmospheric temperature; • reduced average annual rainfall; • increased Sea Surface Temperatures (SST); and • the potential for an increase in the intensity of tropical storms.
Vulnerable sectors ^{6 7}	Agriculture, Water resources, Coastal and Marine Resources, Fisheries and Aquaculture, Forestry, Biodiversity, Tourism, Human Health, Energy, Transport infrastructure, Land use and Human Settlements
NDA/FP	Ministry of Finance Economic Development and Investment (MFEDI) ⁸
National DAEs	Protected Areas Conservation Trust (PACT)
Prospective National DAEs	Development Finance Corporation (DFC) – candidate DAE under Readiness support Social Investment Fund (SIF) – candidate DAE under Readiness support
Regional AEs	Caribbean Community Climate Change Centre (CCCCC) Caribbean Development Bank (CDB) Central America Bank for Economic Integration (CABEI)
International AEs	European Investment Bank (EIB) International Fund for Agricultural Development (IFAD) Conservation International (CI) Food and Agriculture Organization (FAO) United Nations Development Programme (UNDP) Inter-American Development Bank (IDB) Caribbean Development Bank (CDB) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH International Bank for Reconstruction and Development and International Development Association (World Bank) International Union for Conservation of Nature (IUCN) Japan International Cooperation Agency (JICA) German Development Bank (KfW) International Finance Corporation (IFC) United Nations Environment Programme (UN Environment) World Wildlife Fund (WWF)
Delivery Partners	Caribbean Community Climate Change Centre (CCCCC) Caribbean Natural Resources Institute (CANARI) CARICOM Development Fund (CDF)

¹ GoB, MAFFESD - NCCO (2016). Belize’s Third National Communication to the UNFCCC.

² Without forest and other land use removals. Ministry of Agriculture, Forestry, Fisheries, the Environment, Sustainable Development and Immigration. (2020). Belize’s Fourth National Greenhouse Gas Inventory Report.

³ GoB, MAFFESD - NCCO (2016). Belize’s Third National Communication to the UNFCCC.

⁴ Belize’s Nationally Determined Contribution (2016).

⁵World Bank. (no date). Climate Knowledge Portal – Country: Belize.

⁶ Belize’s Nationally Determined Contribution (2016).

⁷ CCCCC and MAFFESD (2014). A National Climate Change Strategy, Policy and Action Plan to Address Climate Change in Belize, 2015-2020.

⁸ Known as the Ministry of Economic Development, Petroleum, Investment, Trade and Commerce (MED) until the November 2020 election.

Geographical location

Belize lies in Central America in the north-western Caribbean bounded by Guatemala to the west and south and Mexico to the north. To its east lies the Caribbean Sea. It is the only English-speaking country in Central America.

Figure 1. Map of Belize (Source: Belize Center for Environmental Studies <https://www.mapsland.com/northamerica/belize/elevation-map-of-belize>).



The country lies between 15.9° and 18.5° North latitude and 87.25° and 89.25° West longitude and extends about 161 miles (259 km) from north to south and 111 miles (179 km) from the coastline to the western border with Guatemala (Figure 1). Most of the northern half and much of the southern third of the country, plus the entire coastal area and all the islands, are flat and low-lying. Large sections of the coastline have an elevation of less than 3.2 feet (1 m) to a distance of several miles inland. In the north, the topography of the land rises to a maximum of approximately 820 feet (250 m) above sea level. The central and southwestern parts of the country are dominated by the Maya Mountain/Mountain Pine Ridge massif, rising to 3,674 feet (1,120 m) above sea level at its highest point.

There are six districts, nine municipalities, and a little over 260 villages. The districts have clearly delineated boundaries. The administrative capital is the City of Belmopan, located in the Cayo district, and the old capital, Belize City, remains the commercial centre of the country.

Land area

Belize has a total land area of 8,867 square miles (22,965 square km), with the mainland making up 95% of the total territory. The remainder amounts to about 1,060 small islands and offshore cayes. In addition, there are about 600 square miles (1554 square km) of lagoons.

Significant portions of the country are subject and vulnerable to annual flooding. There are 39 identifiable river basins and 18 major watersheds. Of the 263 or so settlements, around 62% lie within areas at risk to flooding. Also, about 149 villages and settlements lie in floodplains that flood annually.

Population

The latest census carried out in 2010⁹ showed that the total population amounted to 324,528. Table 2 below shows the population change, and the last census taken in 2010 reveals a 30.4% population growth compared to the 2000 census. The population density was recorded at 36 people per square mile, and the distribution was predominantly rural, with 54.8% of the population living in rural areas. There is an equal distribution of males and females. Postcensal national population estimate from the Statistical Institute of Belize (SIB) was 408,487 persons in mid-August 2019¹⁰.

Table 2. Population Change and Average Annual Growth Rates, Belize 1960 to 2010 (Source: Belize Population and Housing Census- Country Report 2010, Statistical Institute of Belize).

Year	Census Population	Absolute Change	Intercensal Change (%)	Average Annual Growth Rate (%)
1946	59,220	-	-	-
1960	90,505	31,285	52.8	3.03
1970	119,934	29,429	32.5	2.82
1980	145,353	25,419	21.2	1.90
1991	192,877	47,524	32.7	2.57
2000	248,916	56,039	29.1	2.55
2010	324,528	75,612	30.4	2.65

Belize has a diverse ethnic composition with up to nine ethnic groups. These include Mestizo (Spanish, Latino), 52.9%; Maya, 11.3%; Creole, 25.9%; Garifuna, 6.1%; East Indian, 3.9%; Mennonite, 3.6%; Caucasian, 1.2%; Asian (Japanese, Taiwanese, Chinese), 1%. The remaining 1.2% comprises persons belonging to another group not listed.¹¹

Household size gives an indication of social issues such as poverty and the health status of the nation. Comparing the 2010 to the census taken 10 years earlier shows (Table 3) that the national average household size decreased from 4.4 to 4.1 persons per household.

Table 3. Comparison of number of households in Belize for the 2000 and 2010 Census (Source: Belize Population and Housing Census – Country Report 2010, Statistical Institute of Belize).

	Number of households (2000)	Average Household Size (2000)	Number of Households (2010)	Average household Size (2010)	Absolute Change	Percentage Change
Country Total	55,834	4.4	79,492	4.1	23,658	42.4
Urban	28,186	4.0	39,162	3.7	10,976	38.9
Rural	27,648	4.9	40,330	4.4	12,682	45.9

Belize's population is gradually moving towards urban centres, with 46% of Belizeans living in urban areas (2019).¹², due to rural-to-urban flight in search of employment, which leads to the expansion of the cities and main district towns.¹³ This has climate-related implications from both a mitigation and adaptation perspective, which should be accounted as part of city and land use planning. First,

⁹ The Statistical Institute of Belize has had to postpone the census due to take place between May and July 2020 by one year due to the coronavirus pandemic.

¹⁰ Statistical Institute of Belize (2020). Postcensal estimates by age group and sex, 2010-2020.

¹¹ Statistical Institute of Belize (2010). Belize Population and Housing Census- Country Report 2010.

¹² World Bank. (2021). Urban population (% of total population) – Belize. <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=BZ>

¹³ Pan-American Health Organization (PAHO). (no date). Belize. <https://www.paho.org/salud-en-las-americanas-2017/?p=2362>

urbanisation leads to higher greenhouse gas (GHG) emissions and energy consumption.¹⁴ Besides, rapid and unplanned urbanisation turns some formerly defined rural areas into urban centres that are not planned for as such, while also creating informal settlements. These communities are then more exposed to climate risks, and their unplanned expansion degrades ecosystems that contribute to the country's resilience to climate impacts (e.g. wetlands and mangrove areas being encroached upon).¹³

¹⁴ United Nations (UN). (no date). Cities and Pollution. <https://www.un.org/en/climatechange/climate-solutions/cities-pollution>

Climate profile

The overall climate of Belize can be described as tropical as it experiences some of the typical temperature regimes, humidity, trade winds, and rainfall quantities typical of the tropics.

Types of climate

The climate of Belize is characterised by a wet and a dry season with intermediate cool spells between the two seasons. This cool transition period occurs **from November through February**. Rainfall declines during this period, and approximately 12 cold fronts cross the country during these months. The true dry season runs **from February to April** and is marked by a persistent south-easterly airstream. April is also typically the driest month of the year.

The wet or rainy season coincides closely with the start of the Atlantic Hurricane Season. Typically, it starts around mid-May in the southern parts of the country and gradually extends northward to encompass the entire country by mid-June. Approximately 60% of the annual rainfall occurs during this season. The wettest month climatologically is September. Annual rainfall ranges from 3,810 to 4,064 mm (150 to 160 inches) in the south to 1,524 mm (60 inches) in the north, as shown in Figure 2.

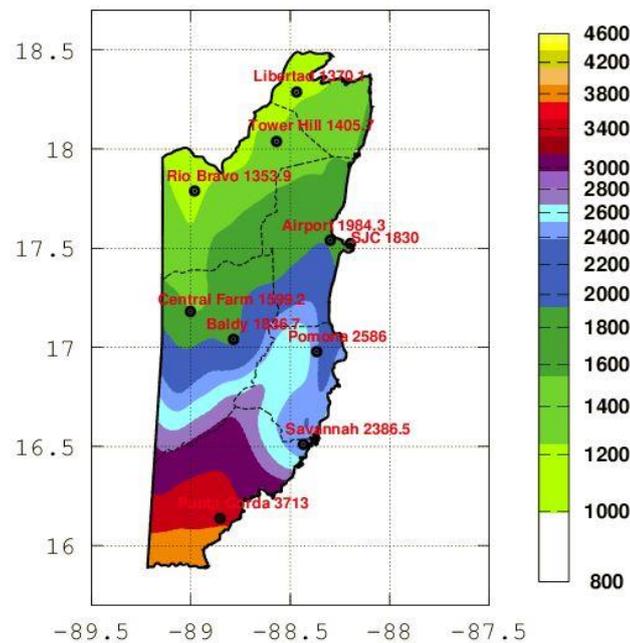


Figure 2. Mean Annual Rainfall in Belize (Source: National Meteorological Service of Belize).

Average high temperatures are near 30 °C (85 °F), and the mean lows are in the mid to lower 20s°C (lower 70s °F). The months of March, April, and May are about 4.4 °C (8 °F) warmer than during the cool intermediate period of November through to February. The diurnal temperature range in the interior is greater than that along the coast, where the sea breezes moderate conditions. The mountainous regions in the west and south are also cooler due to elevation.

Belize lies within the hurricane belt. Historically, tropical storms and hurricanes have affected the country once every three years. Belize City, the former capital, was destroyed twice by hurricanes in the 20th century. Hurricanes can affect any part of the country but are more frequent in the north. Figure 3 shows tracks of tropical cyclones that passed within a hundred miles of central Belize during the period 1870 – 2018.

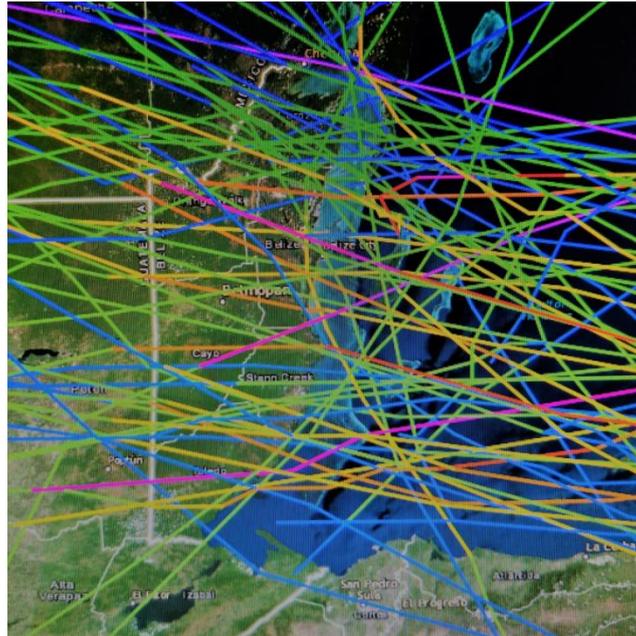


Figure 3. Tracks of Tropical Cyclones that came within 100 miles of central Belize (Source: National Oceanic and Atmospheric Administration, NOAA).

Observed climate changes

Belize is highly vulnerable to the adverse effects of climate change, which is already affecting the livelihoods and living conditions of some of the population. The associated impacts are being manifested in rising temperatures (air and sea), sea level rise, coastal erosion, and changing rainfall and other weather patterns.^{5 15}

The 20th century has seen consistent warming, which continued into the 21st century. The longest and most reliable local data records are collected at the National Meteorological Service of Belize, located at the Philip Goldson International Airport (PGIA). Analysis of the temperature data from that location shows a 1.1 °C (2 °F) increase in average annual temperatures (see Figure 4) over the time series. Other analyses show that nights are warming at a faster rate than daytime.

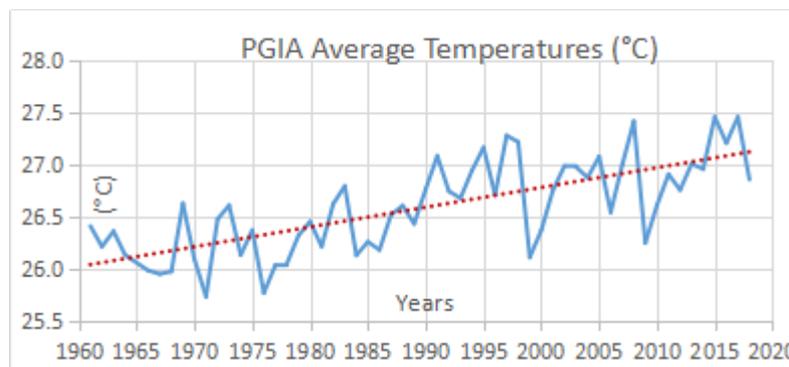


Figure 4. Average Annual Temperatures at the National Meteorological Service of Belize located at the Philip Goldson International Airport (PGIA) (Source: Belize and Climate Change: Costs of Inaction, UNDP, 2009, updated 2019 by D. Gonguez).

¹⁵ EBD Global Optimum. (2020). Integrated Vulnerability and Adaptation (V&A) Assessment. United Nations Development Programme (UNDP) V&A Belize.

Observations from the same station with the longest record show no significant changes in rainfall at the PGIA. However, at a representative inland station, Central Farm, there was a significant (240 mm) increase in rainfall over the time-series (see Figure 5).

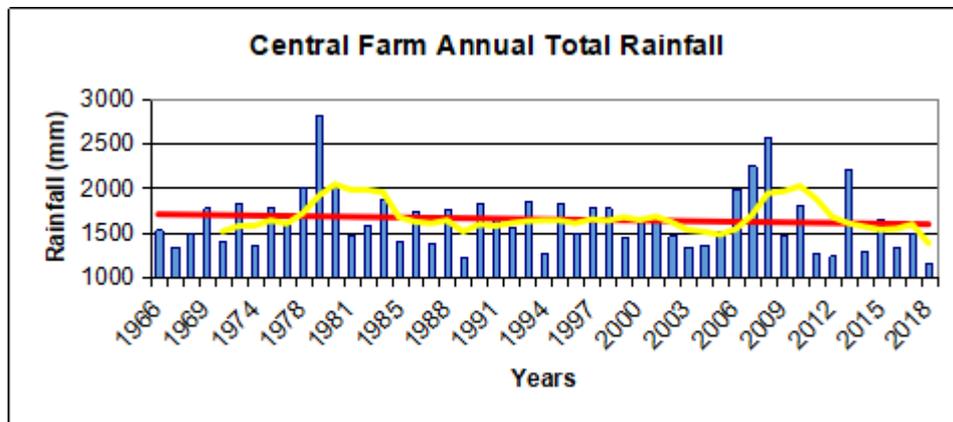


Figure 5. Annual Rainfall and Trend at Central Farm (Source: Analysis of Trends and Projections in Rainfall and Temperatures, Gonguez, 2008, updated 2019 by D.Gonguez).

Considering an average over the entire country, the average rate of increase in temperatures is most rapid in the wet season – May through October.¹⁶

Averaged over all parts of the country and all seasons show decreasing precipitation trends since 1960, only the February-March-April season shows a statistically significant trend.

Projected climate change

The CMIP5 Global Model projections in Central America suggest temperature increases between 1.6°C (Representative Concentration Pathway RCP4.5) to 4.0°C (RCP 8.5) by 2100.¹⁷ Studies found that precipitation changes generally become statistically significant only when the temperature rises by 1.4 °C (2.6 °F).¹⁸ Hence as we approach the 1.5 °C (2.7 °F) threshold, erratic changes in rainfall patterns can be anticipated.

The projected temperature changes across four scenarios¹⁹ in Belize show increases in annual temperatures from 1.84 °C to 2.68 °C by 2050 (for RCP 2.6 and RCP 8.5 respectively), and from 1.78°C to 3.89 °C (7.0 °F) by 2070 (Table 4).

Ensemble rainfall median values for almost all seasons, and emissions scenarios are negative. Projected median change in annual rainfall is -124.59mm (RCP2.6) to -68.24mm (RCP8.5) for 2040-2059 and -160.91mm (RCP2.6) to -84.12mm (RCP8.5) for the 2080-2090 period.⁵

¹⁶ McSweeney C., M. New and G. Lizcano (2009). UNDP Climate Change Country Profiles Documentation.

¹⁷ Intergovernmental Panel on Climate Change (IPCC).(2013). Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Central and South America. .

¹⁸ Mahlstein et al (2012). Perceptible Change in Regional Precipitation in a Future Climate.

¹⁹ RCP2.6 is a stringent mitigation scenario, RCP4.5 is an intermediate scenario, RCP8.5 a scenario with very high GHG emissions. Intergovernmental Panel on Climate Change (IPCC). (2014). Climate Change 2014 Synthesis Report - Fifth Assessment Report. A1B corresponds to the IPCC Special Report on Emissions Scenarios (SRES) A1B scenario with a future world of very rapid economic growth, global population that peaks in mid-century and declines thereafter, and the rapid introduction of new and more efficient technologies (balanced across fossil intensive non-fossil energy sources). Intergovernmental Panel on Climate Change (IPCC). (2000). Special Report Emissions Scenarios.

Table 4: Seasonal and Annual Changes in Temperatures for three Future time Periods High Spatial Resolution Climate Change Scenarios for Belize, 2019, Centella, A., Benzanilla, A., Institute of Meteorology, Cuba).

		HadGEM-ES RCP8.5 (High Scenario)				
		NDJ	FMA	MJJ	ASO	Annual
2050s		3.9	3.32	2.33	1.15	2.68
2070s		3.74	3.89	3.91	4.04	3.89
		Multi-Ensemble PPE+ECHAM5 SRESA1B (Medium-High Scenario)				
		NDJ	FMA	MJJ	ASO	Annual
2050s		2.27	2.18	2.44	2.65	2.38
2070s		3.26	2.92	3.33	3.79	3.33
		HadGEM-ES RCP4.5 (Medium-Low Scenario)				
		NDJ	FMA	MJJ	ASO	Annual
2050s		2.12	2.07	2.22	2.34	2.19
2070s		2.82	2.70	2.51	2.96	2.75
		HadGEM-ES RCP2.6 (Low Scenario)				
		NDJ	FMA	MJJ	ASO	Annual
2050s		1.78	1.89	1.83	1.86	1.84
2070s		1.56	1.85	1.80	1.90	1.78

As for sea level rise, climate models project a rise by the following levels by the 2090s, relative to 1980-1999 sea-level²⁰:

- Scenario SRES B1 (RCP4.5): + 0.18 to + 0.43m
- Scenario SRES A1B (RCP6.0) + 0.21 to + 0.53m
- SRES A2 (RCP8.5)²¹: + 0.23 to + 0.56m

Vulnerability profile

Like all small island developing states (SIDS), Belize is extremely vulnerable to the effects of climate change, which is already affecting the livelihoods of most of the population.²² Challenges will arise primarily from impacts of extreme weather events, changing weather patterns, and sea-level rise.

Belize ranks as the 61st country with the highest exposure to relative mortality risk from multiple hazards globally, and the 8th ranked country out of 167 for climate risk.²³ Belize's annual average losses from weather events during 1990-2008 equal 3.94% of Gross Domestic Product (GDP) per year.²⁴ The direct and indirect losses from natural disasters in Belize between 2000 and 2016 are USD 737 million (BZD 1,474 million), not including loss of revenue from capital assets. This cost averages annually to USD 46 million (BZD 92 million). Almost half of the total losses, USD 319 million (BZD 638 million), come from hurricanes or storms that are of the intensity of Category 1 or less. This signifies that at least half of the

²⁰ Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development of Belize. (2016). Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC).

²¹ Penn State College of Earth and Mineral Sciences. (no date). 'SRES' Scenarios and 'RCP' Pathways.

²² Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development (MFFESD). (2016). Belize's Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC).

²³ World Bank (2012). Belize Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes.

²⁴ Harmeling, S., (2011). Global Climate Risk Index, 2011. Who Suffers Most From Extreme Weather Events? Weather Related Loss Events in 2009 and 1990 to 2009.

losses are likely a result of flooding and storm surges.²⁵

Some of these impacts are already observed around the country include the increased incidence of coastal flooding caused by torrential rainfall. Some of these events are outlined in Table 5.

Table 5. Summary of recent major hydro-meteorological and other climate-related events over the past 15 years (Source: State of the Belize Coastal Zone 2003 to 2013 and updated to 2020 by Ms. Ann Gordon).

Year	Event
2003	Extreme Temperatures: Belize experienced a severe dry season. In April and May, heatwaves resulted in degraded pastures which affected the livestock and poultry (5,000 chickens died) and caused widespread bush fires.
2006	Floods: Belize experienced significant flooding events. January - flooding in the Belmopan area caused major disruption in traffic as the Western Highway and bridge just outside the city were washed out. May - 472.4 mm (18.6 inches) of rain fell in the Stann Creek District, flooding the Pomona and Melinda area. June - the Western and Hummingbird Highway junction was submerged, over 580 mm (22.83 inches) of rainfall was recorded in a 24-hour period.
2007	Extreme Temperatures: This year saw the 'end' of the extreme temperatures, which started in 2003. Three major forest fires in the Mountain Pine Ridge resulted in some 80.9 km ² (20,000 acres) of natural, regenerating pine trees destroyed. More than 20,000 chickens died. Flood: Belize City flood (29 th August). 196 mm (7.7 inches) of rainfall in 24 hours.
2008	Tropical Cyclone: May/June - Tropical Storm Arthur caused 9 deaths and BZD 160 million in damages. Flood: Remnants of Tropical Depression #16 (October 30 th) resulted in BZD 11.3 million damage.
2009	Floods: July - major flooding in the Toledo District. September - 472.4 mm (18.6 inches) of rain fell in 24 hours in the Stann Creek District, resulting in flooding around the Pomona and Melinda area.
2010	Floods: Belize experienced five major flooding events. Three tropical storms (Alex, Karl, Matthew) and one hurricane (Richard). Richard caused BZD 76 million in damages.
2011	Forest Fires (non-hydrometeorological): During the 2011 dry season, a combined area of approximately 86,400 ha (213,500 acres) was burned nationwide. Woody debris from the aftermath of Hurricane Richard in 2010 created the ideal fuel for this event to develop.
2015	Flood: Belize City Flood (14 th to 18 th October). 731 mm (28.8 inches) of rainfall over five days.
2016	Tropical Cyclone: August - Hurricane Earl caused damages totalling BZD 186.3 million
2019	Drought: The Caribbean Institute for Meteorology and Hydrology indicated that the 2019 drought conditions were among the most intense in the country since 1981. The 2019-2020 crop season assessed that sugarcane production dropped by 30% compared to the previous season. Belizean farmers' crop losses are estimated at USD50 million, prompting the GoB to declare a state of emergency. ²⁶ Additionally, the drought conditions created a shortage of electricity supply from hydroelectric and biomass plants. Therefore, the Belize Electricity Limited had to supply the shortfall with fossil fuels and increased electricity imports ²⁷ .
2020	Flood: Belize experienced torrential rains (1 st – 6 th November) and significant flooding, especially in the Cayo District due to tropical depressions, Eta and Iota, causing rivers to rise (by more than 29 feet) to dangerous levels. The flooding inundated villages causing considerable property. The National Meteorological Service reported Baldy Beacon in the Cayo District experienced 555.2 mm (21.9 inches) of rainfall over 6 days. At the time of the Country Programme's update (November 2020), the flooding of the Cayo District continued and the losses and damages due to the floods had not been estimated yet. Figure 6 illustrates the impacts.

²⁵ World Bank (2018). GFDRR, Advancing Disaster Risk Finance in Belize.

²⁶ The San Pedro Sun. (2019). Drought costs Farmers USD50 Million – GoB declares State of Emergency.

²⁷ Annual Energy Report (2019), Energy Unit, Ministry of Public Service, Energy and Public Utilities



Figure 6: Floods in Cayo District due to tropical depression Eta, November 2020 (source: Hanny F. Tzec)

Belize's vulnerability to climate change can be explained by the country's low-lying geography, development, and economic challenges, as well as demography.

Geography-related vulnerability

Belize's vulnerability to the adverse effects of climate change is due to its long, low elevation coastline – most of which is at just above sea level, over 1,600 offshore small islands, fragile ecosystem upon which its tourism industry depends, and high vulnerability to natural hazards such as hurricanes and floods. About 45% of the population is concentrated along the coast. Belize City, the commercial centre and home to about 20% of the population, is highly vulnerable due to its low elevation and inadequate housing facilities (10.8% of the urban population lived in slums in 2014²⁸).

Significant portions of the country are subject to and vulnerable to annual flooding. There are 39 identifiable river basins and 18 major watersheds. Of the 263 or so settlements, 62% (163 settlements) lie within areas at risk to flooding. One hundred and forty-nine (149) villages and settlements lie in floodplains that flood annually. Eleven are in areas which have a flood recurrence interval of 20 years.²⁹

Figure 7 below shows the flood risk areas across the country with the recurrent years of the 20, 100, and 1,000-year flood.

²⁸ United Nations (UN) Habitats. Caribbean Strategy: a guide to inclusive and resilient urbanization.

²⁹ Williams, R, Garcia, E., Hydrology Unit and University of Belize, 2009, Belize Country Report- Status, Advances and Needs.

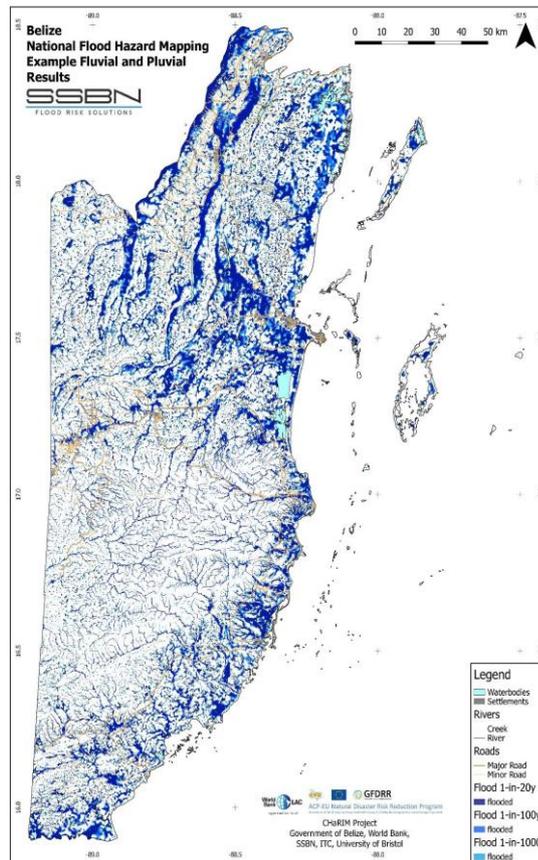


Figure 7. Flood Hazard Map (Source: CHARIM, Belize National Flood Hazard Mapping – Methodology and Validation Report, 2016).

Coastal erosion and flooding have shown an increase around the country. Extreme events are becoming more prevalent such as the flooding in Belize City on August 29, 2007, when the City received 196 mm (7.7 inches) of rainfall during a 24-hour period, and in October 2015, with rainfall accumulation of 731 mm (28.8 inches).

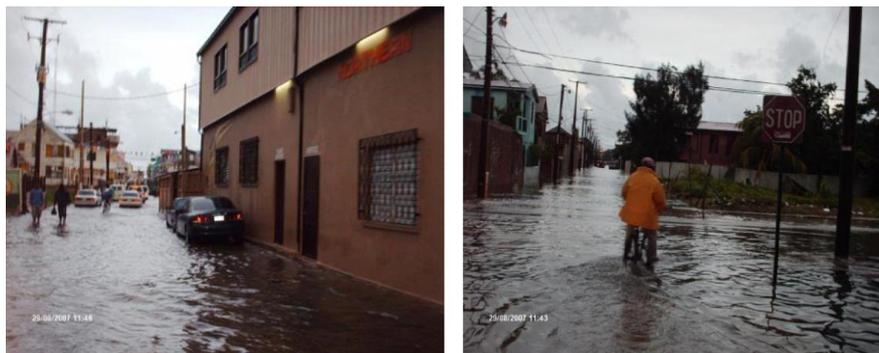


Figure 8. Belize City Flooding Event of 29th August 2007 (Source: National Emergency Management Organization (NEMO)).

Overwhelming evidence of coastal erosion is very much prevalent in the south. However, other areas such as the offshore island of Caye Caulker, have experienced similar types of erosion events. In the coastal town of Dangriga, as shown in Figure 9, the sea is rapidly encroaching and threatens to consume structures as the coastline shifts.



Figure 9. Coastal Erosion in Dangriga as the coast encroaches upon a school building, 2015 (Source: Mayor Francis Humphreys of Dangriga).

Monkey River Village lies on the south coast near the mouth of the Monkey River in Belize. In the past natural coastline dynamics have shaped and reshaped the coastline in that area. However, since the 1980's the rate of erosion has shown a substantial increase. While some of these impacts are due to human activities further upstream, all the changes cannot be attributed solely to those activities. Through the years, large portions of beach and coastal properties have been lost (Figure 10).



Figure 10. Remnant of a building affected by coastal erosion at Monkey River village, 2015 (Source: Marianne Karlsson).

According to the World Bank 2009 study "Sea Level Rise and Storm Surges," the impact of sea-level rise and intensified storm surges in Latin America and the Caribbean will be very high. The data on Belize show that 26.93% of the coastal zone will be impacted by rising sea level – with 56.15% of the coastal population exposed and potential losses estimated at 61.14% of GDP.³⁰

Development and economic challenges

According to the World Bank, the country's population is considered vulnerable to climate change impacts due to compounding reasons. These include the vulnerability to weather patterns of the main economic sectors, such agriculture and forestry which contribute to 10% of the GDP (2018)³¹ and are affected by droughts and flooding, as well as tourism, based in coastal areas and affected by sea- level

³⁰ Dasgupta, S., Laplante, B., Murray, S., Wheeler, D. (2009). Sea-Level Rise and Storm Surges A Comparative Analysis of Impacts in Developing Countries. Policy Research Working Paper 4901, April 2009, The World Bank Development Research Group Environment and Energy Team.

³¹ World Bank. (no date). Belize Country Profile.

rise, coastal erosion and wind hazards among others.³² This is compounded by the relative lack of efficient transport system and flood protection infrastructure; high levels of poverty; concentration of urban centres in low-lying coastal areas; social inequality among different ethnic groups; and poor access to information and health care.³³

The reliance of the country's economy on climate-sensitive sectors makes it particularly vulnerable to climate impacts. For instance, the important agriculture sector is impacted by recurrent droughts such as 2004, 2005 and 2019 events. Considering water deficits, in all cases, the comparison indicates that, during the 2004-2005 agricultural season, rainfall was not sufficient to meet crop water needs at all times, especially during the most critical periods for some of the crops. The result was either wilting of some crops and/or lower unit yield of other crops and plantations and associated economic losses.³⁴

Being largely dependent on natural resources for their livelihoods and being a rural population make the indigenous people of Belize particularly vulnerable. This vulnerability stems from their dependence on fragile and threatened ecosystems as a means of livelihood. Indigenous communities find it difficult to adapt to a fast-environmental change propitiated by climate change in a manner that is consistent with their cultures and traditions. Not only is the viability of indigenous livelihoods threatened, resulting in food insecurity and poor health, but cultural integrity is also being challenged, eroding confidence in solutions provided by traditional institutions and authorities.³⁵

Demographics-related vulnerability

The elderly (population over 65 amounted to 4% of total population in 2010³⁶) are expected to become more vulnerable to health issues, such as heat stress, in a much warmer climate. Poor air quality will only serve to exacerbate the impact of higher temperatures, particularly in the dry season in Belize – February to April. In addition, evacuation procedures brought about by the more frequent extreme weather events will also impact both the physical and mental health of the elderly. In the meantime, population under five years old amounted to approximately 12% of the total population (2010) and also remains very vulnerable to climate change.³⁶

Furthermore, Belize's 2010 census showed that of the 79,492 households, 27.6% (21,939) were headed by women compared to 24% recorded in the 2000 census.³⁶ Female-headed households tend to be the poorest and are likely to be the group most challenged to cope with environmental and climate change.

Sectoral challenges

Although accounting for a small share of past and current emissions, Belize's economy, society and natural environment are expected to disproportionately suffer from climate change impacts. The universal challenges among SIDS to implement mitigation and adaptation measures include financial support, availability of cost-effective technology and capacity building.

In Belize, some key sectors to sustainable development are facing challenges in relation to climate change, in particular:

- **mitigation challenges** for sectors that are key emitters, and

³² World Bank (2012). Belize Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes.

³³ World Bank (2012). Belize Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes.

³⁴ Jovel, J.R. (2005). The 2004 Drought in Belize, Exercise of Damage and Loss Assessment in the Agriculture Sector, 2005, ECLA.

³⁵ Kronik, J., Verner, D. (2010). Indigenous Peoples and Climate Change in Latin America and the Caribbean, 2010, World Bank.

³⁶ Statistical Institute of Belize. (2010). Belize Population and Housing Census.

- **adaptation challenges** for sectors that are particularly vulnerable to climate impacts.

The main sectoral challenges are illustrated in the following sections.

Key emitter sectors and related mitigation challenges

The primary sources of greenhouse gas emissions in Belize include: energy, industrial processes and product use, agriculture, forestry and other land use, and waste. According to the latest available GHG inventory carried out in 2020 and presented in the Fourth National Greenhouse Gas Inventory, total emissions in 2017 were 1,194.71 Gg of carbon dioxide equivalent (CO₂eq) without accounting for sequestration from the Forest and Other Land Use (FOLU) Sector, and -5,826.79 Gg CO₂eq after accounting for sequestration from FOLU. Although there was a general increase in GHG emissions across all sectors, Belize continues to be a net carbon sink (see Table 6).³⁷

Table 6. Belize's Total Net Greenhouse Gas Emissions and Removals by Sector, 1994-2017 (Gg CO₂eq) (Source: Fourth National Greenhouse Gas Inventory, 2020).

Sector	1994	1997	2000	2003	2006	2009	2012	2015	2017
Total National Emissions and Removals with (FOLU)	-6,612.97	-7,193.83	-7,718.26	-11,744.38	-11,202.62	-9,833.79	-7,179.14	-5,260.07	-5,826.79
Total National Emissions and Removals (without FOLU removals)	180.96	128.54	158.77	151.77	188.98	255.26	832.19	1,107.46	1,194.71
Energy	NE	NE	NE	NE	NE	NE	538.07	781.81	786.36
Industrial Processes and Product Use	0.67	2.96	6.36	10.57	15.40	22.83	31.43	42.50	43.69
Agriculture, Forestry, and Other Land Use	-6,614.01	-7,197.20	-7,725.07	-11,755.29	-11,218.40	-9,868.83	-7,771.37	-6,104.27	-6,683.66
Waste	0.37	0.41	0.45	0.34	0.37	12.21	22.73	19.89	26.81
International Bunkers	NE	NE	NE	NE	NE	NE	40.37	40.23	71.89

Belize's emissions profile is symptomatic of several factors, including:

- Vast extent of natural resources – Belize has a network of waterways and water bodies, including 16 watersheds and numerous smaller ones. Approximately 59% of the country remains under natural vegetation while 39.1% of the terrestrial area is made up of protected forests and a great variety of terrestrial, marine and freshwater ecosystems;
- Socio-economic dependence on those resources for livelihood and for sustaining economic growth, particularly through the agriculture and tourism sectors;
- A rapidly growing and urbanizing population (with over a third in poverty and a largely unskilled labour force);

³⁷ Fourth National Greenhouse Gas Emissions Inventory Report, May, 2020

- Concomitantly increasing energy demands.

As to the sectors' contribution, in Belize the energy sector is the largest emitter (almost 800Gg CO₂ eq.), followed by agriculture (over 300 Gg CO₂ eq.).

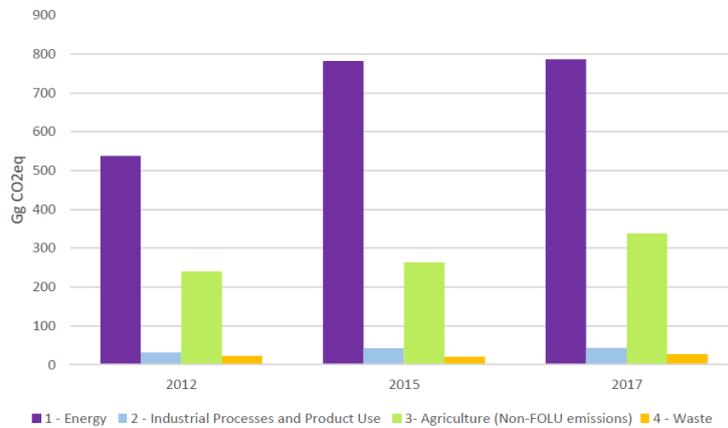


Figure 11. National Emissions excluding the Forestry and Other Land Use Sector, 2012, 2015, 2017 (Gg CO₂ eq.) 2020 (Source: Fourth National GHG Emission Report).

Potential activities in the conventional power sector could, in the future, involve improved efficiency of existing hydro and biomass energy plants. For the time being, there are two biomass plants, producing sugar from sugar cane and electricity from the bagasse. . Belize's commitment to GHG emissions reduction includes cross-sectoral actions (e.g. forestry, electricity, waste and transport) and more specifically⁴:

- Protection of forest reserves and sustainable forest management
- Reduction of fuel wood consumption by 27%-66%
- Protecting and restoring mangrove forests.
- Sustainable Energy Strategy and Action Plan: with 85% renewable energy by 2030
- Developing Transport Policy and Implement Transport Master Plan.
- Developing and implementing a Strategy and Plan to operationalise the National Solid Waste Management Policy (NSWMP).

The table below summarises these sectors' characteristics, mitigation-related challenges and institutional governance. More information on the key emitter sectors and related mitigation challenges are available in Annex 1. Belize's vulnerability profile: mitigation and adaptation-related sectoral challenges

Table 7: Mitigation-relevant sectors and characteristics (source: prepared by the authors)

Sectors	Sectoral NDC targets ³⁸	Characteristics	Mitigation challenges	Governance
Agriculture	<ul style="list-style-type: none"> • Reduce methane emissions from livestock by 10% and avoid 	Three sub-sectors: <ul style="list-style-type: none"> • traditional export crops for sugar, banana, citrus, and marine products • a more traditional, small-scale farm 	GHG emissions primarily come from: <ul style="list-style-type: none"> • livestock • manure management • soil management • biomass burning 	The government entity responsible for the sector is the Ministry of Agriculture, Food Security, & Enterprise

³⁸ The targets are aimed to be achieved by 2030.

	<p>emissions of at least 4.5 ktCO₂e related to agriculturally driven land use change by 2025</p> <ul style="list-style-type: none"> • Restore 200 hectares of arable sugar land in Northern Belize • Promote the reduction of agricultural GHG emissions through effective livestock management 	<p>sector producing food primarily for local consumption</p> <ul style="list-style-type: none"> • a large-scale commercial sector . <p>Only 9.7% of Belize’s total land area is used for crop and livestock production</p>	<p>Emissions continuously increased over the three reference years (2012, 2015, and 2017), as livestock populations increased.</p>	<p>(MAFSE).</p> <p>The policy framework is the National Food and Agriculture Policy 2015-2030.</p>
Land Use and Forestry	<ul style="list-style-type: none"> • Reduce GHG emissions related to land use change by a cumulative 985 KtCO₂e per year (e.g. through reforestation, agroforestry, innovative conservation financing) • Enhance the capacity of the country’s mangrove and seagrass ecosystems to act as a carbon sink • . 	<p>Large forests, with diverse and productive ecosystems. They contribute to industries such as timber and ecotourism.</p>	<p>Over the past 50 years, Belize’s forests have been put under pressures (increasing demand for food, timber supplies, and fuel). Insufficient legislative protection and enforcement measures have contributed to the situation.</p> <p>Sectoral emissions have increased between 2009 and 2017, mainly due to land conversions to grasslands and croplands</p>	<p>The government entity responsible for the sector is the Forest Department.</p> <p>The policy framework is the 2015 National Forest Policy.</p>
Energy	<ul style="list-style-type: none"> • Avoid emissions from the power sector equivalent to 19 KtCO₂e per year through system and consumption 	<p>Local energy generation sources:</p> <ul style="list-style-type: none"> • 86.4% renewables (biomass, solid biofuel, hydropower, solar energy) • 12.7% crude oil • 0.9% petroleum gas <p>Imported energy sources:</p>	<p>Since 2012, the energy sector showed increases in emissions from transport, electricity generation, and residential purposes due to the rise in the use of petroleum fuels.</p>	<p>The government entity responsible for the sector is the Energy Unit within the Ministry of Public Utilities and Logistics (MPUL) .</p> <p>The policy framework</p>

	<p>efficiency measures amounting to at least 100 G</p> <ul style="list-style-type: none"> Avoid 44 KtCO₂e in the national electricity supply by 2030 through the introduction of expanded capacity from renewable energy sources Wh/year 	<ul style="list-style-type: none"> 11.5% electricity 32% diesel 31.1% gasoline 11% LPG <p>Belize has four hydropower plants.</p>		is the Belize National Sustainable Energy Strategy (2012-2033).
Transport	<ul style="list-style-type: none"> Avoid 117 KtCO₂e/year from the transport sector through a 15% reduction in conventional transportation fuel use and achieve 15% efficiency per passenger- and tonne-kilometre through appropriate policies and investments 	Largest energy consumer (95.81% of 2017 total consumption).	<p>From 2012 to 2015, total emissions in transportation rose, although there was a slight decline in 2017.</p> <p>The growing economy, (especially tourism) has led to an increased use of petroleum fuels (expansion of public and private sector vehicle fleet, local maritime ferries, and local aviation fleet).</p>	<p>The government entity responsible for the sector is the Ministry of Public Utilities and Logistics (MPUL).</p> <p>The policy framework is the Comprehensive National Transport Master Plan (2018).</p>
Solid Waste Management	<ul style="list-style-type: none"> Improve waste management processes to avoid emissions of up to 18 KtCO₂e per year 	Since 2010, the Government has closed large open dump sites near Belize City and San Ignacio Town and has commissioned a new regional sanitary landfill facility including access road, to serve the Western Corridor. Now 50% of waste is disposed through landfill.	<p>GHG emissions primarily come from wastewater and discharge. The level of GHG emissions, was almost steady across 2012-2017 reference years.</p> <p>Biodegradable waste during its decomposition phase generates a mixture of CO₂ and methane. For a long time,</p>	<p>The government entity responsible for the sector is the Ministry of Natural Resources, Petroleum & Mining (MNRPM), through the Belize Solid Waste Management Authority (BSWMA).</p> <p>The policy framework is the National Solid</p>

		Improved management of solid waste, new waste transfer infrastructure and law enforcement has resulted in great reduction in open burning of solid wastes.	uncontrolled dumping and burning had been the normal way of disposing garbage in Belize. Greatest challenge is behavioural changes on the part of the population.	Waste Management Policy (NSWMP) for Belize (2015).
Industrial Processes and Product Use sector	n/a	Industrial activities have slowly increased as the country's development progresses.	Greenhouse gas emissions from Industrial Processes and Product Use (IPPU) arise primarily from refrigerants used in stationary and mobile sources, lime production, road paving with asphalt, and food and beverage production. The increased use of refrigerant resulted in a 30% increase in emissions between 2012 and 2017.	The government entity responsible for the sector is the Ministry of Sustainable Development, Climate Change and Disaster Risk Management through the Department of Environment.

Key climate risks and related adaptation challenges

The key impacts of climate change in Belize include temperature rise, precipitation change, ocean acidification and warming, sea level rise, tropical storms/hurricanes, coastal erosion, flooding, saltwater intrusion, wildland fires³⁹, water availability⁴⁰, that will lead to a suite of secondary impacts on productive sectors and the environment.

The table below summarises these sectors' characteristics, adaptation-related challenges and institutional governance. A key overarching challenge is the lack of skills and knowledge to adapt (more information is available in the Gaps and opportunities section). More information on key climate risks and related adaptation challenges per sector are available in Annex 1. Belize's vulnerability profile: mitigation and adaptation-related sectoral challenges

Table 8: Adaptation-relevant sectors and characteristics (source: prepared by the authors)

Sectors	Sectoral NDC targets ⁴¹	Characteristics	Adaptation challenges	Governance
Coastal and marine resources	<ul style="list-style-type: none"> Increase resilience to climate impacts for coastal communities and habitats by managing further development of the coastline to reverse net coastal habitat and land loss by Strengthen the resilience of coastal communities by 	The coastal zone is one of Belize's greatest assets, with over 40% of the population living and working in the fisheries, aquaculture, and tourism industries. The services they provide	Sea level rise, hurricanes, storm surges, and erosion combined with the concentrated presence of people in sometimes inadequate facilities along the coast put at risk their lives and livelihoods.	The government entity responsible for this sector is the Coastal Zone Management Authority and Institute (CZMAI). The policy framework is the Integrated

³⁹ Vulnerability and Risk Assessment, Sustainable Tourism Program (STP) II, 2020

⁴⁰ Integrated Vulnerability and Adaptation Assessment, January, 2020

⁴¹ The targets are aimed to be achieved by 2025.

	<ul style="list-style-type: none"> developing an early warning system for storm surges 	are worth up to USD 559 million per year. ⁴²		Coastal Zone Management (ICZM) Plan (2016).
Fisheries and aquaculture	<ul style="list-style-type: none"> Build capacity in fisheries and aquaculture sector through research, diversification and retraining to support livelihoods while protecting coastal ecosystems 	The Fisheries sector is considered one of the most productive sectors in the Belizean economy and directly influences the livelihoods of more than 15,000 coastal inhabitants.	Rising sea level will adversely impact fish habitat, including (e.g., wetlands, coral reefs, and seagrasses). Rising near-surface water temperature and increasing acidification may cause massive bleaching and dieback of corals. Warmer ocean temperatures can also influence fish populations, fish varieties and zooplankton that provide food for fish. ³	<p>The government entity responsible for this sector is the Ministry of Blue Economy and Civil Aviation (MBECA), through the Fisheries Department and the Ministry of Agriculture, Food Security, & Enterprise (MAFSE) for aquaculture.</p> <p>The policy framework is the Fisheries Resources Act Act (2020), National Fisheries Policy, Strategy and Action Plan (2020) and the Aquaculture Development Act (2011).</p>
Agriculture	<ul style="list-style-type: none"> Reduce post harvest losses through the implementation of the National Adaptation Strategy to Address Climate Change in the Agricultural Sector to increase the adaptive capacity of the agricultural sector Develop and implement an enhanced early warning system for drought and extreme weather events to support farmers in planning for and responding to the impacts of climate change 	The main economically important crops in Belize are sugarcane citrus and bananas. The sector is mostly rainfed. ⁴³	All of Belize's main export commodities and other locally consumed food crops are vulnerable to the negative effects of climate change and variability, water availability being a key issue. The combined impact is low agricultural yields, decrease in food production and higher food prices.	<p>The government entity responsible for the sector is the Ministry of Agriculture, Food Security, & Enterprise (MAFSE).</p> <p>The policy framework is the National Adaptation Strategy to Address Climate Change in the Agriculture Sector (2014).</p>

⁴² WWF, Valuing Belize's Barrier Reef. Accessed April 2019: <https://www.wwf.org.uk/what-we-do/projects/valuing-belizes-barrier-reef>

⁴³ According to the "Belize Farm Registry," nearly 76% of farmers depend on rainfall alone.

<p>Water resources</p>	<ul style="list-style-type: none"> Enhance the protection of water catchment (including groundwater resources) areas and make improvements to the management and maintenance of existing water supply systems through implementation of the National Water Sector Adaptation Strategy and Action Plan 	<p>Belize has 39 identifiable river basins. Of these, there are 18 major watersheds, the largest being the Belize River Watershed. There are also five trans-boundary watersheds and an unknown quantity of shared water reserves with Guatemala and Mexico. There are also seven groundwater provinces</p>	<p>Model projections show a progressive decrease in rainfall, across all regions of Belize, from the 2030s to the 2090s and across all seasons and all emissions scenarios.</p>	<p>The government entity responsible for the sector is the Ministry of Natural Resources through the National Hydrological Services.</p> <p>The policy framework is the National Integrated Water Resources Management Policy for Belize (2008).</p>
<p>Tourism</p>	<ul style="list-style-type: none"> Increase the adaptive capacity of tourism sector through the development of climate resilient planning frameworks and infrastructure 	<p>Tourism has grown considerably recently and is now the second largest industry in the nation. Prior to the covid-19 crisis, it was projected that it would be responsible for 42% of the whole economy by 2027.</p>	<p>The main climate threats are sea-level rise, saltwater intrusion into coastal aquifers, coral bleaching and mortality, extreme temperatures, increase in hurricanes intensity and sargassum influx. This can lead to substantial damages, and an overall reduction in the sector's attractiveness. As a result, a decrease in or absence of tourism arrivals could ultimately result in loss of revenue and loss of employment.</p>	<p>The government entity responsible for this sector is the Ministry of Tourism & Diaspora Relations (MTDR).</p> <p>The policy framework is made of the National Tourism Policy (2005) and the National Sustainable Tourism Masterplan (2011).</p>
<p>Health</p>	<ul style="list-style-type: none"> Build adaptive capacity in the health sector by assessing vulnerability and investing in capacity to respond to climate-related threats 	<p>In Belize, health care is offered through both private and public systems and facilities.</p>	<p>No sectoral assessment of climate change impacts on human health in Belize has been carried out to date. However, as stated by the Intergovernmental Panel on Climate Change (IPCC) with high confidence, <i>“any increase in global warming is projected to affect human health, with primarily negative consequences.”</i>⁴⁵</p>	<p>The government entity responsible for this sector is the Ministry of Health and Wellness (MHW).</p> <p>The policy framework is the 2014-2024 Belize Health Sector Strategic Plan.</p>
<p>Forestry</p>	<p>Implement protection targets of the National</p>	<p>Large forests, with diverse and</p>	<p>Increase in the intensity of storms and hurricanes,</p>	<p>The government entity responsible for</p>

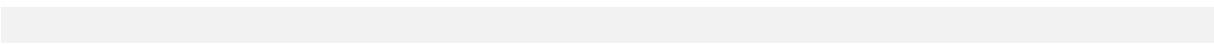
⁴⁴ World Travel & Tourism Council (2017). Travel and Tourism: Economic Impact, 2017, Belize.

	Biodiversity Strategy Action Plan including increased effectiveness of the National Protected Areas System by 2024	productive ecosystems. They contribute to industries such as timber and ecotourism. Mangrove swaths are also found along most of coastal Belize. Besides being sinks of GHG, they provide various ecosystem services such as protecting shorelines, mitigating the effects of storm surge and winds, and contribute USD 174-249 million/year to Belize's economy via tourism recreation, fisheries, and shoreline protection.	increased overall aridity, increased incidence of forest fires, and pests and disease outbreaks all threaten the sector. Forest protection and replanting of mangroves implemented for mitigation purposes are also expected to be beneficial for adaptation, as they protect the coastline against storm surges and erosion. However, mangrove clearing occurring over 1980 – 2010 resulted in a national loss of <4% (76,250 ha to 74,684 ha).	the sector is the Forest Department. The policy framework is the National Forest Policy (2015).
Biodiversity	n/a	Currently there are 103 protected areas, including marine reserves and archaeological sites.	Climate change is expected to generate the loss of habitat and animal and plant species, as described under the coastal and marine resources, fisheries and aquaculture, forestry, and water resources sectors.	The government entities responsible for the sector is the Ministry of Sustainable Development, Climate Change and Disaster Risk Management (MSDCCDRM). The policy framework is the National Protected Areas System Act (NPASA) (2015).
Energy	n/a	The electricity demand is likely to increase due to rising temperatures and a need for air-conditioning among increasing populations. Oil price fluctuations will also cause consequent volatility in costs of production of electricity.	The climate change adaptation challenge for this sector revolves around the projected changes in the hydrological cycle resulting in the reduced generation of energy at a time of greater need. This will be compounded by the likely increased generation costs, ad hoc urbanisation, and the	The government entity responsible for the sector is the Energy Unit within the Ministry of Public Utilities and Logistics (MPUL). The policy framework is the Belize National Sustainable Energy Strategy (2012-2033).

		Furthermore, changes in the hydrological cycle will decrease water levels and adversely impact hydropower generation, making electricity even more scarce and costly.	inadequate infrastructure associated with such settlement expansions.	
Transport infrastructure	n/a	<p>In Belize, underdeveloped and dilapidated transport sector infrastructure, is a key constraint to reducing vulnerability to climate change and disasters. While the road network is particularly vulnerable, as it needs to be upgraded (mostly unpaved) and is affected by the weather, public transportation infrastructure (bus terminals) or electric mobility (charging stations) are also vulnerable to climate change.</p> <p>It is estimated that 70% of the population lives near primary and secondary road networks. Flooding of one section of a roadway can cut access and severely disrupt economic and social movement.</p>	<p>The climate change threats to infrastructure comes from sea level rise, changes in weather patterns, flooding, temperature rise, and incidences of tropical cyclone and associated storm surges.</p> <p>Hazard or risk, particularly climate risk, have not been adequately incorporated in detailed road designs. This, coupled with inadequate preventive maintenance and rehabilitation, results in unsafe road conditions, especially during flooding events.</p>	<p>The government entity responsible for the sector is the Ministry of Infrastructure Development & Housing (MIDH).</p> <p>The policy framework is the Comprehensive National Transportation Master Plan (2018) and National Climate Resilience Investment Plan (NCRIP) (2013).</p>
Land use and settlements	Protect communities from damage caused by flooding and sea level rise through implementation of the Land Use Policy and supporting green and grey infrastructure	All municipalities except for Belize City have developed Urban Development Plans and submitted to the Ministry of Rural Transformation, Community Development, Labour & Local Government.	Infrastructural defence to protect communities from damage caused by flooding and sea level rise is a required costly venture considering the extent of the coastline inhabited and the portion of the coastal elevation at or slightly above sea level. As building requirements	<p>The government entity responsible for the sector is the Ministry of Natural Resources, Petroleum & Mining (MNRPM).</p> <p>The policy framework is the National Land Use Policy for Land Resource</p>

		<p>Land conversion is a major cause of land degradation. Deforestation accounts for the degradation of half a million acres of land in the past 13 or so years.</p> <p>The sector faces rapid urbanisation and ad hoc settlements and infrastructural requirements of unplanned communities. Building adaptation requirements are also now implemented.</p>	(building codes) are non-existent, climate resilience is not embedded into new constructions.	Development (2011).
Disaster risk reduction (DRR)	n/a	<p>Disaster risk reduction is not explicitly listed in the policy documents as a stand-alone sector as it is considered a cross-cutting issue for Belize's economy. Because disaster risk is closely linked to the impacts on critical infrastructure and human settlements and addresses a broad spectrum of issues, a concerted dialogue, and action on the part of all stakeholders engaged in disaster management, sustainable development, natural resource management, and environmental protection will be required for effective national disaster risk management.</p> <p>The GoB intends to mainstream disaster risk reduction (DRR) into projects (e.g.</p>	Tropical cyclones and heavy rainfall events are the principal natural hazards affecting Belize. These events bring recurrent floods and storm surges that inflict severe economic losses. Presently, deteriorating road infrastructure and poor drainage systems impede post-disaster connectivity, eventually slowing emergency response.	<p>The government entity responsible for the sector is the National Emergency Management Organization (NEMO).</p> <p>There is an overarching hazard mitigation policy with clearly defined goals and objectives, but no comprehensive disaster management policy exists.</p>

		education sector reform project, which includes a disaster risk management plan for schools. ⁷¹		
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Development profile

As of November 2020, the impact of the COVID-19 pandemic on the Belizean economy and development prospects is projected to be severe due to the collapse in tourism activity and the indirect effects of the necessary containment and mitigation measures (curfew, closure of the international airport, cross border points of entry and schools, mandatory quarantines). Besides, the crisis occurred when the economy was already in recession due to a drought and a slowdown in tourism in the second half of 2019. As a result, Belize has experienced a real GDP contraction of 14.1% in 2020⁴⁶ only a gradual recovery as the pandemic wanes.⁴⁷ However, as countries are preparing green growth recovery policies, there is an opportunity for Belize to accelerate its transition to a low-carbon and climate-resilient economy by approving such policies to recover from the COVID-19 crisis and enable investment to go back to the pre-crisis levels.

A more detailed description of Belize's development profile is available in Annex 2: Belize's development profile

Economy

Belize is a country in economic transition and has a small, open economy primarily dependent on natural resources. It is a member of both the Caribbean Community (CARICOM) and Central American Integration Systems (SICA).

Over the past 30 years, Belize has gone through periods of rapid economic growth of more than 10% annually (1987-1992, 2000), a recession (1983), or virtually no growth (1994-1995).

Table 9. Summary of GDP, GNI, HDI and ease of doing business over the years 2012 to 2019 (source: World Bank country Profile <https://data.worldbank.org/country/belize>).

Belize's development profile								
	2012	2013	2014	2015	2016	2017	2018	2019
GDP (USD billion)	1.574	1.613	1.704	1.778	1.802	1.838	1.871	1.880
GDP per capita (USD)	4397.8	4332.8	4411.9	4482.5	4367.5	4315.2	4884.7	4815.1
GDP Growth rate (%)	3.8	0.7	4.0	3.8	-0.5	0.9	2.09	0.27
GNI/capita (USD)	4.26	4.31	4.38	4.58	4.48	4.39	4.45	4.45
HDI	0.716	0.715	0.715	0.709	0.709	0.708	0.720	0.720
Ease of doing business	104	106	118	110	112	121	125	135

Table 9 shows the changes in GDP from 2012 to 2019. The 2019 official quarterly statistics on GDP revealed positive growth of 5.2% for the first quarter, however, showed decline of 0.8%, 0.4%, and 2.8% respectively.⁴⁸

⁴⁶ International Monetary Fund (IMF). (2021). Belize: Staff Concluding Statement of the 2020 Article IV Mission. <https://www.imf.org/en/News/Articles/2021/03/12/mcs031221-belize-staff-concluding-statement-of-the-2020-article-iv-mission>

⁴⁷ International Monetary Fund (IMF). (2020). Policy responses to COVID 19. <https://www.imf.org/en/Topics/imf-and-COVID19/Policy-Responses-to-COVID-19#B>

⁴⁸ Statistical Institute of Belize, Gross Domestic Product. Accessed in November 2020: <http://sib.org.bz/statistics/gross-domestic-product/>

Belize is ranked 135 among 190 economies in the ease of doing business, according to the latest World Bank annual ratings. The main weaknesses are linked to getting credit (173/190 economies), starting a business (166/190) and registering property (137/190).⁴⁹

In terms of international trade, Belize imports almost five times in dollar values as much commodities as it exports. Machinery and transport equipment have consistently remained the top import if not by volume by cost. Contained within the document Horizon 2030 - Vision for Belize by the year 2030, under the section 'Strategies to Achieve the Goals for Economic Resilience' can be found the GoB's agreement to implement policies and provide incentives to create new industries, and to develop the domestic market as a springboard for exports, produce quality goods and services and expand exports. This outlines GoB's commitment to reducing the trade deficit by 2030.

The reality is more recently stated in Belize's Fiscal Strategy Statement 2016-2019 as "*the economy of Belize is currently challenged by low growth and high levels of public debt.*" It also states that that recent years saw a slowing down in real economic output, flat tax revenue, and a growing deficit. Furthermore, at the same time debt has increased, GDP growth has slowed.⁵⁰ In general, growth in Belize can be susceptible to the path of debt, exogenous shocks that could heighten volatility, and the depletion of resources available for investments.⁵¹

Key Economic Drivers

Presently the economy of Belize remains a highly open, natural resource and services-based, export economy. Belize's economy can be classified among the group of the most open economies in the region and globally. It is primarily driven by tourism and agriculture and, until recently, oil, which are largely natural resource-based. Other industries include manufacturing, construction, electricity, and water supply. Secondary industries include the wholesale and retail trade, the service industry, real estate, transport, and communication.

Anticipated sectors for growth

As stated in the GSDS, the principal strategy to achieve income growth of approximately 33% over a ten-year period is to intensify efforts to improve productivity and competitiveness. The two main economic sectors are tourism and agriculture. An improved business climate would create the enabling environment for expansion into value-added activities in sectors such as tourism, agri-business / agro-processing, as well as information and communications technology (ICT).

Tourism was up until the 2020 COVID-19 crisis and is anticipated to remain one of the critical economic drivers. The total contribution of travel and tourism to GDP was, until the 2020 crisis, forecast to rise by 5% per annum, reaching 47% of GDP and contribute some BZD 819 million to the economy by 2027.⁵² However, since the COVID-19 related travel restrictions were imposed in 2020, the country has already lost as much as 80% of tourism-related jobs and associated livelihoods. While the extent of the long-term economic impacts of this crisis are unknown, the current situation paints a gloomy picture for the sector's economic prospects.⁵³ As part of recovery measures for the sector, several initiatives are

⁴⁹ World Bank. (no date). Ease of doing business: Belize. <https://www.doingbusiness.org/en/data/exploreeconomies/belize/#>

⁵⁰ Belize Fiscal Strategy Statement 2018/2019 - Caribbean Elections. Accessed in April 2019: http://caribbeanelections.com/eDocs/budget/bz_budget/bz_fiscal_strategy_statement_2018_2019.pdf

⁵¹ Carneiro F. (2016). BELIZE. Right Choices Bright Future. Systematic Country Diagnostic. World Bank Group.

⁵² World Travel & Tourism Council (2017). Travel and Tourism: Economic Impact, 2017, Belize.

⁵³ United Nations Development Programme (UNDP). 2020. UNDP Belize: Support to the National Response and recovery to Contain the Impact of COVID 19.

underway (see Annex 2: Belize's development profile ⁵⁴:

Agriculture remains another key pillar of the Belizean economy and a base of the productive sector agribusiness; hence it will play an essential role in future growth expansion. Belize's proximity to the North American, Central American, South American, and Caribbean markets offers easy access to top markets. Agribusiness is the business sector encompassing farming and farming-related commercial activities.

The COVID-19 crisis has not spared this sector either. In 2020, the Belize Sugar Industries (BSI) reported a decrease in production at the end of the year's sugar season that had been plagued by an extended drought period as well as the coronavirus pandemic. As described in the Economic Recovery Strategy for Belize, as part of the immediate COVID-19 relief effort, the Belizean Government has programmed to invest **USD 233 million** in initiatives to manage the health response and to support the Belizean population, and protect local jobs. A total of USD 16 million has been allocated as direct relief to farmers, as well as an additional USD 50 million in agriculture-related support⁵⁵.

Another among the most promising sources of growth for the private sector is in the ICT industry. It provides relatively high-paying jobs for Belizeans. The fact that Belize is an English-speaking country that is relatively geographically close to the US makes it even more attractive for private investments.

Financial system in Belize

Assessing the size of Belize's private sector is important in evaluating its current and potential contribution to the overall economy. The private sector accounts for about two-thirds of the economy and the public or state sector the other one-third.

It is a known fact that the financial system plays a crucial role in the process of economic development and that the availability of credit is a binding constraint for both macro and micro enterprises in the development process. Since the 1980s, Belize's financial system has seen some growth and diversification. It is, however, still largely undeveloped and high cost of domestic credit has negative implications for private sector development.⁵⁶ Belize's financial sector is made of five domestic banks, five international (offshore) banks, nine domestic insurance companies, 12 credit unions, the state-owned Development Finance Corporation (DFC), the Social Security Board, 44 money service providers (MSBs), and 54 money lenders.

Two basic factors are shaping private sector development in Belize. The first is the population size and the second is the fact the country is land abundant and has always had a comparative advantage based on natural resource exploitation. More can be done to assist the private sector development through the establishments of a "level playing field" for businesses when it comes to taxation, licensing, and other administrative requirements and incentives. More can also be done in terms of policy implementation, such as tax reforms.

In the IDB report "*Belize: a Private Sector Assessment*," the following priority actions were identified to be conducive to significant private sector growth: (i) a lower cost of domestic finance, (ii) a different

⁵⁴ Government of Belize (2020). Economic recovery strategy for Belize.

⁵⁵ Discussions are on hold as of February 2021.

⁵⁶ Rowland, B., Durante, J.J., Martin, D. (2008). Belize: a Private sector Assessment, Private Sector Development Discussion Paper #6, IDB.

incentive framework, (iii) improved infrastructure, (iv) secure property rights and a low cost transactions' framework, (v) a flexible and adaptive labour market, (vi) revamped trade and investment promotion (vii) improving access to finance and (viii) raising the skills level of the labour force through innovative strategies and actions.⁵⁷

To address these issues, the Prime Minister in 2011 established the Economic Development Council (EDC). The EDC is a public-private advisory body whose overall objectives are: (a) to strengthen the collaboration between public and private sectors through meaningful dialogue that leads to positive outcomes facilitating economic development, and (b) to advise on and help develop reforms that improve doing business, enhance the public sector processes and enhance confidence of doing business in Belize. The EDC comprises ten members, including five senior managers from the public sector and five representatives from the private sector, and is co-chaired by a representative from the private sector and a counterpart from the public sector. The EDC came into force with the Economic Development Act of 2017.⁵⁸

The major factor stifling economic growth in Belize is the public sector debt which presents a challenge. The servicing of the high level of external public debt could constrain private sector growth. In 2019, Belize's external debt peaked at 105% of GDP.

The challenges ahead leading towards sustained economic development would involve first and foremost addressing the national debt. For existing leading sectors there is the need to diversify further the production and export bases. Besides tourism and agriculture, another "winner" needs to be identified. Just as important is the development of a robust public-private partnership. Effective investment in education and public service reform is needed.

Post-COVID-19 perspectives

In light of COVID-19 impacts on the country's economy and development, the steps towards recovery should be taken by considering existing national strategies and plans while ensuring broad stakeholder buy-in. A 2020 UNDP study finds that Belize's recovery should be based on the following sectors and aspects, which reflect the country's current development stage and needs.

- Building resilient and sustainable infrastructure
- Strengthening the digital economy
- reducing inequality
- Retooling and transforming the labour force through education and training
- Accelerating the transition to low-carbon energy.⁵⁹

The study's policy recommendations are based on the sustainable development goals (SDGs). The ones presented below relate to climate change actions and can constitute the basis for GCF support to projects and programmes in Belize.

Table 10: Climate change-related policy recommendations for Belize's COVID-19 recovery (source: UNDP, 2020)

⁵⁹ United Nations Development Programme (UNDP). (2020). COVID-19 socioeconomic impact assessment – Belize 2020. <https://www.bz.undp.org/content/belize/en/home/research---publications/socioeconomic-impact-of-the-covid-19-pandemic-in-belize.html>

SDG	Recommendations	Beneficiaries	Estimated budget (USD)
2: Zero Hunger	Provision of, and or support to access financing for retrofitting of properties (focus on including climate mitigation strategies, for example, the use of renewable energy and energy efficiency could be joined to such a programme).	General public	To be determined (TBD)
	Assess the robustness of strategies and plans to pandemics and natural disasters – adopt a risk ethos to fiscal budgeting and planning	General public	72,000.00
3: Good health and well-being	Develop and implement projects that build the resilience of the health care system, including early-warning systems, and building on the climate-smart hospitals' Programme.	General public, medical personnel	TBD
6: Clean water and sanitation 11: Sustainable cities and communities 12: Responsible consumption and production 14: Life below water 15: Life on land	Conduct assessment of the potential to transition to a green economy with a view to creating new sustainable livelihoods/employment Update the GSDS and include Blue economic growth strategy/develop a Blue Economy Master Plan.	General public	90,000.00
7: Affordable and clean energy	Develop an assessment and strategy to promote and access financing to implement renewable energy, energy efficiency and sustainable water use technologies in the micro, small and medium enterprises (MSME) sectors to reduce costs and carbon footprints.	General public	72,000.00
17: Partnerships for the goals	Develop a resource mobilisation strategy, which includes leveraging existing public finance to access additional funding from donors to support the actions set out in the Economic Recovery Strategy (consider the use of green procurement in project/funding proposals)	GoB, general population, vulnerable groups	72,000.00
	Develop/update community emergency response strategies and plans and build capacity, and delegate risk mitigation responsibilities to the different localities	GoB, general population	108,000.00

Climate change response

National frameworks

Climate change is expected to have negative impacts on Belize's vulnerable society, economy, and environment. To respond to the latter, the GoB has accelerated the transformation of the country's economy along a low-emission, climate-resilient pathway. Belize's efforts to date are illustrated in the National Communications to the United Nations Framework Convention on Climate Change (UNFCCC) and exemplified in the national planning processes resulting in Horizon 2010-2030, the National Climate Resilience Investment Plan 2013 (NCRIP), the Growth and Sustainable Development Strategy 2016-2019 (GSDS). Besides, substantial climate frameworks are being updated and are expected to be finalised by late 2020 - 2021, reflecting a push towards accelerating Belize's transition to a low-carbon and resilient development. These are the second Nationally Determined Contribution (NDC) to the Paris Agreement, the 2050 Low-emission long term development strategy, the National Climate Change Policy Strategy and Masterplan 2021-2025 (updating the NCCPSAP), and the Fourth National Communication to the UNFCCC. Most of the intended 2020 updates have been pushed back to 2021 due to delays related to the COVID-19 pandemic.

Table 11. National policy, legal and strategic frameworks related to climate change

1994:	UNFCCC ratification
2002:	First National Communication
2010:	Horizon 2010-2030
2012:	Second National Communication
2013:	National Climate Resilience Investment Plan
2014:	National Climate Change Policy, Strategy and Action Plan (NCCPSAP) 2015-2020
2015:	Intended Nationally Determined Contribution
2016:	Third National Communication
2016:	Growth and Sustainable Development Strategy 2016-2019
2016:	First Nationally Determined Contribution
2016:	Paris Agreement ratification
2020:	Belize's First Biennial Update Report (BUR)
2020:	Second Nationally Determined Contribution
Upcoming:	
2021:	2050 Low-emission Long-Term Development Strategy (LEDS)
2021:	National Climate Change Policy Strategy and Masterplan 2021-2025
2021:	Fourth National Communication to the UNFCCC

To address some of the specific challenges, Belize has also developed several sectoral policy frameworks over the last decade. These include, for instance, the National Energy Policy Framework, and Sustainable Energy Action Plan 2014-2033, the National Integrated Water Resources Management Policy for Belize. Also, a national-level adaptation strategy has been developed concerning only one sector, the National Adaptation Strategy to Address Climate Change in the Agriculture Sector in Belize.

It should also be noted that the National Climate Change Office (NCCO) is developing a National Communication Strategy for Climate Change that will be relevant across all ministries and sectors, and present all public and private initiatives.

The national and sectoral frameworks relevant to climate change issues, including international reports and communications, main policy/strategic processes, and legal regulations existing in Belize, are available in Annex 3: Belize's climate change response: national frameworks

The National Climate Change Policy, Strategy and Action Plan 2015-2020

The National Climate Change Policy, Strategy and Action Plan 2015-2020 (NCCPSAP) provides policy guidance for developing an appropriate administrative and legislative framework for low-carbon development, in line with sectoral policies.

This includes a Climate Change Action Plan, which is a five-year programme covering adaptation and mitigation. The plan was developed based on the results of the First and Second National Communications to the UNFCCC, which identified a number of priority sectors for climate change mitigation and adaptation efforts, including: coastal zone, human settlement, fisheries and aquaculture, agriculture, forestry, tourism, water, energy, and health.

An updated NCCPSAP (five-year period) is under preparation. However, the updated NCCPSAP does not imply the development of climate modelling or include new climate data. Updates are mostly being made to the Action Plan, based on findings in the Technology Needs Assessments and other policies. The findings of the Fourth National Communication are also being integrated into the updated NCCPSAP.

The updated document will be the National Climate Change Policy Strategy and Masterplan 2021-2025, and is expected in 2021.⁶⁰

NDC targets

Belize's Nationally Determined Contribution (NDC) (2016) to the Paris Agreement was developed through a participatory process and adopted at the inter-ministerial level.

Belize's main NDC goals include:

- Strategically transition to low carbon development
- Strengthening resilience to the effects of climate change.

The "intended" contribution or iNDC was submitted in October 2015, and was based on national frameworks, policies, and projects. The First NDC was submitted on April 20th, 2016, and, in addition to references to national frameworks, policies, projects, it included emission reduction commitments done on the energy and forestry sectors.

The GoB used existing frameworks, policies, projects, and activities that provide mitigation and sustainable development co-benefits to elaborate its NDC, including the NCCPSAP 2015-2020, developed a few years before. The reasons for that are manifold. First of all, in the UNFCCC context, SIDS enjoy more flexibility in communicating strategies, plans or actions given the special national circumstances. Secondly, since Belize makes minor GHG contributions to global emissions, the GoB believed that existing mitigation policies would be ambitious enough for the first NDC. Furthermore, by using existing policies as a reference, the full implementation of the frameworks/project/activities is linked to the implementation of the NDC. Showing linkages can help in securing funding for

⁶⁰ Personal communication with Colin Mattis from NCCO on 2 November 2020

implementation.⁶¹

NDC prioritises measures for both mitigation and adaptation, with the understanding that the GoB has a particular interest in adaptation given the low share of GHG of the country and the high vulnerability of its society, economy, and environment:

- Sectors targeted for mitigation include forestry, transport, energy and waste.
- Sectors targeted for adaptation include coastal and marine, agriculture, water, tourism, fisheries, health, and forestry.

The table below presents the national targets on mitigation and adaptation, as laid out in Belize’s NDC.

Table 12. Summary of NDC targets (Source: Belize NDC, 2016).

Summary of NDC targets		Estimated resources required USD
Conditional	<p>Adaptation</p> <ul style="list-style-type: none"> • Coastal and Marine Resources: Increase and strengthen the capacity of the Coastal Zone Management Authority and Institute and municipal authorities to ensure developments within the coastal and urban areas of Belize include an adaptation strategy; implement mangrove restoration or sea and river defence structure to prevent coastal and riverine erosion and ecosystem disruption; manage and regulate further development of the coastline, especially in vulnerable areas such as the Belize and Corozal Districts; inclusion of adaptation strategies in management and development planning in all coastal and marine sectors; review and strengthen planning legislation and building codes, especially as it relates to coastal development; revise and streamline the current legislation and policies that relate to the management and regulation of development in the coastal zone to eliminate overlaps and close existing gaps. • Agriculture: Improve both crop and livestock husbandry practices, increase access to drought-tolerant crops and livestock breeds; adopt better soil and water management practices; reduce post-harvest losses and provide early warning/meteorological forecasts and related information to be competitive in the region. • Water Resources: Design and implement an Integrated Water Resources Management (IWRM) programme in watersheds; enhance protection of water catchment (including groundwater resources); develop water conservancy management systems; conduct water resource assessment (especially groundwater); develop flood controls and drought monitoring; improve trans-boundary cooperation regarding water resources; strengthen the human resource capacity in the water sector; strengthen the compliance monitoring capacity of staff; undertake water policy reform. • Tourism: Identify and assess coastal tourism areas in Belize that are vulnerable to climate change and provide support to coastal planners and policymakers in selecting appropriate policies and adaptation strategies that meet climate adaptation, developmental and environmental goals. Mainstream climate change in the Tourism Master Plan for Belize, to support adaptation measures, especially on the coastline, but also to further promote environmental and responsible tourism best practices. • Fisheries and Aquaculture: Adopt the new Fisheries Resources Bill and subsidiary regulations; revise and adopt mangrove regulations and Environmental Impact Assessment (EIA) regulations; support mangrove and fisheries conservation and management plans to protect wetlands 	TBD

⁶¹ NCCO (2018). BELIZE'S NDC: Exploring Linkages With Key National Strategies. Presented by: Colin Mattis Deputy Chief Climate Change Officer National Climate Change Office, October 9th, 2018.

	<p>and sea grass beds; monitor compliance with EIA regulation requirements for coastal mangroves alterations.</p> <ul style="list-style-type: none"> • Human Health: Undertake a climate change vulnerability and capacity assessment for the health sector; improve the capture, management and monitoring of diseases and vectors affected; increase human resource capacity and improve efficiency; develop education awareness program to educate the population on adaptation measures; improve disease control and prevention; promote investment in health infrastructure. • Forestry: Maintain and restore healthy forest ecosystems by sustainable forest management, increasing afforestation, and reforestation to increase the resilience of human communities. 	
	<p>Mitigation</p> <ul style="list-style-type: none"> • Reserves and sustainable forest management: reducing emissions from land use and forestry from the 2015 estimate of 3, 300Gg CO2 down to zero emissions. • Reducing emissions from fuelwood consumption by 27% - 66% by using efficient cookstoves. • Protecting and restoring mangrove forests: restoration and protection have the potential to turn Belize’s mangrove system into a net carbon sink. • Development of a domestic transportation policy and implement the National Transportation Master Plan. • Develop a Sustainable Energy Strategy and Action Plan aiming at 85% renewable energy by 2030 by implementing hydropower, solar, wind, and biomass, and reduction of transmission and distribution losses. • Develop and implement the Solid Waste Management strategy and plan. 	TBD
Unconditional	<p>Adaptation & Mitigation</p> <p>The unconditional contribution will be given by enabling existing policies, laws, and projects, the provision of staff, and the integration of development and climate change activities.</p>	TBD
		TBD

Some of the mitigation and adaptation activities listed in the NDC are conditional upon external financial support. The current version of the NDC does not include specifications on the resources required to implement the actions, or provisions on the role of the private sector for the implementation. However, the NDC includes reference to the financial needs of implementing the components of the NCCPSAP 2015-2020, which amount to about **USD 23.6 million** as a minimum (see

Table 13).

Table 13. Components and estimated cost of Belize National Climate Change Action Plan (Source: Belize NDC).

Belize National Climate Change Action Plan – components	Estimated resources required USD
Enhance Food Security and Sustainability:	15,960,000
Integrating Climate Change in Revised National Plan	5,158,000
Sustainable Management of the Fisheries Sector	500,000 annually
Implementation of the Belize Integrated Coastal Zone Management Plan	500,000 annually
Improved Integrated Water Resource Management	1,500,000
Integrate Climate Change in the Tourism Sector	TBD
Building Resilience of Human Settlements	TBD
Enhance Resiliency of Transportation Sector	TBD
Strengthened and Improved Human Health	TBD
Improved Waste Management	TBD

An updated, enhanced NDC second iteration of the NDC, including its financial strategy, is under preparation for submission to the UNFCCC in 2021. Critical needs include:⁶²

⁶² NCCO (2018). BELIZE'S NDC: Exploring Linkages With Key National Strategies. Presented by: Colin Mattis Deputy Chief Climate Change Officer National Climate Change Office, 9th October 2018.

- Financial support;
- Technical support;
- NDC implementation plan, which helps in providing high-level political support and a clear governance structure, and covers resource needs, activities to be implemented, costs, etc.

It should be noted that critical infrastructure, such as energy and transport, and disaster risk reduction, are not explicitly listed in the NDC or the NCCPSAP policy documents as stand-alone sectors for adaptation; they are considered cross-cutting issues for Belize. In particular, the NCCPSAP addresses them in the context of land use and human settlements and the transport sector, while the NDC mentions critical infrastructure as part of longer-term adaptation goals.

The table below highlights the priority sectors addressed in the NDC and in the NCCPSAP.

Table 14. Priority sectors in Belize as listed in the 2016 NDC and 2014 NCCPSAP (source: prepared by the authors).

	Sectors	NDC	NCCPSAP
Mitigation	Agriculture		X
	Forestry / Land use and Forestry	X	X
	Energy	X	X
	Transport	X	X
	Solid waste management	X	X
Adaptation	Coastal and marine resources	X	X
	Fisheries and Aquaculture	X	X
	Agriculture	X	X
	Water resources	X	X
	Tourism	X	X
	Human health	X	X
	Forestry / Forestry and biodiversity	X	X
	Energy		X
	Transport		X

Key national entities active on climate change issues in Belize

Leading organisations on climate change

The **Ministry of Sustainable Development, Climate Change and Disaster Risk Management (MSDCCDRM)** serves as the lead government organisation responsible for coordinating and implementing Belize's climate change adaptation and mitigation policies. As a GoB Ministry, financial support is through an annual budget and supplemented with project funding from development partners.

It is the operational focal point of Belize to the Global Environment Facility (GEF). Government initiatives on climate change are dealt with by **the National Climate Change Office (NCCO) established in 2012 within the MSDCCDRM**. Since then, the NCCO has replaced the National Meteorological Service as the top government body responsible for providing technical advice to the government relating to climate change, as well as negotiating on the country's behalf at international fora. The NCCPSAP recommended the establishment of the NCCO as a government institution, which has been implemented in 2017 with the permanent establishment in the public service of four posts within the office: Chief Climate Change Officer, Deputy Chief Climate Change Officer, Climate Change Officer and Project Assistant. However, the NCCO operates as a Unit in the public service and not as a Department, as indicated in the NCCPSAP. This recommendation reflected the need to create a permanent institution with permanent staff and with sufficient human and financial resources to ensure the effective implementation of the country's

climate change adaptation and mitigation agenda as articulated in the NCCPSAP. As part of the second NDC’s development process and the establishment of a corresponding financial strategy, a climate finance advisor has been appointed for one year within NCCO. This advisor, leading the financial strategy’s development, will be a pivotal climate finance contact point, providing support across ministries and institutions on the topic, ensuring NDC activities find the resources they need.

Another entity with a climate-related mandate within the MSDCCDRM is the **Belize Forest Department**. It is responsible for fostering Belize’s economic and human development by effectively enforcing relevant policies and regulations for the sustainable management of Belize’s forests through strategic alliances and efficient coordination with relevant stakeholders.

The Cabinet has appointed the **Ministry of Finance Economic Development and Investment (MFEDI)** as the central organisation responsible for coordinating access to international climate finance, with the role of GCF Nationally Designated Authority (NDA) in Belize and political focal point for the GEF. In particular, the Policy and Planning Unit (PPU) within the Ministry has the following functions: prepare and facilitate national development plans; appraise, monitor, evaluate and report on the Public Sector Investment Programme (PSIP) underpinning the resource planning and mobilisation process in Belize; coordinate multilateral and bilateral assistance; and act as the focal point for international development partners. It is also responsible for coordinating access to reimbursable financing associated with climate change activities; it is also the Adaptation Fund’s focal point. Its primary role is enforcing the fiscal policy as directed by the Cabinet by ensuring that revenue collections through the main revenue departments are enough to cover the recurrent expenditure and the Capital III expenditure (financed from international sources). It is also responsible for preparing the annual budget, starting with a “Budget Call” and ending with the “Appropriation Act” that authorises the GoB to spend proceeds from the Consolidated Revenue Fund.

Aside from MSDCCDRM and MFEDI, several Ministries and Departments whose functions and ministerial responsibilities are critical for the effective development and implementation of climate change action are also established in Belize. These and other public or private sector entities, Civil Society Organisations (CSO), Non-Governmental Organisations (NGOs), and academia with climate change-relevant mandates, are presented below.

Table 15. Overview of key national entities with climate change relevant mandate

Organisation	Climate change-related mandate
Public sector	
Ministry of Finance Economic Development and Investment (MFEDI)	It is responsible for advising on national and sectoral policies and plans and preparing and facilitating national development plans amongst other functions, road safety and administrating the petroleum industry through the Geology and Petroleum Department. It is responsible for climate finance coordination as the GCF NDA, and GEF political focal point. It also advises on, coordinates, and implements the government’s economic and fiscal policies and programmes, including the generation and allocation of financial resources to provide appropriate public services and contribute to the overall development of the country. It also supports the promotion of Public-Private Partnerships (PPPs). Besides, the Ministry is the Adaptation Fund’s Designated Authority.
Policy and Planning Unit (PPU) at MFEDI	It has the following functions: <ul style="list-style-type: none"> • Prepare and facilitate national development plans; • Appraise, monitor, evaluate and report on the Public Sector Investment Programme (PSIP);

	<ul style="list-style-type: none"> Coordinate multilateral and bilateral assistance; and, focal point of international development partners.
Belize Trade and Investment Development Service (BELTRAIDE) under MFEDI	It operates under the MFEDI as a national economic development agency. It focuses on Micro, Small and Medium Enterprise (MSME) development, innovation, entrepreneurship, and delivery of industry-specific training.
Ministry of Sustainable Development, Climate Change, and Disaster Risk Management (MSDCCDRM)	<p>It is charged with leading national coordination of climate-related actions, including analysis, reporting, planning, and identifying and seeking climate finance as the GEF operational focal point and REDD+ focal point. It is also the leading organisation charged with international negotiations on climate and the environment.</p> <p>This ministry is also responsible for disaster risk reduction and management policies and plans.</p>
National Climate Change Office (NCCO) at MSDCCDRM	It is responsible for coordinating of Belize’s national, regional and international response to climate change and mainstream climate change into the plans and policies of all sectors. It is responsible for the execution of REDD+ projects. It is the UNFCCC focal point and the Climate Technology Centre & Network (CTCN) National Designated Entity (NDE). It acts as a Secretariat to the BNCCC and coordinates climate change communications and reports.
Department of Environment (DoE) at MSDCCDRM	It promotes Belize’s sustainable development. Its primary responsibilities are to recommend national policies that promote improvements in environmental quality, recommend priorities among environmental programs and help achieve international cooperation in dealing with environmental problems. It conducts Environmental Impact Assessments (EIAs).
Forest Department at MSDCCDRM	It manages and administers the forest estate with the consideration of critical sectors such as tourism and agriculture to ensure their sustainable development. It manages 52 nationally protected areas.
Sustainable Development Unit (SDU) at MSDCCDRM	It is mandated to mainstream and disseminate the sustainable development goals (SDGs) and conduct capacity building of the SDGs. Coordinates the drafting and presentation of SDGs report at the local and international level.
National Emergency Management Organization (NEMO) at MSDCCDRM	NEMO was established to preserve life and property in Belize in an emergency, threatened or real, and to mitigate the impact on the country and its people; it provides both emergency prevention and response.
Ministry of Blue Economy and Civil Aviation (MBECA)	The Ministry brings together two portfolios. It seeks to take civil aviation to higher standards while boosting Belize’s economy through the responsible use of its oceanic heritage . The Fisheries Department and the Coastal Zone Management Authority and Institute (CZMAI) sit under the Blue economy portfolio, while aerodromes, Belize Airport Authority, and Civil Aviation pertain to the civil aviation portfolio.
Fisheries Department at MBECA	Fisheries management started in January 1965 through the Fisheries Unit Laboratory, which evolved into a GoB Department in 1987. The Fisheries Department is headed by the Fisheries Administrator and assisted by several technical staff to carry out its functions. The Department’s responsibilities are programmed into four units with direct responsibilities for the conservation and sustainable use of fishery resources, the registration and licenses, fisheries research, education, liaison with fishing cooperatives, management of nine marine reserves, fisheries law enforcement, export, and research permits. It manages Belize’s aquatic and fisheries resources to optimise present and future benefits arising from efficient and sustainable management.
Belize Coastal Zone Management Authority and Institute (CZMAI) at MBECA	The Institute’s main functions are to conduct marine research, maintain a data centre, provide information as required by the Authority, organize training courses, support other agencies involved in coastal zone management, maintain coastal monitoring programs, and assist with preparing a National Coastal Zone Management Plan. It supports the allocation, sustainable use, and planned development of Belize’s coastal resources through increased knowledge and the building of alliances. More specifically, it advises the Minister on all matters related to the coastal zone. This includes policy formulation, assisting in programme and project development, fostering regional and international collaboration, commissioning research and monitoring, assisting in the preparation of development guidelines, and reviewing the CZM Plan, and maintaining the national coral reef and coastal water quality monitoring programmes.

Ministry of Agriculture, Food Security, & Enterprise (MAFSE)	Its mission is to maintain agriculture as an economic pillar for Belize by ensuring food security for the country, generating income and foreign exchange, creating employment, and preserving natural resources. It is responsible for setting and implementing agricultural policies and strategies. It also offers extension services to the non-traditional agricultural sector and small/medium size commercial farmers.
Belize Bureau of Standards (BBS) under MAFSE	It is mandated to facilitate the development of national standards by promoting the use and harmonisation of standards for sustainable production in the trade of goods and services. It is the national centre for promoting efficiency and competitive production in goods and services, with Quality Infrastructure serving as the basis for achieving this objective. BBS is therefore responsible to protect, secure and safeguard the welfare of the country.
Ministry of Natural Resources, Petroleum & Mining (MNRPM)	It is responsible for the coordination, protection, and sustainable management of Belize's vital natural resources, including water land and minerals. In addition to its natural resources (geology, petroleum, natural gas) management responsibilities, the ministry also provides technical assistance to stakeholders. Besides, solid waste also falls under their remit.
Lands Information Centre (LIC) under MNRPM	The spatial data repository is responsible for the generation of resource maps, statistics and analysis, to support land management activities.
Hydrology Unit at MNRPM	It is responsible for the collection of data on water resources and advises government on watershed management, environmental concerns, and disasters. It pursues the following goals: to assess the nation's natural water resources, monitor changes in these resources, investigate uses of these water resources, and to publish hydrological information.
Lands and Surveys Department at MNRPM	It is responsible for all aspects of land tenure, its main functions include: <ul style="list-style-type: none"> • management and allocation of national lands; • registration of land tenure; • authentication of plans for all legal surveys; • sub-division of lands; valuation of lands; • land- use planning; and • land information management.
Belize Solid Waste Management Authority (BSWaMA) at MNRPM	It is responsible for the safe and environmentally sound management of solid waste in Belize. By applying an integrated sustainable solid waste management approach, BSWaMA aims to improve and contribute to the protection of human health/safety and the environment, the conservation of natural resources, and the promotion of the occupational health/safety of workers in the waste sector, both formal and informal.
Ministry of Public Utilities and Logistics (MPUL)	One of its responsibilities is the oversight of the transport sector in Belize and manages and establishes policies and guidelines for road users. In addition, energy and renewable energy also pertain to this ministry as part of the public utilities and energy portfolio.
Energy Unit at MPUL	It is responsible for planning, promoting and effectively managing the production, delivery, and use of energy through energy efficiency, renewable energy, and cleaner production interventions.
Ministry of Education, Culture, Science & Technology (MECST)	It aims to strategically integrate science and technology into national development planning and decision-making to catalyse sustainable development. It is also responsible for the culture portfolio, which includes the Archaeology Department, Arts, National Archives, museums, and the National Institute of Culture and History.
Ministry of Health and Wellness (MHW)	It is responsible for delivering an effective network of quality services. The MHW developed a Sector Strategic Plan 2014 – 2024, which seeks to strengthen the Belizean Health Care system to meet the population's needs and contribute to the sustainable development of the country. This includes considerations on the impacts of climate change on human health.
Ministry of Tourism & Diaspora Relations (MTDR)	It provides leadership, strategic direction, good governance and oversight on all matters relating to the development of tourism. Its activities are guided by the National Sustainable Tourism Master Plan endorsed by the Cabinet in October 2012. This provides strategic guidelines for tourism development in Belize up to 2030, including considerations on climate change.
Ministry of Human Development, Families & Indigenous Peoples' Affairs (MHDFIPA)	It is the lead entity focused on the empowerment of people, working with relevant partners to facilitate policy development and implementing programmes promoting social justice and

	equity. It includes four main departments: Community Rehabilitation, Human Services, Policy and Planning, and Women and Family support.
Ministry of Infrastructure Development & Housing (MIDH)	The ministry is responsible for housing and urban development, including building codes and assisting the public with housing. It is responsible for controlling, using, managing, surveying, constructing, and repairing all public roads, bridges, and ferries and prevents obstruction thereof in addition to responsibilities under the Public Roads Act. The MIDH also has the discretionary power to prepare and enforce planning schemes (land use and zoning plans).
Ministry of Rural Transformation, Community Development, Labour & Local Government (MRTCDLLG)	It is responsible for local government legislation and regulation on all matters affecting local government, including the administration of Acts relating to City, Towns, and Village Councils. It is also responsible for the mayoral and alcalde systems. The ministry focuses on the operational component of local government and does not address the growth of settlements, what categorises settlements (urban, rural, population size, population served and functionality), or to adopt the submitted development plans. The ministry has the power to approve but not adopt any municipal development plans. As cities consume 78% of the world's energy and produce 60% of GHG (UN Habitat), this ministry along with MIDH will be critically important in Belize's climate change mitigation and adaptation action.
Government Press Office	It provides the latest official information from the GoB.
National Meteorological Service	It is the leading governmental authority on weather and climate. It provides meteorological and climate-based products and services to the Belizean public through systematic and accurate monitoring and data collection, data analyses, and timely dissemination of user-friendly information on regular and emergency events and processes.
Economic Development Council (EDC)	The EDC is a public-private advisory body whose overall objectives are: (a) to strengthen the collaboration between public and private sectors through meaningful dialogue that leads to positive outcomes facilitating economic development, and (b) to advise on and help develop reforms that improves doing business, enhance the public sector processes, and enhances confidence of doing business in Belize.
Public-Private Desk (PPD)	It was established to provide technical support to the EDC in executing its mandate and is situated at the Office of the Prime Minister. Its main functions include: <ul style="list-style-type: none"> • advocacy, to ensure inclusion of all stakeholders on issues related to public-private partnerships; • policy development, advice, and analysis of new and existing public policies; • technical support; • project management of EDC's Action Plan and • reforms tracking.
Belize Agricultural Health Authority (BAHA)	Established to modernize the Agricultural Health Services in Belize, it provides professional services in Food Safety, Quarantine, Plant and Animal Health in order to agricultural health and facilitates trade and commerce.
Central Building Authority (CBA)	It is established by the Belize Building Act 2003; CBA performs the following functions: plan review and no-objections to building permit applications; site inspections; issue permits for moveable buildings; review and provide no-objection to reports on the safety of public buildings; inspect buildings, and if found to be dangerous, recommend for demolition; develop new, and enforce existing building regulations; provide guidance and information; provide technical support for the development of policy with respect to buildings; and promote public awareness of building-related issues.
Public Utilities Commission	It regulates the electricity, water, and telecommunications sectors in Belize. It is responsible for formulating and implementing policies across all those sectors.
Statistical Institute of Belize (SIB)	It approves, monitors and coordinates the processes of data collection, compilation and analysis by any public body. Its primary functions include collecting, analysing and disseminating information about the economic, demographic, gender, social and environmental situation in Belize.
Sugar Industry Research and Development Institute (SIRDI)	It conducts research, develops and adopts technological innovations and production options for the benefit of the industry. It establishes norms and standards and provides technical services to the Sugarcane Production Committee (SCPC) for determining sugarcane quality. SIRDI and the SCPC both fall under the umbrella of the Sugar Industry Control Board (SICB).

Protected Areas Conservation Trust (PACT)	It oversees nature conservation and the management of protected areas and is the primary national financing mechanism for the NPAS. It has been granted a fiduciary role for the World Bank, the Meso-American Reef Fund (MAR Fund), the Global Environment Facility (GEF) and the Belize Nature Conservation Fund (BNCF), German Development Bank (KfW), and the International Union for Conservation of Nature (IUCN). It is accredited as a national implementing entity (NIE) for the Adaptation Fund as well as direct access entity (DAE) for the GCF in Belize.
Social Investment Fund (SIF)	It approves projects and programmes and provides, either wholly or partially, financial and technical assistance to community groups with development goals, and local government organizations, for the execution of such projects or programmes which will serve to provide basic services to the most severely affected groups in the country. It is a candidate direct access entity (DAE) for the GCF in Belize.
Belize City Council	It aims to ensure the residents of Belize City live in a modern, clean and secure environment. It provides a number of services and includes the following departments: Local Economic Development, Market Department, Works Department, Finance Department, Revenue Department, PR Department, HR Department, Valuation Department, MIS Department, Public Health Department, and a Tourism Unit.
Belmopan City Council	It aims to provide a safe, clean, green, quiet, healthy, and modern city developed based on coordinated urban planning under a master plan that provides equal opportunity for all residents of Belmopan to realize their human potential. In 2016, the city of Belmopan signed a memorandum of understanding with UN-Habitat to address climate change through urban planning.
Central Bank of Belize	It aims to foster monetary stability that promotes the growth of the economy of Belize. Its goals and objectives are intended to encourage financial stability and economic growth in Belize.
National Bank of Belize	It provides a range of retail and corporate banking services, including mortgage products ranging from home construction, home purchase, and home improvements to mortgage refinancing. Other loan products include vehicle, consumer and small business loans. The bank also offers, deposit accounts including savings, checking and term deposits.
Private sector	
Belize Association of Planners	It is committed to promote justice and sustainability in the natural and built environment. It aims to address planning and development issues in Belize by working in partnership with the public and private sector and civil society organizations.
Belize Chamber of Commerce and Industry (BCCI)	It considers among its primary objectives the social and economic development of Belize through the development of all sectors of the economy. It promotes and protects, both nationally and internationally, commerce, and all sectors of industry, including agri-business, tourism and manufacturing, the professions and the trades.
Belize Co-Generation Energy Limited (BELCOGEN)	It is a cogeneration project, a 100% subsidiary of BSI. It is an independent Power Producer generating some 31.5 MW of energy from bagasse (the dry pulpy residue left after the extraction of juice from sugar cane).
Santander Sugar Group	The Santander Group consists of three branches – Santander Farms, Santander Sugar and SS Energy. Santander Farms is the company branch that is responsible for the agricultural processes involved in sugar production; Santander Sugar is responsible for the production and packaging of the final product (sugar and molasses) for sale and distribution and SS Energy is scheduled to supply power to the local market through the use of bagasse. ⁶³
Belize Electricity Company Limited (BECOL)	It operates three hydro-electric facilities, namely the Mollejon Hydroelectric Power Plant, the Chalilo Dam, and the Vaca Hydroelectric Power Plant.
Belize Electricity Limited (BEL)	It is the primary distributor of electricity in Belize. BEL's national electricity grid connects all major municipalities (load centres), except for Caye Caulker, with approximately 1,875 miles of transmission and primary distribution lines. The grid is primarily supplied by local Independent Power Producers (IPP) utilizing hydroelectricity, biomass, petroleum, and solar energy sources; and is secured and stabilized by the interconnection with Mexico. BEL also operates a gas turbine plant as a standby plant for energy security and reliability.

⁶³ Santander Sugar Group. (2015). Santander Group Promises Growth With New Sugar Mill In Western Belize. <http://www.santandersugar.com/news/tag/sugar+industry>

Belize Enterprise for Sustainable Technology (BEST)	It provides micro-credit, promotes enterprise development, provides efficient business management training, sustainable natural resource management, and promotes the participation of women in the social and economic development of Belize.
Belize Hotel Association	It aims to support the sustainable growth of member hotels in the tourism industry in Belize through global marketing initiatives, private and public sector partnerships, and training opportunities aimed at increased standards and professional service.
Belize Sugar Cane Farmers Association	It represents the interests of cane farmers of Northern Belize and negotiates on their behalf to improve the quality, quantity and efficiency of sugar cane production, processing, and marketing. It is composed of two divisions: Corozal District and Orange Walk District. Each one includes nine branches, and the organization presently has more than 5000 cane farmers as members.
Belize Sugar Industries Limited (BSI)	It is a producer of sugar in the northern town of Orange Walk since 1967. Adjacent to the sugar mill, BSI produces renewable energy in its stand-alone power plant (BELCOGEN). The green energy powers the sugar-making operations and exports home-grown energy to the nation's public power grid, providing 15% of the nation's needs.
Belize Tourism Board	Mandated to govern, enhance and promote the tourism sector, it develops strategic initiatives and implement tourism policies to address the changing needs of the tourism industry. Its main goal is to foster sustainable socio-economic growth in the tourism sector in Belize.
Belize Tourism Industry & Association	It is the leading national private sector tourism association, and it focuses on identifying the needs and priorities of its members. Its activities include lobbying and advocating on key tourism issues; promoting sustainable development; disseminating tourism-related information; offering/facilitating training for members; setting standards in the industry; networking; assisting/facilitating the marketing needs of members; and advising the ministry of tourism on marketing and product development matters.
Belize Water Services Limited (BWSL)	It is the water and sewerage utility for the country of Belize. Its objective is to improve the lives of customers by delivering quality and cost-effective water and wastewater services in an environmentally responsible manner.
Bowen & Bowen	It engages in the businesses of brewing, bottling, water, automotive retail, aquaculture, lodging, restaurants and coffee. It offers beers, soft drinks, drinking water, auto parts, and shrimps. Bowen & Bowen also operates as a shipping agency.
Citrus Growers Association (CGA)	It promotes, fosters and encourages the growing of Citrus by the farmers. It represents the interests of citrus growers in Belize. It encompasses a research Unit, a semi-autonomous body that conducts research and extension and was renamed as the Citrus Research and Education Institute (CREI).
Development Finance Corporation (DFC)	It provides small and micro sector enterprises (small business) loans, residential mortgage home loans, student loans, productive sector loans (agriculture, manufacturing, Tourism, Commercial fishing fisheries, services to foster the development of these sectors. etc.) and in 2016, renewable energy and energy efficiency loans for businesses and residences. It is a candidate direct access entity (DAE) for the GCF in Belize.
Progressive Sugar Cane Producers Association	It aims to promote the production of high-quality sugarcane to increase yields with a view of ensuring optimum returns in investment by implementing best agronomic practices, through environmental, systematic and sustainable methods.
CSO/NGOs and academia	
Association of Protected Areas Management Organizations (APAMO)	It is the leading network of non-governmental conservation organisations that seeks to influence and encourage the Belizean society to safeguard the integrity and diversity of Belize's protected areas system and to ensure that any use of Belize's natural resources is sustainable.
Belize Audubon Society	It is an environmental organization dedicated to the sustainable management of Belize's natural resources through leadership and strategic partnerships with stakeholders for the benefit of people and the environment.
Belize Enterprise for Sustainable Technology (BEST)	It aims to strengthen the ability of community-based enterprises to sustain their own development by providing credit, promoting enterprise development and providing efficient business management training, supporting sustainable natural resource management, and promoting the participation of women in the social and economic development of Belize.

Belize Livestock Producers Association	It aims to oversee the livestock industry and relevant stakeholders at national and governmental levels, while aiming to provide its members with access to new markets and disseminate new technologies as well as relevant information through a system of extension officer- led training, education initiatives, and projects.
Corozal Sustainable Future Initiative	It is dedicated to the protection and conservation of ecosystems of north-eastern Belize through effective vigilance, sustainable forest management, scientific research, environmental education, community engagement, strategic alliances and co-management agreements. Ultimately, it aims to create a new sustainable economic model for the benefit of the people of Belize.
Fragments of Hope	It is a community-based organization focusing on the restoration of coral reef habitats and the advocacy for the sustainable management of associated habitats.
Galen University	Established as Belize’s first independent university, it offers degree programs in Accounting, Anthropology, Business Administration, Computer Science, Economics, Environment Science, Entrepreneurship, Criminal Justice, Social Science, and Marketing.
Sarstoon Temash Institute for Indigenous Management (SATIM)	It works with Maya communities and promotes innovations in sustainable development combining traditional and modern practices. This Indigenous-led model aims at increasing food security and climate change resilience, reducing deforestation, and ultimately achieving community-based sustainable development.
Sarstoon Temash Institute for Indigenous Mgt. (SATIM)	Its strategic goals include : <ul style="list-style-type: none"> • advancing the rights of Indigenous Peoples with emphasis on Maya Customary Land Rights and Garifuna Land Rights; • supporting culturally sensitive green economic development of indigenous communities in the Sarstoon Temash Region; and • preserving the ecological integrity and biodiversity of the Sarstoon Temash Region.
Southern Environmental Association (SEA) Belize	It is an NGO created in 2008 when two longstanding conservation organizations, Friends of Nature (FoN) and the Toledo Association for Sustainable Tourism and Empowerment (TASTE), merged to ensure improved community involvement in the conservation and co-management of the natural resources in Southern Belize.
Toledo Institute for Development and Environment (TIDE)	It focuses on park management planning, education and community development. It has a subsidiary, TIDE Tours, established to promote responsible tourism in the Toledo District, offer employment opportunities, and generate revenue to support our Education and Outreach program.
University of Belize - Environmental Research Institute (ERI)	It is a national, autonomous institution committed to excellence in higher education, research, and service for national development. The University is committed to meet national needs, encourage sustainable development, increase self-sustainability, prepare Belize to meet global challenges, and encourage an international student population. The Environmental Research Institute (ERI) of the University of Belize contributes to climate change projects.

National coordinating mechanism on climate change

The **Belize National Climate Change Committee (BNCCC)** was established in 2009 with the mandate to advise the Government on a) its responsibilities and commitments under the UNFCCC, and on b) coordination and implementation of the NCCPSAP to ensure continued sustainable development in Belize.

The BNCCC is a multi-stakeholder committee made up of members at the CEO-level from the GoB’s ministries, including representatives of the private sector, civil society, and academia. The Ministry of Sustainable Development, Climate Change, and Disaster Risk Management (MSDCCDRM) chairs the BNCCC, and the MFEDI acts as vice-chair; the NCCO acts as the BNCCC Secretariat. The BNCCC reports to the Cabinet through the MSDCCDRM. . .

As of November 2020, the BNCCC has not been fully operational⁶⁴ and requires streamlining its mandate and procedures. The BNCCC is in the process of establishing its two committees:

1. **Climate Finance committee:** the ToR for this committee have been finalised.
2. **Technical committee:** the ToR for this committee are being developed.

Membership of the sub-committees would be comprised of appropriate State and non-State actors as defined by the NCCO. The committee may also invite ad-hoc observers and experts to be part of the discussion and decision-making process as needed. The Climate Finance sub-committee will be chaired by the MFEDI and co-chaired by the MSDCCDRM . Additional members will come from the Ministry of Agriculture, Ministry of Public Utilities and Logistics (MPUL) for its energy mandate, the Ministry of Blue Economy and Civil Aviation (MBECA), the Protected Areas Conservation Trust and the NCCO, acting as the Secretariat.⁶⁵ The Technical sub-committee would be chaired by the Ministry of Public Service, Energy and Public Utilities.

The Climate Finance committee's overall mandate is the following⁶⁵:

- Advise on the mobilisation of finance to implement programmes containing measures to facilitate climate change adaptation and mitigation.
- Provide guidance for the coherent and coordinated acquisition, management, and use of climate finance.
- Advise on enhancing institutional linkages and relations between the Government of Belize and international and regional institutions that provide climate finance, including the Green Climate Fund, the Adaptation Fund, the World Bank, and others.
- Providing expert input, including through independent reviews and assessments, into the preparation of concept notes to be submitted to the GCF, the Adaptation Fund, and other financial mechanisms.
- Review and advise on the approval of concept notes and project proposals to be submitted to the GCF, the Adaptation Fund, and other financial mechanisms.
- Examine and review the policies, programmes, and activities of the National Climate Change Office and reports of all projects related to climate change, to ensure that proper fiduciary management is practiced.
- Participate in key meetings, workshops, consultations, trainings, and other related activities as required.
- Perform any other functions that the BNCCC may assign concerning climate finance.

When formally operational, the specific responsibilities and functions of the BNCCC would include inter-ministerial coordination and oversight of climate change policy in the country. In particular, inter alia: supervising the implementation and coordination of the NCCPSAP; provide guidance on the development of national positions on climate change issues; oversee the strategy to ensure that climate change is mainstreamed into national development plans and policies and is fully integrated within government's national budget; review and advise government on the capacity building, institutional and other resource requirements needed to fully implement the strategy and action plan; ensure that the climate change priorities is aligned with the GSDS; advise on and facilitate the revision and approval of project concepts and proposals for the implementation of National Adaptation Plans (NAPs) and Nationally Appropriate Mitigation Actions (NAMAs); Participate in and monitor resource mobilisation

⁶⁴ The BNCCC was expected to meet at least quarterly, but has been meeting on an ad hoc basis, depending on the needs for engagement with other line ministries or agencies on climate change. The BNCCC met in May and November of 2018 and have met in the first quarter of 2019 in March. The Mitigation sub-committee was the most active and has reviewed GEF project proposals, checking alignment against the NCCP, NCCPSAP, the NDC, and the GSDS. The Adaptation sub-committee was hindered by low attendance to its meetings.

⁶⁵ Communication of Ms. Khara Roches from MFEDI on 5th January 2021, sharing the Climate Finance Committee ToR

efforts, to support the implementation of the NCCPSAP; coordinate the preparation and presentation of national communications and other legally mandated documentation to the UNFCCC to ensure compliance with the Convention; facilitate Belize's effective participation in the Convention and its mechanisms and other related bi-lateral and multi-lateral programs and activities.

For what **concerns GCF-related activities, the Climate Finance and Technical sub-committees would support the NDA by:**

- **Reviewing/facilitating the approval of concepts notes and funding proposals** that are submitted by accredited entities to the Designated National Authority of the GCF, the Adaptation Fund, and other financial mechanisms, including monitoring and evaluating the effectiveness of the no-objection procedure. Currently, for the review of GCF project concepts and proposals, the NDA shares them to NCCO for general feedback before the documents are also sent to the relevant ministry(ies), depending on the project's scope, for their feedback.
- **Reviewing/advising on the nomination of Delivery Partners (DPs) and Direct Access Entities (DAEs)** to the GCF, including monitoring and evaluating the effectiveness of the nomination procedure.
- **Overseeing the general course of the Monitoring, Learning and Reporting Framework's (MRLF) operations** to support the NDA in performing its functions regarding the monitoring and evaluation of Belize's Country Programme for engagement with the GCF.

Regional engagement

At the regional level, Belize is involved in different programmes and projects aiming at enhancing the resilience to climate change.

Several **regional GCF Readiness projects**, that include Belize, are also being implemented and/or have been completed. They are all presented under section **Deployment of GCF Readiness and preparatory support funding**. Aside from regional Readiness support from the GCF, the **following additional projects promoting climate adaptation and resilience** are also on-going/have been completed. This list presents the main initiatives and is not comprehensive of all resilience-related initiatives in the region:

The UK Caribbean Infrastructure Programme, UK Aid, (2015-ongoing)

The UK government is investing £300 million in vital new infrastructures such as roads, bridges and ports to help drive economic growth and development across the Caribbean region. This paved the way for establishing the UK Caribbean Infrastructure Partnership Fund with the Caribbean Development Bank (CDB). The UK-CIF supports 8 ODA-eligible Commonwealth Countries and one ODA-eligible Overseas Territory, including Belize, in creating critical economic infrastructure that can set the foundations for growth and prosperity, poverty reduction, and improved resilience to climate change.⁶⁶

Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER), United Nations Development Programme (UNDP) (2019 – 2023)

The EnGenDER project seeks to integrate gender equality and human-rights based approaches into disaster risk reduction (DRR), climate change adaptation, and environmental management frameworks.

⁶⁶UK Aid. (no date). The UK Caribbean Infrastructure Programme. <https://www.caribank.org/sites/default/files/publication-resources/The%20UK%20Caribbean%20Infrastructure%20Programme%20Brochure.pdf>

It also aims to incorporate interventions and identify and address some of the gaps to ensure equal access to DRR and climate change and environment solutions for men, women, boys, and girls. The project, through its activities, will (i) build interest and political will for gender-responsive recovery, planning, and mitigation against disasters and climate change, with a focus on building knowledge and understanding of stakeholders of the relationship between gender and climate change, and (ii) support capacity building for strengthening national and regional systems coordination, action, and accountability for gender-responsive and human-rights based action for resilience. The activities will be implemented in Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines and Suriname.⁶⁷

Intra-African, Caribbean and Pacific (Intra-ACP) Global Climate Change Alliance+ (GCCA+) Programme in the Caribbean: Enhancing Climate Resilience in the CARIFORUM Countries, Pipeline, European Union (EU) (2019 – 2023)

The project's overall objective is to support the climate-compatible development of the CARIFORUM countries to combat the negative impacts of climate change while simultaneously exploring opportunities presented. This is a regional project that will be implemented in CARIFORUM member states: Antigua & Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts & Nevis, St. Lucia & the Grenadines, Suriname, and Trinidad & Tobago.⁶⁷

Climate-Smarting Marine Protected Areas and Coastal Management in the Mesoamerican Reef Region, German International Climate Initiative (IKI) (2018 – 2022)

The project aims to strengthen the adaptive capacities of coastal communities in the region. Together with the municipalities, it identifies options and measures for adapting to climate change, using science-based methods such as ecological risk analysis and the modelling of ecosystem services. Building on this, the project integrates adaptation strategies into coastal development and management plans for marine protected areas, and implements adaptation measures in other selected areas. The countries covered by this project are: Belize, Guatemala, Honduras, and Mexico.⁶⁸

Japan Caribbean Climate Change Partnership project (J-CCCP), United Nations Development Programme (UNDP), (2016 -2020)

The J-CCCP brought together policymakers, experts, and representatives of communities to promote policy innovation for climate technology incubation and diffusion. The initiative aimed at removing barriers to the implementation of climate-resilient technologies. As a result, concrete mitigation and adaptation actions were implemented on the ground, in line with countries' long-term strategies. Belize was one of the participating countries, along with: Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Suriname.⁶⁹

Caribbean Investment Facility (CIF). European Investment Bank (EIB). (2010 – on-going)

The project promotes investment in local infrastructure projects to support economic development and growth, regional integration, and poverty reduction in the Caribbean. One of its strategic objectives is to increase protection, support climate change adaptation and mitigation and prevention and mitigation of natural disasters. It focuses on the following sectors: transport, water and sanitation, energy, disaster prevention, information and communication technologies. Belize is one of the recipient

⁶⁷ Communication from Colin Mattis from NCCO on 12 November 2020.

⁶⁸ German International Climate Initiative (IKI). (2020). Climate-Smarting Marine Protected Areas and Coastal Management in the Mesoamerican Reef Region. Available at: https://www.international-climate-initiative.com/en/details/project/climatesmarting-marine-protected-areas-and-coastal-management-in-the-mesoamerican-reef-region-18_II_152-3009

⁶⁹ UNDP website: http://www.bb.undp.org/content/barbados/en/home/operations/projects/crisis_prevention_and_recovery/japan-caribbean-climate-change-partnership.html

countries, and CIF funds were accessed for the George Price Highway Rehabilitation Project.^{70 71}

Belize's participation in international climate negotiations

The GoB is a member of the Latin American and the Caribbean States' regional group for climate change negotiations under the UNFCCC. The country is also a member of other climate negotiation groups, namely the Group of the 77 (G77), the largest intergovernmental organization of developing countries under the United Nations Framework, the SIDS group, and the related Alliance of Small Island States (AOSIS). In January 2019, Belize assumed the chairmanship of AOSIS for two years, thus leading the negotiation strategy on climate change of the group, representing 43 small island and low-lying developing States recognised as the most vulnerable group of countries.⁷² Belize will also supervise SIDS Fellowship Programme sponsored by the Government of Italy, to train a young carrier professional for a year on climate change diplomacy.⁷³ This occurs at a pivotal year for climate change action under the UNFCCC and the Paris Agreement, for achieving critical milestones for the 2030 Agenda for Sustainable Development, the SIDS Accelerated Modalities of Action (S.A.M.O.A.) pathway, and the agenda for the conservation and sustainable use of the Oceans. For AOSIS, harnessing the synergies of these three agendas will be central to delivering global climate action and increased ambition.

Access to climate finance

This section presents an overview of enabling environment and regulatory framework for mobilisation and deployment of climate finance resources, including public-private partnerships (PPPs) at national level. It also provides an overview of current access to finance for projects in mitigation and adaptation from national and international sources across the public and private sectors.

Domestic finance

The GoB has extensive experience with the management of trust funds, having established PACT in 1996.⁷⁴ PACT aims at promoting the protection, conservation, and enhancement of the natural and cultural resources of Belize. It serves as the fiduciary manager for the National Protected Areas Secretariat (NPAS). It administers USD 6.0 million from the Adaptation Fund for the Marine Conservation and Climate Change Adaptation (MCCA) project, USD 6.0 million from the GEF for the Protection of Key Biodiversity Area (KBA) project,⁷⁴ and USD 3.8 million for REDD+. With a decision of the GCF 21st Board Meeting (17 – 20 October 2018), PACT became Belize's first national Accredited Entity for the GCF.

Based on this experience, **the NCCPSAP recommended the establishment of a Climate Change Trust Fund (CCTF)** by an Act of Parliament. Additionally, it was envisaged that PACT would be mandated with the responsibility to manage this Fund. However, no action has been taken to date to set up the fund, and the COVID 19-related context has made it less likely that this would happen in the short term.⁷⁵

⁷⁰ European Investment Bank (EIB). (2021). Caribbean Investment Facility (CIF). [https://www.eib.org/en/products/mandates-partnerships/cif/index.htm#:~:text=The%20Caribbean%20Investment%20Facility%20\(CIF,poverly%20reduction%20in%20the%20Caribbean.](https://www.eib.org/en/products/mandates-partnerships/cif/index.htm#:~:text=The%20Caribbean%20Investment%20Facility%20(CIF,poverly%20reduction%20in%20the%20Caribbean.)

⁷¹ Communication from Belize's Policy and Planning Unit (PPU) received on 8 February 2021.

⁷² Caribbean Climate blog "Belize accepts the chairmanship of AOSIS" <https://caribbeanclimateblog.com/2018/12/10/belize-accepts-the-chairmanship-of-aosis/>

⁷³ Caribbean Climate blog "Belize to supervise SIDS Fellowship Programme" <https://caribbeanclimateblog.com/2018/12/12/belize-to-supervise-sids-fellowship-programme/>

⁷⁴ CCCCC and MAFFESD (2014). A National Climate Change Strategy, Policy and Action Plan to Address Climate Change in Belize, 2015-2020.

⁷⁵ Communication from Colin Mattis from NCCCO on 12 November 2020.

The **NCCPSAP also recommended that the Cabinet establishes a Climate Change Finance Committee (CCFC)** as a standing committee of the PACT whose main function is to mobilise resources in support of climate change⁷⁴. This was done through the establishment of the BNCCC climate finance committee, whose structure is being finalised, and to which PACT is an observer, along with other entities from the private sector and civil society.

Financing options relevant to climate change interventions are also explored in the GSDS. The strategy recognises the inter-linkages between disaster risk management and climate change resilience, as climate change and climate variability are increasing the variety of natural hazards in Belize. **The GSDS recommends that the MFEDI collaborates with the NEMO to prepare a disaster risk financing plan**, which has not been established to this date. It is suggested that the selection of risk financing instruments is made based on the frequency and severity of disasters. The plan shall distinguish between risks that will be retained, opportunities for risk pooling such as under the Caribbean Catastrophe Risk Insurance Facility (CCRIF), and risks to transfer. In terms of risk retention, it is envisioned that *“some risks may be financed out of budgetary savings and appropriate proposals for doing so will be made. These could include specific budgetary allocations and the establishment of reserve funds. In other instances, it may be best to finance retained risks and in those cases access to multilateral resources will remain important. Alternative risk financing instruments from multilateral development banks will also be considered, including the use of contingent loans which may require the country to pursue and sustain agreed macro-economic targets”*.⁷⁶

In light of the above, it would be sensible to explore in which ways the proposed disaster risk financing plan can be used to finance climate change-related interventions.

International Finance

As of November 2020, flows of public climate finance in Belize accounted for USD 26.55 million; however, the total figure may be underestimated.⁷⁷ The main channels include the Adaptation Fund, the Global Environment Facility (GEF), the Special Climate Change Fund (SCCF), the Forest Carbon Partnership Facility (FCPF), and the Global Climate Change Alliance (GCCA).

The GoB confirmed in the GSDS its commitment to work with donors and direct their support towards the priority areas identified in the GSDS, including disaster risk management and climate change resilience.

The table below provides an overview of the most recent on-going climate change-related projects financed by international donors⁷⁵ (aside from the Green Climate Fund).

Table 16: Overview of most recent on-going climate change-related projects financed by international donors (source: NCCO)

Project	Timeframe	Description	Amount	Donor
Climate Action Enhancement Package (CAEP)	2019 – 2020	Review of Belize’s Nationally Determined Contribution (NDC)	USD 659,875.00	NDC Partnership
Climate Promise- safeguarding agenda 2030 through bold	2019 – ongoing	Support to enhancement of the NDC on elements not funded under CAEP. ⁷⁸	USD 115,000.00	United Nations

⁷⁶ Ministry of Economic Development (2016). Growth and Sustainable Development Strategy, Belize 2016-2019.

⁷⁷ Climate Funds Updates database, accessed on 19 November 2020. It should however be noted that this database does not cover all the climate finance sources available. <https://climatefundsupdate.org>

⁷⁸ This includes: reviewing national policies and legal and institutional frameworks, supporting institutional capacity building for climate change mitigation MRV, development of a national Low Emission Development Strategy for Energy, Forestry, Agriculture, Tourism and Waster, inter alia,

climate action				Development Programme (UNDP)
Development of an integrated and comprehensive agroforestry policy	2019 – 2020		Technical assistance is being provided for the development of this policy.	USD 118,000.00 Climate Technology Centre and Network (CTCN)
Enhancing the resilience of Belize’s coastal communities to climate change impacts	Concept approved in 2019, funding proposal to be submitted in December 2020		The main objective of the proposed project is to increase climate resilience of coastal communities in Belize by improving coastal land use and habitation, increasing and improving monitoring, increasing adaptive capacity and knowledge transfer.	USD 4,000,000.00 Adaptation Fund (AF)
Belize Marine Conservation and Climate Adaptation Initiative	2015 – 2020		The objective is to implement priority ecosystem-based marine conservation and climate adaptation measures to strengthen the climate resilience of the Belize Barrier Reef System. The project takes a two-pronged approach – both enhancing ecosystem function and therefore resilience through recovery and restoration, and reducing degradation caused by overexploitation and pollution.	USD 6,000,000.00 Adaptation Fund (AF)
Climate Vulnerability Reduction Program	2017 – ongoing		The programme's objective is to reduce Belize's climate vulnerability and risk, through the implementation of climate resilient measures in the tourism sector and by improving the governance of Belize's Disaster Risk Management. ⁷⁹ A Climate Risk Information System (CRIS) is being developed under this programme.	USD 10,000,000.00 Interamerican Development Bank (IDB)
REDD+ Readiness Preparation Project	2017 – ongoing		The project aims to assist Belize in carrying out key Readiness Preparation activities in order to strengthen their capacity to participate in future REDD+ carbon payment transactions.	USD 3,800,000.00 Forest Carbon Partnership Facility (FCPF)
Preparation of Belize’s Fourth National Communication and First Biennial Update Report to the UNFCCC	2017 – ongoing		The immediate objective of the project is to assist Belize in the preparation and submission of its Fourth National Communication Document to the Conference of the Parties to the UNFCCC and to support the country’s submission of its First Biennial Update for the fulfilment of its obligations to the Convention.	USD 852,000.00 Global Environment Facility (GEF): USD 852,000.00 United Nations Development Programme (UNDP): USD 20,000.00
Philip S.W. Goldson Highway upgrading ⁸⁰	2012 - 2016		The project aimed to protect the highway from increased flooding, to improve its climate resilience.	USD 12,500,000.00 European Investment

developing a Low Emission Development Investors Guide and other communication materials and supporting the linking of three MRV systems including the MRV system under development within the NCCO, the local Climate Risk Information System (CRIS) that will be managed by the NCCO and the proposed MRV system supporting green climate fund investments managed by the Ministry of Economic Development.

⁷⁹ Interamerican Development Bank (IDB). Climate Vulnerability Reduction Program. Available at: <https://www.iadb.org/en/project/BL-L1028>

⁸⁰ European Investment Bank (EIB) and Caribbean Development Bank (CDB). (2017). Quick facts: climate action lines of credit. <http://www.murphyintldev.com/website/cmsAdmin/uploads/2017-05-24-CaribbeanDevBank.pdf>

				Bank (EIB) Caribbean Development Bank (CDB)
Belize Social Investment Fund ⁸⁰	2012 - 2016	The project aimed to increase gender-equitable and inclusive access to climate-resilient infrastructure and basic social services for poor and vulnerable communities.	USD 2,500,000.00	European Investment Bank (EIB) Caribbean Development Bank (CDB)

Public-Private Partnerships (PPPs)

To support public-private sector collaboration, the Economic Development Council (EDC), a public-private advisory body, was launched in 2011. The EDC is comprised of 10 members, including five senior managers from the public sector, and five representatives from the private sector. It is co-chaired by a representative from the private sector, and a counterpart from the public sector.

The overall objectives of the EDC are:

- To strengthen the collaboration between public and private sectors through meaningful dialogue that leads to positive outcomes facilitating economic development.
- To advise on and help develop reforms that improve doing business, enhance the public sector processes, and enhance confidence of doing business in Belize.

A Public-Private Desk was established in the Office of the Prime Minister (OPM) to support the EDC in its functions.⁷¹

The EDC is currently undertaking the following private sector support projects:⁸¹

- Leveraging Digital Technology for Improving the Business Climate in Belize
- Innovation Platforms for Social and Economic Impact
- Capacity-building for Public Transportation
- Design and Preparation of a Sustainable Development Plan

So far, according to the PPP Knowledge Hub, only two PPPs projects have been implemented for a total investment of USD 205 million. The projects include: the *"Macal/Mollejon Hydroelectric"* project (1995) for the development of the Macal Mollejon hydropower plant; and the *"Belize Co-generation Energy Limited"* project (2007), which was the first commercial-scale cogeneration project in Belize aiming at bringing renewable energy technology and know-how to the nation.

IDB led several initiatives promoting PPPs. For instance, in 2017, the Belize Chamber of Commerce and Industry (BCCI) and IDB partnered for a project entitled *"Proadapt Belize – Increasing Climate Change*

⁸¹ Communication from Mr. Ishmael Quiroz from EDC on 6th January 2021

Resilience and Related Business Opportunities.” The main objective of the project is to increase the climate resilience of the private sector in Belize. It was created to pilot and support the development of new and innovative methodologies, tools, and business models to help MSMEs to increase their climate resilience and take advantage of related businesses. The project should be completed in 2021.

Additional IDB support on PPPs includes the “Capacity Building for Public Transport Reform Project”, which considers “strengthening of the TPU on procurement and contract management given the government’s intention to roll-out nation-wide transportation facilities through user-pay PPP procurement arrangements” and “assisting the government in the preparation of the PPP contract to roll out the National Bus Terminal as a PPP.”

Also, through IDB technical assistance, a draft PPP policy has been developed under the auspices of Belize Infrastructure Ltd., but the status as far as endorsement and adoption is uncertain as of February 2021. **Error! Bookmark not defined.**

However, it should be noted that there is a lack of a central repository of information on PPPs projects. This is one of the main barriers to the development of PPPs. Another factor that has hindered the collection of information is the lack of M&E regulations on PPPs contracts, reinforcing the problem of transparency and lack of trust between the private and the public sector.⁸² Additional obstacles for PPPs are a lack of open data, public tender notice and continuous enforcement of established internal practices for the selection process, evaluation, monitoring and reporting.

Based on this and in light of the challenges posed by climate change, it would be essential to improve the dialogue between private and public sector to establish PPPs to support activities such as sustainable agriculture, resilient infrastructure, and renewable energy.

The Organization of American States (OAS), in collaboration with the US Embassy in Belize, launched the “*Promoting an Open Government Ecosystem in Belize*” project to establish management practices based on openness, accountability, and easy access to public information. An OAS Representative presenting this project emphasised that in order to achieve a more open government, the private sector and the government must forge stronger relations based on trust and transparency.^{83 84}

⁸² Personal communication with BCCI, April 2019.

⁸³ Love FM. “OAS Celebrates Open Government”. Accessed on 17th April 2019 at: <http://lovefm.com/oas-celebrates-open-government/>

⁸⁴ The Trust for the Americas, Promoting an open Government Ecosystem in Belize. Accessed on 17th April 2019: <https://www.thetrustfortheamericas.org/programs/dia/promoting-open-government-ecosystem-belize>

Gaps and opportunities

Referring to the climate and development issues and priorities identified, as well as the climate change responses outlined in the previous sections, it is possible to identify gaps, weaknesses, and opportunities in terms of⁸⁵:

- **Institutional strengthening and existing policy framework:** elements from the current institutional and policy framework which either facilitate/hamper the access to the GCF and climate finance.
- **Financing needs across mitigation and adaptation:** the needs in terms of climate-related finance that can help to set Belize on a low-carbon and climate-resilience development pathway.
- **Capacity needs of existing actors across the public and private sectors:** the capacity that is needed for actors to understand and access/channel climate finance & the GCF
- **Technology needs:** the technology that is required to contribute to achieving adaptation and mitigation goals in the country.

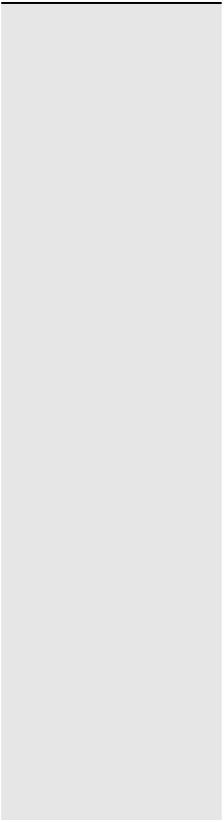
Belize sees the GCF playing a supporting role, for example, with the Project Preparation Facility (PPF), National Adaptation Plan (NAP), or Readiness resources on certain gaps, weaknesses, and opportunities, as indicated in the tables below

It should be noted that capacity-building needs and high technology costs have been identified by stakeholders as recurrent elements across the above-mentioned four pillars.

⁸⁵ This section was updated by national stakeholders during the second Structured Dialogue held between 29-31 March 2021.

Table 17. Summary of Gaps/Weaknesses and Opportunities - Institutional strengthening and existing policy framework.

	<i>Gaps/Weaknesses</i>	<i>Opportunities</i>	<i>Desired GCF supporting role</i>
<p>Institutional strengthening and existing policy framework</p>	<ul style="list-style-type: none"> • There is a gap between policy development and implementation. • Administrative structure does not enable efficient policy development. • Lack of national macro-policy framework aligned with international climate agreements, that would enable government agencies to have a common understanding of climate-related sustainable development. It would be used as a basis to design and implement related policies. • There is no mechanism to create linkages between policy formulation and ongoing parallel activities which prevents to capitalise on opportunities to contribute to climate-relevant policies' goals. • Most government departments are understaffed (including NCCO) and cannot spare the human resources to develop, monitor, and document policy. This is worsened by the freeze on new staff hiring resulting from the COVID-19 crisis. • There is a need of more formal monitoring and evaluation systems • Lack of enforcement or follow-up of actions outlined in regulations emanating from policy documents due to lack of human resources. • Limited political support also hampers climate-related institutional strengthening and existing policy framework • Many climate change actions are multi-sectoral and involve several policies and multiple agencies. The lack of coordination between agencies often leads to duplication of activities. • Coordination among data suppliers/users within the Government Service needs to be strengthened. • There is minimal use of fiscal policies and economic instruments to encourage environmental stewardship. There are laws and policies in place that are not being activated. • Limited information gathering, management, storage and exchange that will produce relevant, reliable, timely, 	<ul style="list-style-type: none"> • Identifying of focal points in the different agencies to drive the process from policy development to implementation and providing support from the NDA to mobilise actions (public sector and private sector) • Addressing climate change is a mandatory part of all future GoB strategic development plans (need to include a climate finance component). • Include into the national budget the financing of policies/plans that mainstream climate change, following an integrated approach. Final approval and operationalisation of the ToR for the two BNCCC sub-committees. A gap analysis has been completed to assess the extent to which the current strategy and action plans are aligned with the goals of the GSDS. • The new NDA website has improved to disseminate information. • Examine the policies and mainstream climate change actions and activities within the overall policies to avoid duplication of activities. • NCCPSAP Action Plan is being renewed; GoB in reviewing and updating NCRIP and GSDS policies; ICZM Plan expected to be revised in 2022. • Second NDC and Fourth National Communication under development, including new vulnerability assessment studies. 	<p>Current support:</p> <ul style="list-style-type: none"> • Continued NDA capacity building with respect to M&E and communications • Capacity building of the BNCCC and its sub-committees • Additional support received for current DAEs and prospective direct access entities to increase GCF access. • The Agriculture sector has a NAP while two more are being developed for fisheries and coastal sectors and the water sector. Others are being discussed (e.g. tourism).



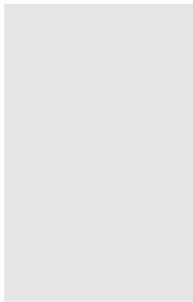
standardised and inter-operable information to inform policy decisions.

- Despite improvements, BNCCC still needs to become fully operational.
- Key policy frameworks are “expiring,” including GSDS, NCCPSAP, and NCRIP, and the COVID-19 crisis has slowed down their updating process.
-

- Integration of the different functions and activities (e.g. statistics, policy reviews/analysis) through a centralised unit within the different ministries.
- Providing targeted human resource training development to help implement policies/plans and allocating adequately trained personnel within institutions.

Table 18. Summary of Gaps/Weaknesses and Opportunities – Financing needs across mitigation and adaptation.

	<i>Gaps/Weaknesses</i>	<i>Opportunities</i>	<i>Desired GCF supporting role</i>
Financing needs across mitigation and adaptation	<ul style="list-style-type: none"> • Low levels of private sector participation. • Lack of financial resources to implement/enforce policies that enable climate change mitigation and adaptation. • BNCCC's ToR were approved for the different committees but the BNCCC still is not operational. • • Lack of funding to develop awareness and implement/enforce policies. 	<ul style="list-style-type: none"> • Project funding opportunities can lead to capacity building and increased educational opportunities. • Private sector engagement through PPPs and support from EDC and the PPD. • Fiscal incentives and tax reductions: Ministry of Finance to clarify official position with regards to reducing the taxation level on importation of new technologies/ and incentivising development of technology domestically. • Tax reductions: opportunity for the adoption of new technologies for the private sector (e.g. irrigation systems/renewable energy). • DFC can incentivise private sector to participate in adaptation and mitigation by acting as an intermediary to access climate resources. For instance, provides solar technologies for the tourism sector, water harvesting systems, home biogas and currently considering a wider scope (agriculture). • Operationalisation of BNCCC climate finance subcommittee. • GSDS with strong emphasis on climate change and resilience and its M&E framework . • Existence of a Public Sector Investment Programme (PSIP) to report to external donors, identify co-financing opportunities, and serve as planning mechanism to communicate on project pipeline, existing projects and identifying financing synergies to achieve of scale for interventions across sectors • PACT became the first National AE for the GCF. • REDD+ project looking at carbon credits: determining carbon stocks, which could lead to another REDD project. • National Climate Change Policy Strategy and Action Plan is also an opportunity (once revised). • Identify synergies (co-financing) with Nationally Appropriate Mitigation Action (NAMA) Facility 	<p>Current support:</p> <ul style="list-style-type: none"> • Private sector engagement through BCCI-led Readiness project “Support for Strengthening Belize Private Sector Access to Climate Finance”. • Readiness support for the accreditation of DFC and SIF, with different accreditation types (opportunity to present different project types). • IICA-led Readiness “Strengthen the foundation for a climate responsive agricultural sector in the Caribbean” to increase the capacity of agricultural sector in Caribbean countries to access climate finance • PPF support for pipeline projects: “Arundo Donax” (CCCCC/BSI) and “Resilience landscape for sustainable sugarcane production in Northern Belize” (CCCCC/SIRD1). <p>Potential support:</p> <ul style="list-style-type: none"> • Funding of GCF projects in the Country Programme pipeline that will cover a wide range of sectors, including projects with co-financing for income-generating activities, including through direct access with PACT. • Opportunity through Readiness to build up the institutional structures to reduce the financial gap to get personnel in country to carry-out



the project assessments and developing projects.

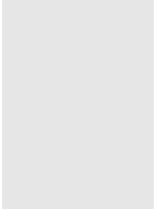
- Readiness for carrying out assessments prior to developing a concept/project. Larger scale national assessments (e.g. data).
- PPF support, which is key for the submission of bankable projects.

Table 19. Summary of Gaps/Weaknesses and Opportunities – Capacity needs of existing actors across public and private sector

	<i>Gaps/Weaknesses</i>	<i>Opportunities</i>	<i>Desired GCF supporting role</i>
<p>Capacity needs of existing actors across public and private sector</p>	<ul style="list-style-type: none"> • Need to build capacity in the public sector to do tasks such as GHG inventories, downscaling climate model outputs, vulnerability studies, GIS. • Need to address knowledge gaps on climate change across sectors, starting from educational system down to awareness-raising and professional training at later stage. • Need to continue strengthening private/public sector partnership (in capacity building). • Most departments do not have an institutionalised training programme on climate change and climate finance-related issues. • Need to continue developing knowledge about climate finance and GCF processes and access modalities, (both for public and especially private sector) • Need to continue developing capacity to develop GCF concept notes and funding proposals. • Limited capacity in NEMO – 	<ul style="list-style-type: none"> • Mitigation and adaptation-related trainings are provided by national, regional and international organisations (i.e. NCCO, UNDP, the 5Cs). • National Climate Change Office should be responsible of developing these training modules / training package and to disseminate the information to other ministries / committees);Increased staffing at the NCCO and departments with a climate change focus across ministries. • Potential for increased human capacity and skills of public and private sector actors related to climate change. • BNCCC has private sector and NGO representation. • The national GCF Readiness projects have built the capacity of national stakeholders on GCF and the NDA notices more engagement on the topic. • Possible opportunity for collaboration between NEMO and NCCO to ensure alignment of DRM and climate change policies and action plans. • 	<p>Current support:</p> <ul style="list-style-type: none"> • Post-accreditation support to PACT to develop entity work programme and engage with stakeholders. • Support for accreditation of two more DAEs, including DFC that can strengthen access for private sector, and SIF that can strengthen access at community level. • Private sector engagement through BCCI-led Readiness project “Support for Strengthening Belize Private Sector Access to Climate Finance” • CSO engagement through CANARI-led Readiness project “Enhancing Caribbean Civil Society’s Access and Readiness for Climate Finance” • Nine on-going Readiness projects and four completed ones (including NDA support). • Total of six Readiness support requests in the pipeline.

Table 20. Summary of Gaps/Weaknesses and Opportunities – Technology needs.

	Gaps/Weaknesses	Opportunities	Desired GCF supporting role
Technology needs	<ul style="list-style-type: none"> • High upfront/capital cost of technology and equipment and spares is a non-starter barrier, as well as high operational and maintenance expenses. • Limited technical capacity to operate and efficiently maintain new and improved technology. • Lack of a centralised clearinghouse for environmental data. • Limited communication across agencies retards the sharing of new technologies and need to enable those to take action on risk (proactively) rather than simply reactive communication on new existing technologies. • Need to communicate the challenges that may arise from the technology. • Lack of emphasis on research and development. • Lack of qualified individuals are performing operational duties. • Limited options for Belize to develop its own technology and need of efficient manufacturing capabilities to be able to do so (e.g. solar panels for mitigation and need to import these currently). • Civil society and private sector need financial support to adopt climate technologies (e.g. farmers and irrigation). • Need to change housing materials to become resilient to climate impacts, which would also benefit the health sector. • Need of solar technology to provide water recycling within homes. • Need adequate technical assistance in-country to support countries with energy development units, staffing supports. • Need to adequately support technology development and implementation (e.g. based on size of the enterprise, technicians' expertise). • Need for regulations to support technologies (e.g. rooftop solar and need to be connected to the grid). Need of more appropriate technology sourcing. Need to 	<ul style="list-style-type: none"> • Business opportunities in the importation of new technology equipment and training in the use of the technology. • Training opportunities in the use and maintenance of new technologies. • Communication conduit and repository for environmental data and research papers. • Adopt broader definition of technology to be less restrictive (e.g. citizen science). • Government to identify best-suited technologies to address climate change and avoid modernisation bias. • The outcome of the 2018 Technology Needs Assessments (TNAs) could help define adaptation and mitigation needs and could be integrated in project concepts. • Opportunity for domestic research into appropriate solutions to address lack of some data. • Research into what are appropriate technologies for Belizeans to ensure it is used in an efficient way and is eventually financially attractive. • Ministry of Housing is determining adaptation needs for construction, considering indigenous communities (traditional buildings). This could be replicated by other ministries and sectors. 	<p>Current Support:</p> <ul style="list-style-type: none"> • Support to accreditation of DFC which would strengthen the role of private sector and improve the financing of technology needs. <p>Potential Support:</p> <ul style="list-style-type: none"> • Funding of GCF projects in the Country Programme pipeline, notably through CCCCC through: <ul style="list-style-type: none"> ○ “Building the Adaptive Capacity of Sugarcane Farmers in Northern Belize” (PPF stage) which primarily relates to biological controls for pests and crop management, mechanical harvesting (present but not widely used in Belize), introducing climate-resilient crop variances into the northern sugarcane belt ○ “Integrated Flood Management in the Upper Belize River Watershed” (concept note) looking at early warning systems and how to upscale/build the system itself to communicate risk information to residents in a timely manner.



put in place mechanisms to disseminate technology's feasibility and profitability to attract private sector investment, to enable technology uptake.

- No clear definition of technology that acknowledges technology can be diverse.
- Need to identify the barriers within sectors that prevent technology take-off.

- CCCCC LiDAR project is an opportunity for Belize to access LiDAR services through to build on country data needed to inform climate change policies and investments.

2. Belize's agenda and GCF engagement

Institutional arrangements for engagement with the GCF: The National Designated Authority (NDA)

Introduction

Since June 2015, the MFEDI has been assigned the role of NDA to the GCF through a Cabinet decision. The MFEDI manages the Public Sector Investment Programme (PSIP) and is the main channel for communication with all the International Financial Institutions (IFIs).

To properly carry out efficient planning and administration of GCF-related responsibilities, the NDA must perform the following key functions:

- Acting as the focal point for communication with the GCF, AEs, and national stakeholders (including private sector actors);
- Deploying Readiness and preparatory support funding in the country;
- Convening relevant public, private, and civil society stakeholders to identify national funding priorities for engagement with the GCF, through, for example the development and update of a Country Programme;
- Nominating Direct Access Entities (DAEs) for accreditation application (sub-national and national entities applying under the direct access track);
- Recommending funding proposals and concept notes received from AEs that are consistent with national laws, regulations, development, and climate priorities, through the implementation of the no-objection procedure;
- Retaining an overview of all projects and programmes relating to the country; and,
- Conducting annual participatory reviews of GCF-funded activities for local stakeholders, notably project-affected people and communities, including women, and disseminate their findings.

The NDA's **technical capacity has been improving steadily** under the first and second NDA support Readiness projects (see section *National Readiness support*). Belize is now seen as a leading country for GCF engagement in the Caribbean, and the GCF focal point is invited by the GCF to present the NDA's work in various regional events, while being contacted by Caribbean countries to share information on the topic.⁸⁶ Examples of recent development include the finalisation of the NDA Review Manual for GCF concept notes, which is now waiting for approval.⁸⁶

In the context of the COVID-19 crisis, the NDA has had to request no-cost extensions for several GCF projects/programmes, and on-site visits and travels to Belize have been delayed and/or cancelled. However, the NDA's engagement with the GCF and project stakeholders has not ceased, and the on-going work could continue.⁸⁶

Capacity constraints

The NDA faces various capacity constraints, that have been targeted through GCF Readiness support. These include:

- **Human capacity: only 2.5 staff are dedicated to NDA matters** as of November 2020. Ms.

⁸⁶ Communication from Leroy Martinez from MFEDI on 26 November 2020.

Narda Garcia, the CEO, Mr. Leroy Martinez, the GCF focal point, and Ms. Khara Roches, the GCF national coordinator are the only staff members dedicated to working on the topic. This is becoming an increasing constraint as more and more projects and programmes are being added to Belize's GCF portfolio and pipeline.

- **Stakeholder engagement and outreach:** as of November 2020, the NDA did **not have a dedicated communication team** in-house, while communication channels used by NDA to **raise awareness** amongst national stakeholders on the GCF are **mostly workshops and close work with the Press Office**. However, improvement has been made with a dedicated webpage⁸⁷ to the GCF that has supported stakeholder information and engagement on the latest GCF-related developments in Belize. The next steps would need to include hiring a communication officer and developing a communications strategy.
- **Institutional coordination:** given the proliferation and increased complexity of funding sources including the GCF, there is a need for enhanced coordination between the MFEDI as the NDA, the MSDCCDRM as the lead government organisation responsible for coordinating and implementing Belize's climate change adaptation and mitigation policies, as well as other governmental and non-governmental stakeholders in the country. To overcome this challenge, **the BNCCC, as the main inter-ministerial coordinating mechanism with climate change-relevant mandate**, was designated as the **entity supporting the NDA in its functions** (see section *National coordinating mechanism on climate change* for more details on BNCCC). Capacity building of the BNCCC and its sub-committees took place under the second Readiness support project (December 2019 – March 2021), through a five-week virtual training course on GCF project requirements (including gender), to improve the BNCCC's capacity to review and appraise concept notes. The full operationalisation of the BNCCC should address this constraint, while the NDA maintains a direct communication with other Ministries' CEOs on the topic of GCF.

Deployment of GCF Readiness and preparatory support funding

National Readiness support

To date, Readiness support at the national level has been received through the projects summarised in the table below.

⁸⁷ The webpage is available at: <http://med.gov.bz/resources/>

Table 21: National Readiness projects/programmes

Name	Timeframe	Delivery Partner	Summary
Ongoing			
Readiness to further assist the Development Finance Corporation (DFC) gaps for GCF accreditation	2020 - 2021	Caribbean Development Bank	The GCF approved the readiness proposal in December 2020, and the Grant Agreement between CDB and the United Nations Office for Project Services (UNOPS) was signed in the first quarter of 2020. The Readiness project provides technical support to strengthen the operational policies of the DFC to enable compliance with GCF accreditation requirements.
Support for the Accreditation of the Belize Social Investment Fund (BSIF), NDA capacity and post-accreditation to PACT	2019 - 2021	Caribbean Community Climate Change Centre (CCCCC)	The NDA received additional Readiness support to address the existing capacity and remaining coordination issues. Its subcomponents are: <ul style="list-style-type: none"> • A gap assessment of BSIF against the GCF accreditation requirements will be conducted. • Support was provided to the NDA on GCF project requirements, including gender, along with the update of the Country Programme as well as the development of a proposed update process of the document. This component should be completed by March 2021. • PACT is in the process of updating its policies on environmental and social safeguards as well as their environmental, social and management framework (ESMF) to be able to expand the scope of their internal activities to stakeholder entities. The ESMF was developed in 2020 and approved in 2021.
Readiness capacity building support to Protected Areas Conservation Trust (PACT)	2020 - 2022	PACT	The project provides post-accreditation support to meet the GCF accreditation conditions, establish its planning framework for engagement with the GCF, mobilise climate action among national stakeholders, and strengthen its capacity to identify, design, and implement climate projects to meet GCF requirements.
Strengthening Belize Private Sector Access to Climate Finance	2020 - 2021	Caribbean Development Bank (CDB)	Launched during the first Structured Dialogue in 2020, this project aims to strengthen private sector engagement with the GCF through knowledge building, crowding in private sector investment for climate actions and building the capacity within the private sector to develop GCF concept notes and funding proposals. Belize's Chamber of Commerce Industry (BCCI) is the lead executing entity (EE).
Closed			
NDA Strengthening and Development of Strategic Frameworks ⁸⁸	2018 – 2019	Caribbean Community Climate Change Centre (CCCCC)	The project aimed at enhancing the existing capacity within the NDA. Under this support, now closed, an initial process for the nomination of AEs/DPs was proposed, with support from the BNCCC. A dedicated Toolkit for the NDA and key stakeholders in Belize publicly shared on the GoB website illustrates the procedure in detail. ⁸⁹

⁸⁸ The NDA received support through a GCF Readiness Grant approved in December 2016 and delivered by the CCCCC, aimed at enhancing the existing capacity within the NDA to effectively undertake its GCF-related responsibilities, as well as develop this Country Programme, thereby supporting appropriate oversight of the GCF activities at the country level. This Readiness support is now closed.

⁸⁹ GoB, accessed June 2016: <http://www.belize.gov.bz/index.php/tool-kit-for-the-green-climate-fund-s-national-designated-authority-in-belize>

Support for accreditation and accredited direct access entities - Development Finance Corporation (DFC)	2019	Pricewaterhouse Coopers (PwC)	This project was focused on developing DFC's gap analysis and action plan for accreditation to the GCF. Follow-up Readiness will be developed to address gaps.
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Regional Readiness support

Additional regional and multi-country Readiness relevant for Belize includes the following projects, summarised in the table below.

Table 22: Regional Readiness projects/programmes

Name	Timeframe	Delivery Partner	Summary
Ongoing			
Support to the development of a Credit Risk Abatement Facility (CRAF) – CARICOM Development Fund (CDF)	2020	CARICOM CDF	This on-going six-month project aims to achieve countries' priorities by strengthening small and medium-size enterprises (SMEs) access to finance for renewable energy and energy efficiency projects, and providing them with different financing options. This Readiness is being implemented in St Lucia and Belize ⁹⁰ .
Strengthening the foundation for a climate-responsive agricultural sector in the Caribbean	2020	IICA	The central aim of this project is to strengthen the foundation on which the region's agriculture sector prioritizes investments for resilience and enhance conditions for improved reporting on GHG emissions in specified agricultural value chains. This Readiness is in Bahamas (lead). Belize, Dominica, Haiti, Saint Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago.
Strategic Regional Readiness to enable resilience of Mesoamericans five Great Forest and Communities	2020-2021	Wildlife Conservation Society (WCS)	This project is led by Costa Rica's NDA. It aims to identify projects and programmes for nature-based climate change solutions (NBS) and to build the capacity of Indigenous and local communities to engage in national and regional decision-making. Readiness funding will support the preparation of a regional GCF programme concept to ensure the resilience of Mesoamerican Forests and the forest-dependent Indigenous peoples and local communities
Caribbean Disaster Emergency Management Agency (CDEMA) Early Warning Systems (EWS)	2019–2020	Caribbean Disaster Emergency Management Agency (CDEMA)	This project is led by Antigua & Barbuda's NDA. It aims to provide support for improving regional and national level mechanisms and capacity for achieving climate resilience through advancing Multi-hazard Early Warning Systems (MHEWS). It is implemented in Antigua & Barbuda; Belize; Commonwealth of Dominica; Grenada; Guyana; Haiti; Saint

⁹⁰ Green Climate Fund (GCF). (2019). Readiness to support the development of a Credit Risk Abatement Facility (CRAF) for CARICOM States. Available at: <https://www.greenclimate.fund/sites/default/files/document/readiness-proposals-belize-saint-lucia-caricom-development-fund-strategic-frameworks.pdf>

			Lucia; St. Vincent & the Grenadines; St. Kitts and Nevis; and Suriname. ⁹¹
Enhancing Caribbean Civil Society's Access and Readiness for Climate Finance	2020 – 2022	Caribbean Natural Resources Institute (CANARI).	This project was launched during the 2020 first Structured Dialogue by CANARI. It aims to enhance civil society's capacity, including knowledge, skills, and organisational structures, and the enabling external institutions to improve access to climate finance and delivery of climate change adaptation and mitigation in the Caribbean. The Association of Protected Areas Management Organizations (APAMO) is the National Project Coordinator & Civil Society Liaison in Belize. ⁹²
Closed			
Mobilising Private Sector to Support Low-Carbon and Climate Resilient Development in Jamaica and other CARICOM States	2017 – 2018	Ministry of Economic Growth and Job Creation (MEGJC) of Jamaica	This project led by Jamaica's MEGJC aimed to support private sector mobilisation for the development of projects/programmes which translate into regional and national benefits. The Readiness Support was used to identify barriers to private sector investment; support the accreditation of the selected private sector entities in the region; inform the best strategy for investment at the regional and country level, and promote south-south cooperation among other CARICOM States, including Belize. ⁹³
Building Capacity for a Regional Approach to Climate Action in the Caribbean	(2017 – on-going-):	Caribbean Community Climate Change Centre (CCCCC)	This project is specifically aimed at accessing Readiness funding to enhance the capacity of the CCCCC, to facilitate and increase the origination of high-quality funding proposals for GCF consideration. This readiness funding was expected to enhance the Regional Framework and its accompanying Implementation Plan both aimed at articulating clear actions to combat climate change in the Caribbean, including in Belize.

Preparatory support funding

In terms of preparatory funding received from the Project Preparation Facility (PPF), the following two national and one regional requests have been approved, as summarised in the table below.

⁹¹ Green Climate Fund (GCF). (2019). Caribbean Disaster Emergency Management Agency (CDEMA) Early Warning Systems (EWS) Regional Readiness Project. Available at: https://www.greenclimate.fund/sites/default/files/document/readiness-proposals-antigua-and-barbuda-belize-dominica-grenada-guyana-haiti-saint-kitts-and-nevis_1.pdf

⁹² Caribbean Natural Resources Institute (CANARI). (2020). Enhancing Caribbean Civil Society's Access and Readiness for Climate Finance. Available at: <https://canari.org/wp-content/uploads/2020/02/GCF-CSO-Brief-3.pdf>

⁹³ Ministry of Economic Growth and Job Creation for Jamaica (2017) GCF Readiness Proposal. Available at: https://www.greenclimate.fund/documents/20182/466992/Readiness_proposal_-_Jamaica_Ministry_of_Economic_Growth_and_Job_Creation_Entity_Support_and_Private_Sector_Mobilization.pdf/570e65e3-f837-48a2-a632-0f4cb18b70d3

Table 23: Approved preparatory support requests

Name	Timeframe	Accredited Entity	Summary
National			
A Scalable Demonstration Energy Project using Arundo donax to replace fossil energy in the generation of electrical energy	2018	Caribbean Community Climate Change Centre (CCCCC)	The project aims to introduce a new high-energy crop as a supplementary fuel for generation of electricity in Belize. It is intended that it will then be cultivated on a large scale, on a commercial basis for expanded use.
Building the Adaptive Capacity of Sugarcane Farmers in Northern Belize	2020	Caribbean Community Climate Change Centre (CCCCC)	The project covers an evaluation of recommended climate-resilient agriculture practices and a cost-benefit analysis for the latter, in order to strengthen the adaptive capacity of farmers by promoting behavioural change to sustain livelihoods and build resilience to the impact of current and future climate variability and change.
Regional			
Unlocking Climate Finance for Development Finance Institutions in Belize, Jamaica and St. Lucia	2018	Caribbean Development Bank (CDB)	The project aims to unlock the private sector investment needed to transform Caribbean productive sectors and energy systems by catalysing a transformation of finance. The programme will accomplish this by blending GCF and CDB resources to extend concessional lines of credit to Development Finance Institutions (DFIs). They, in turn, will on-lend to MSMEs and homeowners for climate action investments.

More information on the on-going Readiness projects and PPF support are available in section on [Belize’s portfolio for engagement with the GCF](#), while the completed projects’ information can be accessed in [Annex 9: Completed GCF projects and programmes](#)

Identification and recommendation of subnational and national entities for accreditation

As of November 2020, the PACT is accredited as a national Direct Access Entity (DAE). In addition, MFEDI has identified **two other institutions as potential candidates to become national AEs, namely the BSIF and DFC**, for which readiness support for accreditation has been mobilised. The MFEDI has also preliminarily considered the National Bank of Belize as another potential candidate, although no further discussions had taken place as of November 2020.

To support the NDA in performing the function of identifying and recommending subnational and national entities, **an initial process for the nomination of DAEs seeking accreditation** to the GCF is proposed (refer to NDA toolkit). It is envisaged that the BNCCC and its Climate Finance sub-committee (to be established) will support the NDA in this function.

Table 24. Existing and potential national AEs (source: prepared by the authors based on country missions in 2018, and 2019, and consultations November 2020)

Organisation	Accreditation phase	Accreditation details	Additional information
Existing AE(s)			
PACT	Accredited to GCF in October 2018 via Fast-track accreditation process. Readiness support approved in January 2019 through CCCCC under component 3.	Project size: Micro Specialised fiduciary standards: project management and for grant award and/or funding allocation mechanisms E&S risk category: C (minimal to no risk)	<ul style="list-style-type: none"> Accredited to the Adaptation Fund. Sound experience with managing projects under Adaptation Fund, GEF. Need to enhance technical expertise for project initiation and design. Focus on is sustainable development and in particular resource management at community level. Under the Readiness support, PACT is in the process of updating their policies on environmental and social safeguards as well as their environmental, social and management framework (ESMF) to be able to expand the scope of their internal activities to stakeholder entities. The ESMF was developed in 2020 and approved in 2021. PACT is also currently developing an entity work programme.
Prospective AEs			
BSIF	Intends to start self-assessment. Readiness support approved in January 2019 through CCCCC.	Project size: Micro Tool: grants and loans E&S risk category: N/A	<ul style="list-style-type: none"> Experience in accessing the basic needs trust fund from the Caribbean Development Bank (CDB), and a climate resilient infrastructure project implemented through the World Bank. Focus on investing in low-carbon development initiatives and in building climate resilience through the delivery of small-scale community sub-projects under various sectors.
DFC	Concept Note and self-assessment complete. Readiness support approved in January 2019 through CCCCC and second Readiness kicked off in 2020 through CDB. Based on GCF advice, PwC completed a Gap Analysis and Action Plan under Readiness accreditation support. It is expected additional readiness support will be required to address the identified gaps.	Project size: N/A Tool: Grants and loans E&S risk category: N/A	<ul style="list-style-type: none"> Has a climate champion in place. Experience with accessing and managing development credit from international and regional financial Institutions. E.g. EIB and CDB. Its new strategic focus is to mainstream climate and gender in all its operations. Engagement with the private sector and provision of other financing options for climate investments. Focus on supporting climate smart initiatives (both through grants and credits) for projects in the sectors of Agriculture, Manufacturing, Agro-Industry, Commercial Fisheries, Tourism and Services.
National Bank of Belize	Not engaged with the NDA yet.	N/A	<ul style="list-style-type: none"> No technical climate change expertise. They have participated in several stakeholder meetings.

Recommendation of project and programmes through the issuance of a no-objection letter

The NDA is responsible for implementing a 'no-objection procedure' that aims to ensure that all concept notes and funding proposals submitted by AEs for GCF-funded activities in Belize are consistent with national processes (including relevant national laws, national climate change strategies and plans, and gender plans).

To support the NDA in performing this function, **an initial no objection procedure** is proposed for concept notes and full funding proposals (refer to NDA toolkit). It is envisaged that the BNCCC and its Climate Finance sub-committee (to be established) as well as its Technical sub-committee (to be established) will support the NDA in this function.

A **dedicated Toolkit** for the NDA and key stakeholders in Belize, publicly shared on the GoB website, illustrates the procedure in detail.⁹⁴

The ToR of the BNCCC and its prospective Technical sub-committee (under development) and Climate Finance sub-committee (approved) are being revised to be in line with this procedure.

⁹⁴ GoB, accessed June 2016: <http://www.belize.gov.bz/index.php/tool-kit-for-the-green-climate-fund-s-national-designated-authority-in-belize>

Collaboration with Accredited Entities

The NDA is currently collaborating with **existing national, regional and international Accredited Entities (AEs) and other Delivery Partners (DPs)** to strengthen its engagement with the GCF.

As of November 2020, in addition to PACT, the Caribbean Community Climate Change Centre (CCCC), Caribbean Development Bank (CDB), Food and Agriculture Organization (FAO), Interamerican Development Bank (IDB), International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP) and World Wildlife Fund (WWF) were actively engaged with Belize's NDA in developing concept notes and funding proposals for the GCF. However, several other development partners that are regional or international AEs and that have worked in Belize, so far have not engaged on GCF matters in the country, or have stopped their engagement on initial project ideas that have not been pursued. The following table provides a snapshot of this engagement.

In addition to these entities, CANARI, CDF and PwC which serve as DPs, but are not AEs, have engaged with the NDA for Readiness support.

Table 25 summarises the current engagement in the country of national, regional and international AEs active in Belize. Those who have participated in the consultations as part of the elaboration and update of this Country Programme are listed in [Annex 6: List of stakeholders involved in the Country Programme consultations](#)

Table 25. Relationships between the NDA and AEs (Source: prepared by the authors).

NDA's relationships with existing AEs			
National AEs			
Entity/Partner Name	Area/s of focus	Engagement in the country (GCF focus)	Summary of efforts for GCF engagement ⁹⁵
Protected Areas Conservation Trust (PACT) ⁹⁶	Biodiversity, nature conservation, energy efficiency, water and food security.	<p>PACT is the country's national conservation trust, working on Belize's 103 protected areas' conservation. PACT is developing four project ideas for submission to the GCF:</p> <ul style="list-style-type: none"> • Strengthening the Belize National Protected Areas System (NPAS) to provide Natural Solution to the Impacts of Climate Change, with APAMO as a lead executing entity (EE) • Natural Resources Management – Watershed, with the lead EEs being PACT, Department of Environment, Hydrology Department, and Department of Agriculture • Greening MSME's in Belize – Energy Efficient Technologies, with Beltraide as the lead EE • Mainstreaming Resiliency to Disaster, Crisis and Climate Transformation in Belize Communities, with the lead EEs being the Red Cross, Ministry of Health, Ministry of Rural Development, the National Emergency Management Organization (NEMO), National 	<p>One Readiness request approved.</p> <p>One Readiness request under preparation.</p> <p>Their entity work programme (EWP) is being developed under another Readiness II currently being implemented by CCCCC.</p>

⁹⁵ Details on concept notes, funding proposals, PPF requests and Readiness proposals is available under the section "Belize's portfolio for engagement with the GCF".

⁹⁶ Updated by Denaie Swasey from PACT, on 4 November 2020.

		<p>Meteorology Department, Ministry of Agriculture</p> <p>PACT is also a Delivery Partner. It has received Readiness support and are currently updating their ESS and Gender policies and ESMF.</p> <p>Besides, PACT is working with the NCCO to develop a new Readiness request: Belize's Multisector National Adaptation Plan – Building Climate Resilience in Natural Resource Dependent Sectors.</p>	
Regional AEs			
Caribbean Community Climate Change Centre (CCCCC) ⁹⁷	Energy access and power generation; Forestry and land use; Health and well-being, and food and water security; Ecosystems and ecosystem services	<p>The CCCCC is developing regional and national programmes and projects involving Belize.</p> <p>The CCCCC acts as delivery partner for Belize to strengthen its NDA and has signed the Readiness Agreement Framework with the GCF. It is implementing three Readiness support projects with the GoB. The CCCCC is also serving as delivery partner for other countries in the region.</p>	<p>Three Readiness support requests approved.</p> <p>Two Readiness requests submitted.</p> <p>Four concept notes under preparation</p> <p>One concept note submitted.</p> <p>Four funding proposals under preparation.</p> <p>Their EWP is being developed.</p>
Caribbean Development Bank (CDB) ⁹⁸	Digital transformation, regional cooperation and integration (RCI), gender equality (GE) and good governance, private sector engagement, with a sectoral focus on education, agriculture and road transport.	<p>CDB is serving 19 Borrowing Member Counties, which includes Belize. Its 2020-2024 Strategic Framework identifies three strategic objectives: Building (i) social, (ii) economic and (iii) environmental resilience. CDB has provided support to the GoB for several activities (road safety, water supply, education, launch Public Policy Analysis and Management (PPAM) and Project Cycle Management (PCM) programme). CDB has also provided a USD20 million credit line to Belize's Development Finance Corporation (DFC)⁹⁹.</p> <p>CDB is a regional Readiness DP.</p> <p>It has launched in November 2020 a Readiness Support for Strengthening Belize Private Sector Access to Climate Finance. It is working on two additional Readiness requests, including one at the national level to further support DFC in its accreditation process to the GCF. Besides, CDB is working on two regional funding proposals for submission to the GCF:</p> <ul style="list-style-type: none"> Transforming Finance to Unlock Climate Action in the Caribbean" for Belize, Jamaica and St. Lucia; and 	<p>One Readiness request approved.</p> <p>One national and one regional Readiness requests submitted.</p> <p>Two funding proposals under preparation.</p>

⁹⁷ Communication with Donnell Cain, Ryan Zuniga, Meghann Gordon from CCCCC on 14 October 2020.

⁹⁸ Updated by Derek Gibbs from CDB on 4 November 2020.

⁹⁹ Caribbean Development Bank (CDB). (2018). CDB and DFC launch USD20 mn consolidated line of credit in Belize. Available at: <https://www.caribank.org/newsroom/news-and-events/cdb-and-dfc-launch-usd20-mn-consolidated-line-credit-belize>

		<ul style="list-style-type: none"> Scaling up the Integrated Utilities Services (IUS) model to support energy sector transformation 	
Central American Bank for Economic Integration (CABEI) ¹⁰⁰	Sustainable development and building climate resilience of communities. A variety of financial instruments are deployed through projects in sectors such as agriculture, energy, human development and transport.	<p>CABEI has funded a number of initiatives in Belize, including, among others: Belize Integral Security Program, to develop actions aimed to the rehabilitation of new works and provision of equipment for institutions responsible for the Belize security. Projects for the Improvement and Rehabilitation of the Infrastructure of the Corozal Frontier Post; a Rural Financing Program for the strengthening and extension of the cooperative sector; and the Program for the Improvement and Carretera Sur Tramo Dump - Jalacte. CABEI aims to boost competitiveness, social development and regional integration.</p> <p>CABEI has not yet engaged with the NDA.</p>	The NDA may initiate a dialogue with the Bank to identify potential ways to engage with GCF.
International AEs			
Conservation International (CI) ¹⁰¹	Nature-based solutions (NBS) to climate change mitigation and adaptation.	<p>CI is an organisation focusing on nature preservation. It is committed to work with the GoB and other stakeholders in the preparation of an eligible project proposal for submission to the GCF.</p> <p>CI had engaged with the NDA on a potential projected “Accelerating Private Investment to Restore Degraded Landscapes in Latin America: A Dedicated Pre-Investment Facility”. This has however not been taken forward.</p>	The NDA may re-initiate a new dialogue with CI to identify potential ways to engage with GCF.
European Investment Bank (EIB) ¹⁰²	Renewable energy and energy efficiency	<p>There is no specific engagement in Belize. Belize was the beneficiary of the GCF approved multi-country GEEREF NeXT project, which was approved in April 2017 but lapsed in 2020.</p>	The NDA may re-initiate a dialogue with EIB to identify new potential ways to engage with GCF.
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH ¹⁰³	GIZ operates in all the eight result areas of the Fund with the focus on agriculture and food systems, water security, ecosystems, land use and forestry, off-grid energy access, energy efficiency, health, climate services, and other crosscutting topics for GCF-1 (2020-23).	GIZ has managed a number of climate change projects in the region. These include, for instance, a project to support the monitoring of biodiversity and climate change in the Selva May (Belize, Guatemala, Mexico); and a project focused on Adapting to climate change in the Caribbean to conserve natural resources and diversify farming and forest management (involving Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines).	GIZ has not engaged with the NDA yet. GIZ finalised its entity work programme for the engagement with the Fund during its first replenishment cycle 2020-23. NDA may initiate a dialogue with GIZ to identify potential ways to engage with GCF during its next replenishment cycle starting 2024.
Food and Agriculture Organization (FAO)	Food security and nutrition; Agricultural and rural development, Renewable natural resources and climate change, agricultural health and food safety	FAO’s assistance to Belize has been delivered through approximately 85 interventions over the past 15 years, including a focus on policy advice, advocacy and capacity building as well as emergency assistance and resource mobilisation for the food and agriculture sector. More recently, resilience building and expansion of market access have become important features of cooperation.	One Readiness request being prepared.

¹⁰⁰ Updated by Miguel Angel Méndez Castellanos from CABEI, on 18 November 2020.

¹⁰¹ Updated by Steven Panfil from CI, on 4 November 2020.

¹⁰² Updated by Marika Levena from EIB, on 5 November 2020.

¹⁰³ Updated by Battsetseg Tseren from GIZ, on 16 November 2020.

		FAO is currently working as a DP on a Readiness NAP proposal entitled “Enhancing adaptation planning and increasing climate resilience in the coastal zone and fisheries sector of Belize”, with FAO as the EE.	
Inter-American Development Bank (IDB) ¹⁰⁴	Sustainable energy, natural resource management, private sector development, and public-sector management	The IDB country strategy for the period 2013-2017 aims to support the GoB in improving public expenditure efficiency and effectiveness as well as promoting private sector development and sustainable export-led growth. The strategy concentrates on four priority areas: education, tourism, transport and trade and tax policy. ¹⁰⁵ In line with this, IDB funded the development of the National Sustainable Tourism Master Plan of Belize 2030. IDB also funded the “Caribbean Climate Smart Islands Program” to support the transition to low carbon pathways in Tobago (Trinidad and Tobago), Caye Caulker (Belize) and Harbour Island (The Bahamas) by identifying and implementing climate resilient mitigation measures in the tourism sector. IDB is exploring a GCF Caribbean-basin proposal on adaptation and resilience,	Considering one national and one regional GCF projects.
International Fund for Agricultural Development (IFAD) ¹⁰⁶	Climate resilient agricultural practices	IFAD has been active in Belize since 1986, IFAD providing funding to the GoB for the rural development projects. Its overall strategic goal in Belize is to contribute to improve the livelihood of rural smallholders to gain market access in an economically, socially and environmentally sustainable way. ¹⁰⁷ IFAD is the AE for the national programme Resilient Rural Belize (Be-Resilient) approved in 2019. It aims to increase the economic, social, and environmental resilience of smallholder farmers, thus creating the conditions for farmers to have a sustainable market access for their produce. The project has met all conditions for first disbursement and initial investments are being procured (climate vulnerability assessment and the first two infrastructure investments). The Project Oversight Committee has been established and relevant PMU managerial and technical staff have been recruited. The COVID-19 crisis has however hindered the initiation of field work.	One funding proposal approved.
German Development Bank (KfW) ¹⁰⁸	Promotion of small and medium-sized companies (SMEs) and start-ups; Equity capital; Energy-	KfW has not engaged with the NDA yet, however it supported a regional conservation initiative structured around agreements between the nations of Belize, Guatemala, and Mexico, to preserve cultural, historical and	The NDA may initiate a dialogue with KfW to identify potential ways to engage with GCF.

¹⁰⁴ Updated by Daniel Hincapie-Salazar from IDB, on 18 November 2020.

¹⁰⁵ IDB website, Belize Overview. Accessed on 17th April 2019 at: <https://www.iadb.org/en/countries/belize/overview>

¹⁰⁶ Updated by Oliver Page from IFAD on 5 November 2020.

¹⁰⁷ International Fund for Agricultural Development (IFAD). (2017). Belize: Country strategy note. Available at: https://www.ifad.org/documents/38711644/40077965/Belize%20Country%20strategy%20note%20_0016-1659783803-369_714.pdf/86a9c764-ded5-45e3-86c1-6d60273801bc?1517983702250

¹⁰⁸ KfW was contacted in November 2020 to update the information but has not responded as of December 2020.

	<p>efficient refurbishment of residential buildings; Environment protection; Educational finance for retail customers; Programmes for municipalities and regional promotional banks; Export and project finance; Promotion of developing countries and emerging economies; Financing and consulting for companies investing in developing countries and emerging economies.</p>	<p>biological resources in this vital landscape for Central America and the world.</p>	
<p>International Bank for Reconstruction and Development and International Development Association (World Bank)¹⁰⁹</p>	<p>Renewable energy generation, energy efficiency and access, forestry and sustainable transport; climate change adaptation, disaster risk reduction and ecosystem services (fisheries and water resources management).</p>	<p>The Bank has supported efforts to strengthen Belize's vulnerability to climate shocks and to strengthen public infrastructure. The Country Partnership Framework (CPF) (2018-2022) aims to support Belize in strengthening its economic resilience¹¹⁰.</p> <p>The World Bank has not engaged with the NDA yet.</p>	<p>The NDA may initiate a dialogue with World Bank to identify potential ways to engage with GCF.</p>
<p>International Finance Corporation (IFC)¹¹¹</p>	<p>Investments in for-profit projects in developing countries, with focus on: Agribusiness and Forestry; Financial Institutions; Funds; Health and Education; Infrastructure; Manufacturing; Oil, Gas, and Mining; Public-Private Partnerships; Telecommunications, Media & Technology; Tourism, Retail & Property</p>	<p>The IFC has not engaged with the NDA yet, however in 1998 it signed an agreement to invest up to USD 6 million in a project to strengthen shrimp farming. The loan would finance the expansion of a shrimp farm operated by NOVA Companies Ltd., a shrimp exporting company in Belize, as well as the construction of a shrimp hatchery by Ambergris Aquaculture Ltd. of Belize. The project aimed to expand NOVA's shrimp exports, particularly to the U.S. market.</p>	<p>The NDA may initiate a dialogue with IFC to identify potential ways to engage with GCF.</p>

¹⁰⁹ Updated by Claudia Croce from the World Bank on 4 November 2020.

¹¹⁰ World Bank Group. (2017). International Bank For Reconstruction And Development International Finance Corporation And Multilateral Investment Guarantee Agency Country Partnership Framework for Belize for The Period FY18-22. Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/27145/BELIZE-CPF-FY18-22-04282017-Final-v1-05092017.pdf?sequence=1&isAllowed=y>

¹¹¹ IFC was contacted in November 2020 to update the information but has not responded as of December 2020.

International Union for Conservation of Nature (IUCN) ¹¹²	Nature conservation and governance, nature-based solutions to global challenges such as climate change	IUCN is supporting several projects in the Caribbean region. For instance, IUCN is responsible for the financial implementation and technical support to the Selva Maya Natural Resources Protection Project, involving Belize, Guatemala and Mexico. In addition, a recently approved project “Linking Landscapes in Central America” will be launched, and includes a key transboundary area Belize- Guatemala- Honduras. IUCN has not engaged with the NDA yet, but it is however designing, with several regional organisations, a concept for submission to the GCF related to the resilience of coastal communities in the Mesoamerican Reef Region through ecosystem-based adaptation (EbA) and disaster risk resilience (DRR).	The NDA may strengthen dialogue with IUCN to identify potential ways to engage with GCF. This includes starting a dialogue about the current concept being developed at the regional level.
Japan International Cooperation Agency (JICA) ¹¹³	Education, Health, Water Resources Governance, Peace-Building, Social Security, Transportation, ICT, Energy and Mining, Economic Policy, Private Sector Development, Agricultural/Rural Development, Natural Environment Conservation Fisheries, Gender and Development, Urban/Regional Development, Poverty Reduction, Environmental Management, Disaster Risk Reduction	JICA is carrying out several projects in Belize. One of these is the Caribbean Disaster Prevention Project. Phase II of the project was piloted in Belize, with focus on gathering natural and social data related to disaster management. The data were used to create flood hazard maps, community disaster prevention plans, early flood warning systems, and disaster prevention. JICA has not engaged with the NDA yet.	The NDA may initiate a dialogue with JICA to identify potential ways to engage with GCF.
United Nations Development Programme (UNDP) ¹¹⁴	Energy generation and access; Forest and land use; Livelihoods of people and communities; Ecosystem and ecosystem services; Disaster risk reduction and climate data	UNDP has been active in Belize since 1982. UNDP in Belize is guided by the 2017-2021 Country Programme Document (CPD), and the United Nations Multi country Sustainable Development Framework (UN MSDF 2017-2021). Aligned with the Belize Growth and Sustainable Development Strategy GSDS - (2016-2019) and the 2018-2021 UNDP Strategic Plan, UNDP is committed to supporting the government and people of Belize. UNDP has not engaged with the NDA yet.	The NDA may initiate a dialogue to identify potential ways to engage with UNDP.
United Nations Environment (UNE) ¹¹⁵	1. Promoting ecosystem-based approaches that enable climate	UNE has implemented a number of GEF-funded projects in the Caribbean region including Belize, such as “Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)” focused on reducing the negative environmental and human health	The NDA may initiate a dialogue with UN Environment to identify potential ways to engage with GCF.

¹¹² Updated by Sebastien Delahaye from IUCN on 4 November 2020.

¹¹³ Updated by Shinji Maruyama from JICA on 19 November 2020.

¹¹⁴ Updated by Jihyea Kim from UNDP on 6 November 2020.

¹¹⁵ Updated by Virginie Fayolle from UNE on 2 December 2020.

	<p>adaptation and mitigation</p> <p>2. Building and developing national capacity for climate information and early warning systems to support evidence-based climate planning and decision-making at all levels</p> <p>3. Fostering low-emission development through the promotion of energy efficiency and renewable energy</p>	<p>impacts from untreated wastewater discharges; “Catalysing Implementation of Strategic Action Programme for the Sustainable Management of shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems” to facilitate an ecosystem-based management/ecosystem approach to fisheries in the Caribbean Large Marine Ecosystems; and “Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem and Adjacent Regions” focused on adopting an ecosystem-based management approach among other things to assist Caribbean countries to meet the World Summit on Sustainable Development target for sustainable fisheries.</p> <p>UNE has not engaged with the NDA yet.</p>	
World Wildlife Fund (WWF) ¹¹⁶	Wilderness and biodiversity preservation, coastal marine management, watershed management, sustainable agriculture, eco-tourism, climate change	<p>WWF works in a cross-sectoral fashion in Belize, involving public and private entities along with civil society. It is managing the project “Climate-Smarting Marine Protected Areas and Coastal Management in the Mesoamerican Reef (MAR) Region”, to identify viable adaptation options and management scenarios to address climate risks to resources within the coastal zone of Belize. WWF has also been working with the GoB, to generate nature-based time-bound targets to increase ambition for protection of coastal ecosystems within Belize’s NDC. WWF is functioning as part of the NDC Partnership’s Technical Work Group for Belize’s NDC updating.</p> <p>WWF also supported the Belize’s Coastal Zone Management Authority and Institute (CZMAI) and the Natural Capital Project to develop and update an integrated coastal zone management plan.</p> <p>WWF aims to integrate the conservation work it has been doing in Belize since 1980 into climate-related projects and programmes for submission to the GCF. It has engaged with the NDA regarding the project idea it is working on, which was prioritised during the Structured Dialogue event held in October 2020: “Building Resilience for Coastal Communities and the Fisheries and Tourism Sectors through Improved Governance and Sustainable Financing for Marine Protected Areas”. WWF is engaging with national stakeholders to identify EEs for the project idea, as well as developing the GCF concept note.</p>	<p>One project idea being developed.</p> <p>Their entity work programme (EWP) is being developed.</p>

¹¹⁶ Updated by Nadia Bood from WWF on 6 November 2020.

Belize's portfolio for engagement with the GCF

The initial Belize's Country Programme for the GCF was finalised in June 2019 and updated in November 2020. It includes a portfolio anchored in the economic plan of the country, and comprises climate change priority actions that have been selected following a methodology ensuring that they are relevant and in alignment with national development priorities, and involve key national stakeholders for the development and implementation of such projects and programmes. As part of the updating process, a call for project ideas to be submitted to the GCF was organised in October 2020, before such projects underwent prioritisation by national stakeholders in November 2020. More details on the updating process's methodology are available in Annex 4: Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update. This section reflects the project/programmes, project preparation support, and readiness support projects that are occurring in Belize and in which the NDA has been engaged. The section is organised as follows:

- **A Country portfolio**, which includes approved GCF projects/programmes, Readiness programmes as well as approved Project Preparation Facility (PPF) requests.
- **A Country pipeline**, which includes GCF projects/programmes, Readiness programmes as well as pending Project Preparation Facility (PPF) requests to be submitted for funding to the GCF.

Portfolio

As of November 2020, the Belize's GCF portfolio includes the following projects and programmes funded by the GCF:

Table 26. Overview of Belize's portfolio of projects and programmes funded by the GCF

No.	Project title	AE (or DP)	EE	National / Multi-country	Sector(s)	Impact area	Implementation timeframe
Projects / Programmes							
1	Resilient rural Belize (Be-Resilient)	IFAD	IFAD	National	Agriculture	Adaptation	2019 - 2024
Readiness Programmes							
2	Support for the accreditation of the Development Finance Corporation and Social Investment Fund of Belize	CCCCC	CCCCC	National	Cross-sectoral	Cross-cutting	2018 - 2021
3	Support to the Protected Areas Conservation Trust (PACT) - Capacity Building	PACT	NDA	National	Cross-sectoral	Cross-cutting	2020 – 2022
4	Support for Strengthening Belize Private Sector Access to Climate Finance	CDB	BCCI	National	Cross-sectoral	Cross-cutting	2020 – 2021
5	Readiness to further assist the Development Finance Corporation (DFC) gaps for GCF accreditation	CDB	DFC	National	Cross-sectoral	Cross-cutting	2020 - 2021
6	Strategic Regional Readiness to enable resilience of Mesoamericans five Great Forest and Communities	Costa Rica's NDA/ Wildlife Conservation Society	Wildlife Conservation Society	Multi-country	Forestry	Cross-cutting	2020 – 2021
7	Regional Early Warning Systems	Antigua & Barbuda's NDA	Caribbean Disaster Emergency Management Agency	Multi-country	DRM	Adaptation	2019 - 2021

8	Enhancing Caribbean Civil Society's Access and Readiness for Climate Finance	CANARI	CANARI	Multi-country	Cross-sectoral	Cross-cutting	2020 - 2022
9	Support the development of a Credit Risk Abatement Facility (CRAF) for CARICOM States	CDF	CDF	Multi-country	Energy	Cross-cutting	2019 - 2020
10	Strengthening the foundation for a climate responsive agricultural sector in the Caribbean	IICA	IICA	Multi-country	Agriculture	Cross-cutting	2021 - 2022
Project Preparation Facility requests							
11	A Scalable Demonstration Energy Project using <i>Arundo donax</i> to replace fossil energy in the generation of electrical energy	CCCCC	CCCCC	National	Energy	Cross-cutting	FP to be submitted in December 2020
12	Building the Adaptive Capacity of Sugarcane Farmers in Northern Belize	CCCCC	BSI/NDA	National	Agriculture	Adaptation	2020 - 2022
13	Unlocking Climate Finance for Development Finance Institutions in Belize, Jamaica and St. Lucia	CDB	CDB	Multi-country	Cross-sectoral	Cross-cutting	2020 - 2021

As of November 2020, the GFC has funded one project¹¹⁷ in Belize, which is a national adaptation agriculture project implemented through IFAD, approved in February 2019.

To date, four Readiness projects are being implemented at the national level.

- Support for the accreditation of the Development Finance Corporation and Social Investment Fund of Belize
- Support to the Protected Areas Conservation Trust (PACT) - Capacity Building
- Support for Strengthening Belize Private Sector Access to Climate Finance
- Readiness to further assist the Development Finance Corporation (DFC) gaps for GCF accreditation

At the regional level, the following Readiness assignments are on-going:

- Strategic Regional Readiness to enable resilience of Mesoamericans five Great Forest and Communities
- Regional Early Warning System (EWS)
- Enhancing Caribbean Civil Society's Access and Readiness for Climate Finance
- Support the development of a Credit Risk Abatement Facility (CRAF) for CARICOM States
- Strengthening the foundation for a climate responsive agricultural sector in the Caribbean

In terms of PPF requests that have been approved, and are now supporting the development of projects, the following two national and one regional projects are represented in the portfolio:

- A Scalable Demonstration Energy Project using Arundo donax to replace fossil energy in the generation of electrical energy
- Building the Adaptive Capacity of Sugarcane Farmers in Northern Belize
- Unlocking Climate Finance for Development Finance Institutions in Belize, Jamaica and St. Lucia

All the portfolio projects and programmes are described in detail in the tables below.

¹¹⁷ The other multi-country project funded by GCF which involved Belize has lapsed. It was the EIB GEEREF NeXt project.

Table 27. Country projects/programmes portfolio

Project Title	Description	Accredited Entity	Submission timeframe
1. Resilient Rural Belize (Be-Resilient)	<p>(National Project)</p> <p>The programme aims to increase the economic, social, and environmental resilience of smallholder farmers, thus creating the conditions for farmers to have a sustainable market access for their produce. The programme proposes a comprehensive approach to reduce the exposure to climate and economic shocks by promoting climate-smart agricultural production, investing in climate proof infrastructure, supporting producer associations, and strengthening value chains to reinsert smallholder farmers as reliable, competitive suppliers of domestic produce in Belize.</p>	IFAD	Approved at B.22 (February. 2019) – FP101
Fund level strategic impacts		Total financing: USD 20 M	
<p>(Adaptation)</p> <p>Increased resilience of:</p> <ul style="list-style-type: none"> • Health, food and water security • Livelihoods of people and communities • Infrastructure and built environment 		<p><u>GCF:</u> USD 8 M (USD 2 M loan + USD 6 M grant)</p>	<p><u>Other:</u> USD 12 M (loan + grant + equity)</p>
Action	Lead	Timeline	
FAA to be signed	IFAD	5 years	

¹¹⁸ Communication from Oliver Page from IFAD received on 5 November 2020: "COVID 19 has significantly hindered the capacity of the project to engage in field work, which is a critical aspect of conducting vulnerability assessments and defining investments. Some of this work is being conducted virtually, and as restrictions are eased the PMU staff have been reengaging in field activities."

Table 28. Country Readiness Programme portfolio

Title	Description	Delivery Partner	Submission timeframe
2. Support for the accreditation of the Development Finance Corporation and Social Investment Fund of Belize	<p>(National Project) This project seeks to further strengthen Belize’s national capacities to effectively and efficiently access, manage, disburse and monitor climate financing. The activities of the project will complement those of the previous Readiness support received for building the capacity of the NDA and the preparation of Country Strategic Framework, implemented through the CCCCC, including on the initial no-objection procedure and the NDA website.</p> <ul style="list-style-type: none"> • Support for accreditation is provided to SIF. It is seeking support from a to undertake a gap assessment against the GCF accreditation requirements¹¹⁹. • Post accreditation support to PACT is provided to strengthen the capacity of stakeholders in identifying and developing climate related projects and in developing a GCF Entity Work Programme. 	CCCCC	Submitted and approved (January 2019)
		Total financing: USD 355,365.00	Status On-going
		<u>GCF:</u> 355,365.00 (grant)	Approved, awaiting disbursement. Readiness support will target SIF and PACT, while DFC’s will be supported through a separate project.
Action	Lead	Timeline	
Under implementation	GCF	24 months (extended until May 2021)	

Title	Description	Delivery Partner	Submission timeframe
3. Support to the Protected Areas Conservation Trust (PACT) - Capacity Building	<p>(National Project) Post-accreditation Readiness support to PACT for strengthening the capacity of NDA to fulfil its role as the National Implementing Entity. Specifically, readiness support will be used to:</p> <ul style="list-style-type: none"> • Meet the conditions of accreditation set by the GCF; • Establish PACT’s planning framework for engagement with the GCF; • Mobilise climate action among national stakeholders; and 	PACT	Approved (December 2016)
		Total financing: USD 279,062.00	Status
		<u>GCF:</u> USD 279,062.00 (grant)	Project launched on July 30 2020. Consultants were hired for the environmental and

¹¹⁹ As of November 2020.

	<ul style="list-style-type: none"> Strengthen its capacity to identify, design, and implement climate projects to meet GCF requirements. 		<p>social safeguards, gender elements.</p> <p>NDA to monitor progress and work closely with PACT as the DP to avoid delays of project.</p>
Action	Lead	Timeline	
Under implementation	PACT	24 months anticipated duration	

Title	Description	Delivery Partner	Submission timeframe
4. Support for Strengthening Belize Private Sector Access to Climate Finance Building Private Sector Capacity to Access GCF Resources	<p>(National Project)</p> <p>This readiness initiative, which builds on previous work undertaken from a Jamaica led Readiness Project – “Entity Support and Private Sector Mobilisation”, will now address the need to strengthen the private sector in Belize to access funds from the GCF. Specifically, the readiness support will be used to:</p> <ul style="list-style-type: none"> Strengthen private sector engagement with the GCF through knowledge building; Crowd-in private sector investment for climate actions; and Build capacity within private sector to develop GCF concept notes/funding proposals 	CDB	Approved (December 2019)
		Total financing: USD 297,537.00	Status
		<u>GCF:</u> USD 297,537.00	<p>CDB and UNOPS to finalise the signing of grants.</p> <p>NDA and BCCI to finalise the starting date of project (tentatively November 2020). Project launched during first Structured Dialogue (October 2020).</p>
Action	Lead	Timeline	
Under implementation	MFEDI and BCCI	12 months (can be extended for six months under new GCF guidelines due to COVID-19).	

Title	Description	Delivery Partner	Submission timeframe
5. Readiness to further assist DFC gaps for GCF accreditation	<p>(National Project)</p> <p>Understanding that climate financing must be scaled up to match increasing demand, the Government of Belize (GoB) has nominated the Development Finance Corporation (DFC) of Belize for accreditation to the GCF as a Direct Access Entity (DAE). In 2019, PriceWaterhouseCoopers (PwC) conducted a Gap Assessment of DFC to analyse the Corporation’s</p>	CDB	Approved (December 2020)
		Total financing: USD: 5,120,577.00	Status
		<u>GCF:</u> USD 5,120,577.00	Grant Agreement between CDB and UNOPS was signed in the first quarter of 2020.

	<p>performance regarding the requirements of GCF accreditation standards. The assessment identified a number of performance gaps and recommendations for actions to be taken by DFC to meet GCF accreditation standards.</p> <p>This proposed Readiness project is informed by the recommendations from the PwC Gap Assessment. The Readiness project provides technical support to strengthen the operational policies of the DFC to enable compliance with GCF accreditation requirements. The project outputs will include the following:</p> <ul style="list-style-type: none"> • Investment Management Policy; • Asset and Liability Committee; • Environmental and Social Management System; • Internal Audit Policy and Procedures; • Procurement Policy and Procedures; and • Communication Policy 	
Action	Lead	Timeline
Under implementation	CDB	14 months

Title	Description	Delivery Partner	Submission timeframe
6. Strategic Regional Readiness to enable resilience of Mesoamericans five Great Forest and Communities	<p>(Multi-country Project)</p> <p>This proposal seeks funding to support the Government of Costa Rica to leverage regional and international cooperation in support of its national approach to nature-based climate change solutions (NBS). Mesoamerica’s Five Great Forests Initiative is a critical pillar of the region’s climate strategy and is essential to ensure the resilience of Indigenous and local forest-dependent communities. Costa Rica is leading efforts to galvanize regional political support and mobilise financial resources for the Initiative. However, Costa Rica and the region currently lack the resources and capacity to develop a regional GCF programme. This application builds on the Wildlife Conservation Society’s ongoing work with CR to identify projects and programmes</p>	<p>Wildlife Conservation Society</p> <p>Total financing: USD 1,100,000.00</p> <p><u>GCF:</u> USD 340,828.00</p> <p><u>Belize:</u> USD 60,000.00</p>	<p>Approved (January 2020)</p> <p>Status</p> <p>Grant Agreement between Costa Rica NDA and UNOPS to be signed</p>

	for NBS and to build capacity of Indigenous and local communities to engage in national and regional decision making. Readiness funding will support pre-feasibility studies, regional alignment of NDCs, NAPs, and consultation with Indigenous partners (including FPIC) to prepare a regional GCF programme concept to ensure the resilience of Mesoamerican Forests and the forest-dependent Indigenous peoples and local communities. Support will help Costa Rica develop new approaches to climate change mitigation and adaptation and expand its access to GCF funding.		
Action	Lead	Timeline	
Under implementation	Wildlife Conservation Society / Costa Rica's NDA (Ministry of Environment and Energy)	12 months	

Title	Description	Delivery Partner	Submission timeframe
7. Regional Early Warning System	<p>(Multi-country Project)</p> <p>This readiness initiative seeks to provide support for improving regional and national level mechanisms and capacity for achieving climate resilience through advancing Multi-Hazard Early Warning Systems (MHEWS). Specifically, the readiness support will be used to:</p> <ul style="list-style-type: none"> Strengthen the country programming process; and Strengthen the climate finance strategies and project pipeline. 	Caribbean Disaster Emergency Management Agency	Approved (December 2019)
		Total financing: USD 1,747,223.00	Status
		GCF: USD 1,747,223.00	Approved by GCF. Belize supported with USD 50,000. Signing of grant agreement.
Action	Lead	Timeline	
Under implementation	Antigua and Barbuda NDA (Ministry with responsibility for the Environment)	24 months anticipated duration	

Title	Description	Delivery Partner	Submission timeframe
8. Enhancing Caribbean civil society's access and	<p>(Multi-country Project)</p> <p>This readiness initiative seeks to enhance civil society's capacity to improve access to climate financing and delivery of</p>	CANARI	Approved (November 2019)
		Total financing:	Status

readiness for climate finance	climate change adaptation and mitigation in the Caribbean. Specifically, the readiness support will be used to: <ul style="list-style-type: none"> • Develop mechanisms for CSO engagement and consultation in the Caribbean; • Scale up CSO-led climate change solutions; • Strengthen technical and organisational capacity of Caribbean CSOs to access climate finance; and • Enhance awareness among civil society/public/private sector to develop Caribbean CSO-led projects 	USD 1,296,958.00	Approved by GCF. Signing of grant agreement. Launched at the first Structured Dialogue (October 2020).
		<u>GCF:</u> USD 1,296,958.00 (grant)	
Action	Lead	Timeline	
Under implementation	Jamaica NDA (Ministry of Economic Growth and Job Creation), supported by NDAs of Antigua and Barbuda, Belize, Grenada, St Kitts and Nevis, St Lucia, Suriname	24 months anticipated duration	

Title	Description	Delivery Partner	Submission timeframe
9. Support the development of a Credit Risk Abatement Facility (CRAF) for CARICOM States	(Multi-country [Belize and St Lucia] Project) This readiness initiative seeks to strengthen SMEs access to finance and encourage the private sector to provide additional lending to SMEs for renewable energy and energy efficiency projects in the Caribbean. Specifically, the readiness support will be used to design the CRAF with three components: <ul style="list-style-type: none"> • A Credit Risk Instrument to stimulate additional lending with risk mitigation feature via underwriting; • A Technical Assistance Facility to grow the market; and • A M&E/improvement programme. 	CARICOM Development Fund (CDF)	Approved (October 2019)
		Total financing: USD 124,986.00	Status
		<u>GCF:</u> USD 124,986.00 (grant)	Three consultants hired to complete the CRAF Readiness. CDF has 6 months to complete. CDF to inform NDA and UNOPS if no-cost extension will be needed due COVID-19.
Action	Lead	Timeline	
Under implementation	CDF	12 months anticipated duration	

Title	Description	Delivery Partner	Submission timeframe
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10. Strengthening the foundation for a climate responsive agricultural sector in the Caribbean” (CARICOM AgREADY)	The AgREADY project seeks to raise the profile of the agricultural sector in GCF’s climate financing prioritization processes by implementing an evidence-based and intersectoral strategy for developing and rebranding Caribbean agriculture as “low-emissions”, to enhance market opportunities and attract private sector investments. The project logic is premised on a vision of developing “A Climate responsive agricultural sector in the Caribbean that supports food security, livelihoods and uses natural resources sustainably” by addressing barriers of ineffective mechanisms and engagement with agricultural experts and stakeholders in GCF climate programming processes, policy gaps, and limited or fragmented data/information to inform climate risks planning, programming, and action in the sector. The Project targets nine countries (The Bahamas, Belize, Dominica, Haiti, St. Kitts and Nevis, St. Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago) in the CARICOM sub-region	IICA	Approved
		Total financing: USD 1,199,943.00	Status On-going
		GCF: (grant) 1,199,943.00	Approved, awaiting disbursement.
Action	Lead	Timeline	
Under implementation	IICA	12 months	

Table 29. Country Project Preparation Facility portfolio

Country Project Preparation Facility portfolio			
Project Title	Description	Accredited Entity	Submission timeframe
11. A Scalable Demonstration Energy Project using Arundo donax to replace fossil energy in the generation of electrical energy	(National Project) The <i>Arundo donax</i> Project (ADP) was initiated to supplement bagasse for energy production to ensure a continuous supply of electricity to BEL annually. The Project will be rolled out over a four-year period involving a Compatibility Testing Phase of	CCCCC	Approved (January, 2018)
Fund level strategic impacts		Total financing: (project preparation) USD 739,700.00	Status

<p>(Crosscutting)</p> <ul style="list-style-type: none"> • Increased resilience of most vulnerable people and communities • Increased resilience of health and well-being, and food and water security • Reduced emissions from energy access and power generation • Reduced emissions from forestry and land use 	<p>the technical feasibility of <i>Arundo donax</i> being burnt in the BELCOGEN boilers, a Field Research Phase of various agronomic parameters, and a Commercial Production Phase.</p> <p>The proposal has two components.</p> <ul style="list-style-type: none"> • Financing studies including Stakeholder Analysis and preparation of a Stakeholder Engagement Plan, a Gender Study and preparation of a Gender Action Plan, an Environmental and Social Impact Assessment with the production of the Environmental Impact Management Plan, and a Feasibility Study of the Investment Proposal. • Carrying out compatibility test, which is the actual burning of the prepared biomass in the BELCOGEN furnace to determine performance, etc. 	<p><u>GCF</u>: USD 694,000.00</p>	<p><u>Other</u>: CCCCC: USD 45,700.00</p>	<p>PPF Disbursed and under implementation.</p> <p>As of November 2020, the following studies are finalised: stakeholder analysis, gender study, feasibility and ESS studies.</p> <p>The following activities have taken place: harvest, transport and stockage of wild cane and combustion and compatibility test.</p>
<p>Action</p>	<p>Lead</p>	<p>Timeline</p>		
<p>Under implementation</p>	<p>CCCCC</p>	<p>15 months. The funding proposal will be submitted in December 2020.</p>		

Country Project Preparation Facility portfolio			
Project Title	Description	Accredited Entity	Submission timeframe
12. Building the Adaptive Capacity of Sugarcane Farmers in Northern Belize	<p>(National Project) This project will strengthen the adaptive capacity of farmers by using GCF support to design effective and efficient climate adaptation responses; evaluate recommended a climate resilient agriculture practices and technologies; conduct a cost-benefit analysis for the practices identified; and elaborate on the impacts of climate variability and change on sugarcane productivity to which the practices identified will respond to.</p> <p>The financing studies include Feasibility study; Stakeholder Analysis and Management and Engagement Plan; Gender Studies; Risk Assessment, Register and Mitigation Plan; and Economic and financial analysis.</p>	CCCCC	Approved (August 2020)
Fund level strategic impacts		Total financing: Project preparation: USD 599,765.29 Project: USD 20,278,250.00	Status
<p>(Adaptation) Increased resilience of:</p> <ul style="list-style-type: none"> • Most vulnerable people and communities • Ecosystem and ecosystem services 		<p><u>GCF PPF:</u> USD 594,357.79</p> <p><u>Project Financing:</u> <u>GCF:</u> USD 9,994,250.00</p>	<p><u>Project preparation:</u> USD 5,407.50</p> <p><u>Project Financing:</u> USD: 10,284,000</p>
Action	Lead	Timeline	
Under implementation	CCCCC	18 months to implement Project Preparation activities.	

Country Project Preparation Facility portfolio				
Project Title	Description	Accredited Entity		Submission timeframe
13. Transforming Finance to Unlock Climate Action in the Caribbean	(Multi-country [Belize, Jamaica and St. Lucia] Project) CDB aims to use GCF PPF resources to develop a full funding proposal for the Transforming Finance to Unlock Climate Action in the Caribbean programme. The Programme aims to unlock private sector investment to transform Caribbean productive sectors and energy systems through blending GCF and CDB resources to extend concessional lines of credit to DFIs who will on-lend to MSMEs and homeowners for climate action investments. The financing studies include a Feasibility study; ESMS and Stakeholder Engagement Plan; Gender studies; Economic and financial analysis; and lastly, the development of the funding proposal.	CDB		Approved (September 2020)
Fund level strategic impacts		Total financing: USD <u>Project preparation:</u> 694,000.00 <u>Project financing:</u> 68,250,000.00		Status
(Crosscutting) <ul style="list-style-type: none"> • Reduced emissions from energy access and power generation • Reduced emissions from low emission transport • Reduced emissions from buildings, cities and industries and appliances • Increased resilience of most vulnerable people and communities • Increased resilience of infrastructure and built environment 		<u>GCF:</u> <u>PPF:</u> USD 694,000.00 <u>Project financing:</u> <u>GCF:</u> USD 41,998,000.00 (senior loans and grants)	<u>Project preparation:</u> Other: n.a. <u>Project financing:</u> Other: USD 26,255 million (senior loans).	Under implementation.
Action	Lead	Timeline		
Under implementation	CDB	12 months		

Pipeline

As of November 2020, the Belize's pipeline includes the following concept notes/funding proposals/project ideas for engagement with the GCF. As for the portfolio, the pipeline is divided between GCF projects/programmes, Readiness programmes as well as Project Preparation Facility (PPF) requests that have been identified for imminent or potential submission to the GCF.

The detailed methodology of the prioritisation process is available in Annex 4: Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update

The status column reflects whether the projects/programmes are at project idea stage (high level idea or internal concept note being prepared by the project proponent), GCF Concept Note stage (a concept note is being prepared/is awaiting GCF feedback) or GCF funding proposal stage (a funding proposal is being prepared).

Table 30. Overview of Belize's pipeline of projects and programmes for GCF funding

Project title	AE (or DP)	EE	National / Multi-country	Sector(s)	Impact area	Project proponent	Status
Projects / Programmes							
Fast-track projects and programmes							
Most advanced projects/programmes as of March 2021¹²⁰							
Building "Guardians of the Forest and Regenerative Agriculture" Communities in Forest Buffer Zones Across Rural Belize	CCCCC	IICA	National	Agriculture and forestry	Cross-cutting	IICA	Concept note stage
Building Resilience for Coastal Communities and the Fisheries and Tourism Sectors through Improved Governance and Sustainable Financing for Marine Protected Areas	WWF	TBC (CZMAI considered)	National	Coastal and marine resources	Cross-cutting	WWF	Project idea stage
Building the Climate Resilience of the New River Watershed in Belize	PACT	PACT, Department of Environment, Forestry Department and Department of Agriculture	National	Natural resources and biodiversity	Cross-cutting	PACT	Concept note stage
Climate Adaptation through disaster risk management perspective in Belize	PACT	Belize Red Cross Society	National	Disaster risk management (DRM)	Adaptation	PACT	Concept note stage
Strengthening the Belize National Protected Areas System (NPAS) to provide Natural Solution to the Impacts of Climate Change	PACT	APAMO	National	Natural resources and biodiversity	Cross-cutting	PACT	Concept note stage

¹²⁰ In line with the latest [2021 GCF Country Programme Guidance](#), the NDA has earmarked the most advanced project/programmes as of March 2021. This is based, among others, on AEs' level of engagement and progress to date on preparing the project/programme. These projects/programmes' short and medium-term support needs are described hereafter.

Establishing a National Cohune Industry	CDB	CCCCC	National	Land Use and Forestry	Mitigation	JV partnership led by Cohune Ltd.	A PPF request is being prepared
Piloting urban climate smart planning and development for sustainable development co-benefits in at risk and underserved urban communities	TBC	CCCCC	National	Construction	Cross-cutting	Belize Association of Planners	Project idea stage
Additional fast-track project/programmes¹²¹							
Caribbean Cacao production for competitiveness and climate resilience	TBC (CCCCC or DFC considered)	TBC (CCCCC or DFC considered)	National	Agriculture	Adaptation	Toledo Cacao Growers' Association	Project idea stage
The Road to Resilient (R2R) fisheries – adopting ecosystem-based adaptation in four CARICOM Member States	CCCCC	Caribbean Regional Fisheries Mechanism	Multi-country	Fisheries	Adaptation	CCCCC	GCF Concept Note stage (under preparation)
(Increasing resilience of) the Belize Citrus Industry by transforming it to a juice industry	TBC	TBC	National	Agriculture	Adaptation	Citrus Growers' Association	Project idea stage
Integrated Flood Management in the Upper Belize River Watershed	CCCCC	San Ignacio and Santa Elena town council	National	Disaster risk management (DRM)	Adaptation	San Ignacio and Santa Elena town council	GCF concept note stage (awaiting feedback)
Mainstreaming Coral Reef Resilience and Restoration as an Ecosystem-based Adaptation Strategy to Climate Change in the Caribbean Region (MaCREAS)	CCCCC	CCCCC	Multi-country	Coastal and marine resources	Adaptation	CCCCC	GCF concept note stage (under preparation)
Climate Actions for Building Resilience in Coastal Communities in the Caribbean (CA-BRIC Caribbean)	CCCCC	CCCCC	Multi-country	Coastal and marine resources	Cross-cutting	CCCCC	GCF funding proposal stage (under preparation)

¹²¹ Fast track project/programmes include all the project/programmes prioritised during the Structured Dialogue as well as those submitted after the event but which however met the pre-screening criteria. See Annex 4 for the detailed prioritisation methodology.

Belize Transport Sector Transformation (Be-EVs)	CCCCC	TBC	National	Transportation	Mitigation	CCCCC	Project idea stage
Optimized Sugarcane Bio refinery in Belize	CCCCC	TBC	National	Agriculture	Mitigation	CCCCC	GCF Concept Note stage (under preparation)
Revitalizing and Caring for Diverse Ecosystems of Indigenous Communities for Climate Change Adaptation and Mitigation: A Model for Sustainable Development and Environmental Stewardship in the Maya Region	TBC	TBC	National	Natural resources and biodiversity	Cross-cutting	Maya Leaders Belize	Project idea stage
Combatting climate change and biodiversity decline in Belize through reimagination of the urban connection with nature	PACT	Belize Tourism Industry Association or Friends of Swallow Caye	National	Natural resources and biodiversity	Cross-cutting	Friends of Swallow Caye	Project idea stage
Scaling up the Integrated Utilities Services (IUS) model to support energy sector transformation	CDB	Barbados Light and Power; Belize Electricity Limited; Guyana Power and Light; and the Jamaica Public Service Company Ltd.	Multi-country	Energy	Mitigation	CDB	GCF Funding Proposal stage (under preparation)
Non-fast track projects							
Promoting Affordable Climate Resilient Buildings for SMES and Green Financing	TBC	BCCI	National	Construction	Adaptation	BCCI	Project idea stage
Green Finance for MSMEs in the Agriculture and Fisheries Sectors	TBC	Belize Union Credit League (BCUL)	National	Agriculture and fisheries	Cross-cutting	BCUL	Project idea stage

Research & Development of Biodegradable Sargassum Mask	TBC	TBC	National	Tourism	Adaptation	Belize Association	Hotel	Project idea stage
Traditional Savanna Fire Management Emissions Reductions for Belize	TBC	TBC	National	Land Use and Forestry	Cross-cutting	Forest Department		Project idea stage
Continued reef replenishment with the critically endangered acroporid corals in Belize	CCCCC (proposed)	Fragments of Hope	National	Marine resources	Adaptation	Fragments of Hope		Project idea stage
Solar Water Stations for Tourism Attractions	TBC	Ministry of Tourism and Civil Aviation (MTCA)	National	Tourism	Mitigation	MTCA		Project idea stage
Green Financing products	TBC	TBC	National	Finance	Mitigation	St. Francis Xavier Credit Union		Project idea stage
Resilience landscape for sustainable sugarcane production in Northern Belize	WWF (proposed)	Sugar Industry Research and Development Institute (SIRDI)/WWF	National	Agriculture and land use	Cross-cutting	SIRDI		Project idea stage
Recovering degraded agricultural lands in Northern Belize	TBC	TBC	National	Agriculture	Mitigation	Belize Department	Forest	Project idea stage
National Environmental Pollution and Climate Change Studies Laboratory for a Healthy and Resilient Belize	TBC	TBC	National	Cross-sectoral	Adaptation	University of Belize		Project idea stage
Development of a National Marine Dredging Policy	TBC	TBC	National	Marine and coastal resources	Adaptation	Ministry of Natural Resources (MNR)		Project idea stage
Improving livelihoods of vulnerable rural communities within the sugar cane belt for climate resilience and adaptation through Solar Power Packaging plant	TBC	TBC	National	Energy	Cross-cutting	Progressive Cane Association	Sugar Producers	Project idea stage

Biochar Production	CCCCC	TBC	National	Agriculture	Cross-cutting	Ministry of Natural Resources (MNR)	Project idea stage
Greening MSME's in Belize – Energy Efficient Technologies	PACT	Beltraide	National	Energy	Mitigation	PACT	Project idea stage
Readiness Programme							
Belize's Multisector National Adaptation Plan – Building Climate Resilience in Natural Resource Dependent Sectors	PACT	NCCO	National	Cross-sectoral	Adaptation	n/a	GCF Proposal stage (under preparation)
Water National Adaptation Plan (NAP)	CCCCC	MNR	National	Water	Adaptation	n/a	GCF Proposal stage (awaiting feedback)
Enhancing adaptation planning and increasing climate resilience in the coastal zone and fisheries sector of Belize	FAO	FAO	National	Coastal and fisheries	Adaptation	n/a	GCF Proposal stage (integrating GCF feedback)
Comprehensive Building Sector Reform Project	CCCCC	Ministry of Infrastructure Development & Housing (MIDH)	National	Construction	Cross-cutting	n/a	Project idea stage
Enhancing Climate Change Resilience of Health Systems in the Caribbean	PAHO/WHO	Unknown	Multi-country	Health	Adaptation	n/a	GCF Proposal stage (awaiting feedback)
Enhancing Coherence and Complementarity and Building Climate Resilience in the Caribbean	CDB	TBC	Multi-country	Cross-sectoral	Adaptation	n/a	GCF Proposal stage (awaiting feedback)
Project Preparation Facility							
Fast-track projects							
Prioritised by national stakeholders during First Structured Dialogue held on 20-22 October 2020							

<p>Increasing Resilience in the Fisheries Sector of Caribbean SIDS, through Climate Change Adaptation (CCA) and Enhancing Livelihoods in Vulnerable /Fishing Communities (IRCFish)</p>	CCCCC	CCCCC	Multi-country	Fisheries	Cross-cutting	CCCCC	Concept note stage (under preparation)
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As of November 2020, Belize has identified several project / programme requests for consideration by the GCF that are in line with the Country's main climate change priorities, including the NDC and NCCPSAP, as well as the GCF's investment criteria and priority impact areas.

National stakeholders' inputs were also gathered as part of the initial preparation of the Country Programme in 2019, as well as during the pipeline's updating process in November 2020. Information on the Country Programme's elaboration and recent update's methodology is available in Annex 4: Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update. More background information on the roles and contributions of stakeholders involved is available in Annex 5: Roles and contributions of key national stakeholders on the elaboration and update of Belize's Country Programme for engagement with the GCF and their contact information is presented in [Annex 6: List of stakeholders involved in the Country Programme consultations](#)

With regards to the addressed impact areas, a strong adaptation focus is reflected by the pipeline, although cross-cutting projects and programmes are also numerous, in particular for the natural resources and biodiversity sector. In terms of sectoral breakdown, agriculture and fisheries is one of the most prominently represented sectors, with 10 projects, reflecting the sector's importance to the Belizean economy while also its climate vulnerability. Marine and coastal projects (seven) are also well represented, showing the need to address climate impacts, including sea level rise, on Belize's coastal areas, and the associated impacts on important sectors such as tourism.

Regarding the energy sector, often covered from a mitigation perspective, it does not seem to sufficiently embed climate resilience. However, without strengthening resilience many new investments might be in danger of being affected by climate change. In the future, it is therefore envisaged that at least one study on climate change impact on existing energy infrastructure be undertaken, possibly in preparation of a multi-sectoral National Adaptation Plan (NAP). In the short term, such analysis will allow to define weak infrastructure points (e.g. energy grids prone to flooding). This can inform renewable energy projects structuring. In the long term, might create foundations to structure resilient infrastructure projects in Belize.

Furthermore, in order for the country programme to be aligned with the national development plan and aim to address, among other issues, the existing significant trade deficit in Belize, should also focus on improving the resilience of the country's export industries, to further reduce vulnerability to shocks that would lead to increasing the trade deficit.

Fast track and non-fast track

A breakdown of selected project / programme requests is presented according to the agreed two-track approach, as follows:

- **Fast-track:** Projects and programmes that are at a more advanced preparation stage and have received stakeholder validation. Some of them already are at a concept note or funding proposal development stage. As for project ideas, they include concrete investment projects of sufficient scale, with a clear climate rationale, along with complete information (AE and EE identified, activities are developed, potential co-financing has been identified). They could qualify for PPF funding. They also do not duplicate existing GCF-funded activities from the country's portfolio. Projects that have been prioritised by national stakeholders during the first Structured Dialogue held on 20-22 October 2020, to collect feedback on project ideas, are

included under the fast-track list. More details on project prioritisation methodology is available in [Annex 4: Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update](#)

- **Non-fast track:** Projects and programmes that are still at a very preliminary idea stage and will require further preparatory work, including potential re-scoping to become bankable (i.e. to align with GCF requirements). An EE and/or AE have often not been identified. A GCF Readiness funding for pipeline development could be developed to move them to concept note development stage. Some projects and programmes might also benefit from merging with additional smaller ones, to build a more programmatic approach to GCF project submission. Importantly, the GCF cannot fund the same activity twice consecutively, therefore similar project proposals in the Country Programme must be streamlined/merged. The projects and programmes in the non-fast track list can be considered as an indicative second round pipeline for the next iteration of the Country Programme.

The fast track/non-fast track approach was not applied to Readiness projects, as these aim to improve and accelerate Belize's engagement with the GCF.

No project factsheet is provided for non-fast track projects, given that these are likely to be merged as part of broader projects/programmes.

AEs' role in further developing the pipeline

As shown in the project tables below, not all the AEs for the implementation of the selected concept notes or funding proposals have been identified yet. **Belize's NDA and national stakeholders will prioritise working with the current national DAE and more DAEs that are expected to be accredited in the future.** Belize's NDA and national stakeholders will also **prioritise working with AEs with whom they have built the most efficient relationships in the past.** This will be the main criterion used in Belize for selecting international AEs, and the process for selecting them will therefore be based on the creation of strategic partnerships with organisations with whom there is a track record of past working experiences, based on their sectoral expertise. Knowledgeable entities which represent an opportunity for an easier access to GCF funds would also be prioritised.

AEs and EEs should develop their proposals in line with the overall strategic framework outlined in the Country Programme, and in doing so help identify further priority actions. Existing and future DAEs in Belize should engage in open consultations to gather project ideas and develop concept notes/funding proposals, and shall follow the same no-objection procedure to obtain endorsement by the NDA. DAEs **shall refer to the NDA as their focal point** to engage with the GCF for what concerns approval of projects and Readiness support. However, DAEs also have a direct line of communication with the GCF secretariat being in a legal relationship with the Fund.

National AEs should ensure that their **entity work programmes (EWPs)** are aligned with and complement the impact areas and sectoral breakdown of projects included under this pipeline. PACT is currently the only national AE, and is completing its EWP's preparation, which will include project ideas, concept notes and full funding proposals. It is recommended the EWP considers this pipeline when finalising its EWP. It will also be relevant for potential national AEs that are in the process of accreditation (e.g. Belize Social Investment Fund (BSIF), Development Finance Corporation (DFC)).

There is a risk that the NDA becomes saturated with GCF proposals. **One of the coordination functions**

required at the NDA level is 'donor intelligence'. Donor intelligence aims at strategically aligning projects *ex ante*, that is, before project approval. Some of the AEs with previous engagements in Belize are accredited to other funds (e.g. GEF, AF). An analysis of how potential complementarity and coherence can be realised, by assessing whether a project could be rather funded through another fund, or whether co-financing or scaling-up can be foreseen, while limiting GCF only for priority actions for the country, is a key tool for coordination and ensures that proposals are presented to the most relevant fund. This analysis could be developed by the NDA under future Readiness support projects.

The tables below provide a detailed descriptions of the projects and programmes in the pipeline (Table 31), Readiness support projects/programmes (Table 32) and PPF requests (Table 33).

Table 31. Country Projects/Programmes pipeline

Country projects/programmes pipeline				
Project Title	Description	Accredited Entity		Submission timeframe
Building "Guardians of the Forest and Regenerative Agriculture" Communities in Forest Buffer Zones Across Rural Belize	(National) The project's objective is to increase resilience to climate change by building economically-productive guardians of forest and farm-landscape communities through establishing sustainable regenerative agriculture and forest conservation systems integrated with sustainable business enterprises. The project has four components:	CCCCC		As soon as new support letter (from the Ministry of Agriculture) and no objection letter from the NDA are obtained.
Fund level strategic impacts		Total financing: USD 11,058,540.00		Status
Cross-cutting N/A	<ol style="list-style-type: none"> 1. Regenerative Agriculture (with activities - soil and water management, Inga-Alley cropping systems, agroforestry); 2. Strategies for Resource Conservation (strengthening national policies, community conservation protocols and agreements, ecosystem adaptation plans, agreements for partnerships between national and local bodies); 3. Business capacity (integrated stock assessments - identifying opportunities for businesses, training and coaching in business and marketing, community businesses established for farm and forest products); 4. Knowledge management (communication and 	<u>GCF:</u> n/a	<u>Other:</u> n/a	This is a SAP project. Concept note finalised

	<p>awareness campaign, 'guardians of the forest and regenerative agriculture' recognition programme). Working with four of Belize's leading conservation and forest protection NGOs, the project will target ten forest-buffer communities (buffering: Vaca Forest Reserve, Cockscomb Basin Wildlife Reserve, Golden Stream Corridor Preserve and Shipstern Conservation and Management Area) to create a paradigm shift in their agricultural and forest-use activities – creating a transformation in practices from “business as usual” to systems that are regenerative and sustainable. The project will create model forest-buffer communities practicing regenerative agricultural methods and sustainable use of forest resources.</p>			
Action	Lead	Timeline		
Concept note finalised and ready for submission. New support letter (from Ministry of Agriculture) and no objection letter form NDA obtained.	IICA	8 years		
Short/medium-term GCF support required:				
The project will require support through feasibility studies, environmental, social and gender studies, risk assessments, identification of programme and project level indicators, revision of tender documents, advisory services to financially structure a proposed activity. This will however be defined more specifically in the PPF application.				

Country projects/programmes pipeline			
Project Title	Description	Accredited Entity	Submission timeframe
Building Resilience for Coastal Communities and the Fisheries and Tourism Sectors through Improved Governance and Sustainable Financing for Marine Protected Areas	(National) Belize's reefs, mangroves and seagrass beds are threatened by climate change and impacting the welfare of coastal communities who depend on these ecosystem services to provide essential habitat for fisheries, sustain the foundation of the marine tourism economy and protect	WWF	N/A
Fund level strategic impacts		Total financing: USD 120,000,000.00	Status

N/A	<p>coastal infrastructure and assets against coastal erosion from sea level rise and storm surge. Belize will participate in the Global Coral Reefs Resiliency Program, a joint undertaking of WWF and the GCF to deliver adaptation solutions to sustain the world's most resilient reefs. The program will provide countries support to ensure productivity of their reef and coastal ecosystems by addressing climate-related threats as well as key stresses on these ecosystems from land-based pollution and their over-exploitation through:</p> <ol style="list-style-type: none"> 1. Holistic coastal zone and marine use planning, ocean governance and climate buffering focused on Belize's coastal-marine ecosystems 2. Financial Sustainability for Marine Protected Areas: Economic Anchor of Coastal Communities 3. Financial systems for regenerative production and practices with market outcomes 4. M&E, Knowledge Management, and Communications 	GCF: USD 30,000,000.00 (subject to change)	Other: n/a	Project idea stage.
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Action	Lead	Timeline
Concept note to be developed	WWF supported by Belize NDA and CZMAI	10 years

Short/medium-term GCF support required:

- Elements included in the PPF proposal will be:
 - a full climate vulnerability analysis to ensure the project is targeted to and benefits the local populations likely to experience the most severe and direct impacts of climate change
 - a gender study to ensure the project's beneficiaries are gender-balanced and specifically address the vulnerabilities and needs of women, a feasibility study that covers all project elements,
 - an additional feasibility analysis that goes deeper into evaluating the potential for a community investment facility to strengthen adaptation and resilience of the vulnerable communities identified and/or a blended finance facility that would provide concessionary financing to economic actors/sectors to reduce land-based pollutants that compromise the reef's health.
- The approximate value of the PPF grant is USD 750,000.00. A final amount can be determined after the GCF Secretariat's approval of the Concept Note when the final contours of the project are confirmed.
- Should the GCF note additional resources or support they could provide to elaborate the full funding proposal, their recommendations would be well-received. WWF would welcome learning from the GCF high impact and expanding portfolio of coastal marine projects, and importing the project elements which they have found successful and could be adapted for the specific conditions in Belize (e.g. [FP126](#)).

- Identification of a development bank or private financial institution partner that can provide access to low-cost capital.
- Prioritisation of Belize within the Global Fund for Coral Reefs, an initiative of the GCF and BNP Paribas to provide USD 400 million to stimulate for-profit activities in reef countries to improve adaptation and resilience.

Programme Title	Description	Accredited Entity		Submission timeframe
Building the Climate Resilience of the New River Watershed in Belize	<p>(National)</p> <p>The proposed project intends to restore the ecological functionality of the Watersheds by minimising climatic impacts via the implementation of a long-term riparian protection program to increase water quality and security. The proposed project components incorporate a community-based approach to avoid future eutrophic and anaerobic conditions of the river during periods of drought, by devising mechanisms to restore and maintain the riparian forest, water quality and the ecological functionality of the catchment.</p> <p>The proposed intervention has four interdependent components that aim to improve the ability of the watershed to provide safe and secure water resources, including drinking water, to buffer communities.</p> <ol style="list-style-type: none"> 1. Rehabilitation of water catchment via a community based riparian forest management for enhanced ecosystem services 2. Improved water management 3. Utilization of climate smart agriculture for sustainable development practices 4. Enhancing knowledge dissemination, capacity building and outreach. 	PACT		N/A
Fund level strategic impacts		Total financing: USD 7,510,000.00		Status
Cross-cutting n/a		GCF: 7,510,000.00	Other: n/a	Concept note stage (under preparation)
Action	Lead		Timeline	
To be developed into a concept note/funding proposal.	PACT, and Belize's Department of Environment; Forestry		3 years	

	Department; and Department of Agriculture	
Short/medium-term GCF support required:		
<ul style="list-style-type: none"> • Pre-Feasibility and Feasibility Study, including project design and risk analysis • Technical Assistance for the development of the project proposal via a Consultancy Firm . • Stakeholder Engagement Plan and project level grievance redress mechanism • Stakeholder Consultations – Financing to conduct sessions • Gender Assessment • Gender Action Plan with indicators and targets • Logical Frameworks – Identification of project level indicators and methods to monitor them • Pre-Contract Services – Terms of References • Identification and assessment of potential executing entities in the funding proposal to GCF 		

Project Title	Description	Accredited Entity	Submission timeframe
Climate Adaptation through disaster risk management perspective in Belize	This project explores climate-smart disaster risk management as a climate adaptation strategy to ensure vulnerable communities become more resilient and better prepared for disasters and climate change impacts. This will be achieved by establishing informed people-centred climate planning, monitoring, and the introduction of climate-smart technology to improve well-being.	PACT	The CN could be submitted to GCF within six months to a year's time.
Fund level strategic impacts		Total financing: USD 7,280,000.00	Status
Adaptation: increase resilience of: <ul style="list-style-type: none"> • Most vulnerable people and communities • Health and well-being, and food and water security • Infrastructure and built environment • Ecosystem and ecosystem services 		GCF: 6,280,000.00 (grant) Other: 1,000,000.00 (grant)	Concept note under preparation
Action	Lead	Timeline	
Finalise and submit the concept note.	PACT and Belize Red Cross Society	15 years	

Short/medium-term GCF support required:			
<ul style="list-style-type: none"> • Pre-Feasibility and Feasibility Study, including project design and risk analysis • Technical Assistance for the development of the project proposal via a Consultancy Firm . • Stakeholder Engagement Plan and project level grievance redress mechanism • Stakeholder Consultations – Financing to conduct sessions • Gender Assessment • Gender Action Plan with indicators and targets • Logical Frameworks – Identification of project level indicators and methods to monitor them • Pre-Contract Services – Terms of References • Identification and assessment of potential executing entities in the funding proposal to GCF 			

Programme Title	Description	Accredited Entity	Submission timeframe
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Strengthening the Belize National Protected Areas System (NPAS) to provide Natural Solution to the Impacts of Climate Change	<p>(National) The Program/Project seeks to use a ridge-to-reef approach to achieve a network of national marine and terrestrial protected areas (over 100 sites in Belize spanning 1.29 million acres of biodiversity) contributing to improve socio-cultural, environmental, and economic resilience to climate change related impacts in buffer communities.</p> <p>The components of the project include:</p> <ol style="list-style-type: none"> 1. Science-Based Approach to Management of the NPAS for Increased Resilience 2. Climate-Resilient Communities of the NPAS 3. Information and Knowledge Management for Sustainable Adaptation Strategies 	PACT		N/A
Fund level strategic impacts		Total financing: 10,000,000.00		Status
<p>Mitigation. Reduced emissions from:</p> <ul style="list-style-type: none"> • Forestry and Land Use <p>Adaptation: Increased resilience of:</p> <ul style="list-style-type: none"> • Most vulnerable people and communities • Ecosystems and ecosystem services 		<u>GCF:</u> 10,000,000.00	<u>Other:</u> n/a	Concept note stage

Action	Lead	Timeline
To be developed into a concept note/funding proposal.	APAMO	n/a

Short/medium-term GCF support required:

- Pre-Feasibility and Feasibility Study, including project design and risk analysis
- Technical Assistance for the development of the project proposal via a Consultancy Firm .
- Stakeholder Engagement Plan and project level grievance redress mechanism
- Stakeholder Consultations – Financing to conduct sessions
- Gender Assessment
- Gender Action Plan with indicators and targets
- Logical Frameworks – Identification of project level indicators and methods to monitor them
- Pre-Contract Services – Terms of References
- Identification and assessment of potential executing entities in the funding proposal to GCF

Project Title	Description	Accredited Entity	Submission timeframe
Establishing a National Cohune Industry	<p>(National)</p> <ul style="list-style-type: none"> • Conservation of 30,000 acres of tropical rainforest under direct threat and being aggressively destroyed by illegal milpa and other activities (property adjacent to St. Herman’s Block, Blue Hole National 	CCCCC	N/A
Fund level strategic impacts		Total financing: USD 35,000,000.00	
<p>(Mitigation) Reduced emissions from:</p> <ul style="list-style-type: none"> • Forestry and land use 		<u>GCF:</u> USD 10,500,000.00	<u>Other:</u> USD 24,500,000.00

	<p>Park) Sequestration of estimated 3.2 million tCO₂eq. Catalytic project in the protection of millions of additional Cohune trees countrywide, thereby enhancing the climate rational of the project exponentially.</p> <ul style="list-style-type: none"> • Arrest illegal logging, poaching and significantly mitigate the risk of wildfires on the property through drone support in conjunction with a comprehensive fire prevention plan (strategically located monitoring towers, and water well sources and fire-fighting equipment). • Commercialisation of Cohune nuts extracted from the property and rural communities countrywide to manufacture edible products, cosmetics, residential and industrial filters, products for the chemical, pharmaceutical and agro-industries • Creation of thousands of jobs for rural residents of villages with high density of Cohune countrywide. • Participating rural communities will earn 100% of the Net Strip Value 			
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	(NSV) of Cohune Nuts from their Communities, (economic impact for approx. 25,000 Belizeans)			
	<ul style="list-style-type: none"> • Preserve natural habitat for a wide variety of animals • Earn significant Foreign Exchange from the export of a variety of Cohune Based products. 			
Action	Lead		Timeline	
Concept note is being finalised and a PPF request is under preparation.	JV partnership led by Cohune Ltd		TBD	
Short/medium-term GCF support required:				
<ul style="list-style-type: none"> • A Light Detection and Ranging (LIDAR) study to precisely confirm and quantify the available Cohune nut stock, and then be able to confirm the project's financial feasibility. A LIDAR survey will also provide landscape modelling, to study the landscape to facilitate the construction of the infrastructure network that will facilitate the optimal level of efficiency for the extraction process and the minimum level of infrastructure required. This is necessary to complete the cost estimates of the overall project. • Environmental Impact Assessment (EIA): the completion of the LIDAR study will greatly facilitate the completion of the EIA as it relates to the design of the required level of infrastructure. • Social and Gender Studies: consultations with the identified rural communities with high densities of Cohune Trees are required to confirm the level of participation countrywide as well as the quantification of the level of impact of the industry on these communities. • Total preparatory support to be determined. 				

Programme Title	Description	Accredited Entity		Submission timeframe
Piloting urban climate smart planning and development for sustainable development co-benefits in at risk and underserved urban communities	(National) The project intends to introduce and demonstrate smart urban planning, design, development and management strategies that shape urban form and influence the behaviour of residents and businesses to use energy efficient technologies and materials through taxation and economic incentives or disincentives, such that significant co-benefits can be derived to deliver on the sustainable development goals.	CCCCC		N/A
Fund level strategic impacts		Total financing: USD 25,000,000.00		Status
n/a	This will be achieved by: 1. Enhancing the institutional and community governance structures and public-private sector partnerships	<u>GCF:</u> TBC	<u>Other:</u> TBC	At the project idea stage (October 2020)

	<p>for planning, implementing monitoring and evaluating climate change mitigation and adaptation policies, programmes and projects</p> <p>2. Increasing awareness and knowledge of climate smart urban design and the use of urban forms, energy efficient technologies and materials for climate change mitigation and adaptation, while at the same time leveraging private-public sector partnerships for low carbon development pathway and co-benefits to deliver on the sustainable development goals, and</p> <p>3. Piloting a demonstration initiative of 4 climate smart urban communities in varying stages of development (inner city, periphery and sub-urban/dormitory) through a comprehensive project that integrates climate resilience, social cohesion and economic opportunities for infrastructure, people, ecosystems and governance.</p>			
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Action	Lead	Timeline
To be developed into a concept note/funding proposal.	Belize Planners' Association	5 years

Short/medium-term GCF support required:

- Pre-feasibility/feasibility studies
- Environmental, social and gender studies
- Risk assessments
- Identification of programme and project level indicators
- Revision of tender documents
- Advisory services to financially structure a proposed activity
- Potentially other project preparation activities.

Country projects/programmes pipeline			
Project Title	Description	Accredited Entity	Submission timeframe
Caribbean Cacao production for competitiveness and climate resilience	(National) Due to severe droughts, increases in temperature and erratic weather, the traditional	TBC (CCCC or DFC considered)	N/A

Fund level strategic impacts	<p>but highly important Cacao industry in southern Belize is challenged with low Cacao yields and low product output due to the highly sensitive cacao bean processing. With further climate, changes the Cacao industry proposes a project with the objectives:</p> <ol style="list-style-type: none"> 1. To build climate resilience by upscaling and strengthening the processing and packaging of Cacao bean and develop value added Cacao products in Belize 2. To implement an extensive varietal diversification program with better more resilient available varieties, promoting and adopting climate resilient practices to improve climate and pest affected yields. 3. Strengthen the marketing and supply chain of the industry to improve benefits for over 500 small-scale farmers in southern Belize. 	Total financing: USD 12,000,000.00		Status
Adaptation TBD		<u>GCF:</u> USD 5 to 10,000,000.00	<u>Other:</u> n/a	At the project idea stage (October 2020)
Action		Lead		Timeline
Concept note to be developed		Toledo Cacao Growers' Association		5 years

Country projects/programmes pipeline			
Project Title	Description	Accredited Entity	Submission timeframe
The Road to Resilient (R2R) fisheries – adopting ecosystem-based adaptation in four CARICOM Member States	<p>(Multi-country; 4 countries [Belize, Grenada, Jamaica, St. Kitts and Nevis])</p> <p>Climate stressors have degraded the health of coral reefs and associated ecosystems in the Caribbean, threatening the delivery of ecosystem services to the local communities that depend on them. This programme seeks to increase the resilience and adaptative capacity of coastal fishing communities and coastal and marine resource users to climate risks, by adopting coastal and marine ecosystem-based solutions in marine managed areas of four CARICOM Member States through three components:</p> <ol style="list-style-type: none"> 1. Incorporating a natural capital approach to adaptation that supports decision-making in marine managed areas; 2. Implementing a Technical Assistance Facility to guide and implement ecosystem-based adaptation solutions; and 3. Strengthening knowledge management to raise awareness and share skills through established fisheries data hubs 	CCCCC	N/A
Fund level strategic impacts		Total financing: USD 12,462,800	Status
<p>Adaptation</p> <ul style="list-style-type: none"> • Most vulnerable people and communities • Ecosystem and ecosystem services 		<p><u>GCF:</u> USD 9,962,800.00 (grants)</p> <p><u>Other:</u> 2,500,000.00</p>	<p>This is a SAP project.</p> <p>GCF Concept Note under preparation (October 2020)</p>
Action	Lead	Timeline	
CN in development.	Caribbean Regional Fisheries Mechanism	3 years	

Country projects/programmes pipeline			
Project Title	Description	Accredited Entity	Submission timeframe
(Increasing resilience of) the Belize Citrus	(National)	TBC	N/A

Industry by transforming it to a juice industry	The citrus industry is Belize's second largest agricultural industry but is on a downward trend because of unproductive trees and tree disease exacerbated by a changing climate. To maintain the livelihood of the thousands dependent on the citrus industry, the Citrus Growers Association and other stakeholders sought to transform the citrus industry to a juice industry and to increase the efficiency of the processing plant. This project aims to incorporate other "juice-able" crops other than citrus, and to increase the efficiency of the processing plant; the latter being done by using high-density planning, installing irrigation systems and expand soursap production.		
Fund level strategic impacts		Total financing: USD 21,000,000.00	Status
Adaptation N/A		<u>GCF:</u> n/a	<u>Other:</u> n/a
Action	Lead	Timeline	
Concept note to be developed	TBC	5 years	

Country projects/programmes pipeline			
Project Title	Description	Accredited Entity	Submission timeframe
Integrated Flood Management in the Upper Belize River Watershed	(National) San Ignacio and Santa Elena towns located in western region Belize are affected by seasonal flash floods which have become more intense over the past three decades due to climate change. These changes have increased the vulnerability of residents putting lives and livelihoods at risk. The Government of Belize, through its local government, the San Ignacio/Santa Elena Town Council and its partners, are intent in procuring additional funds through the GCF, to upgrade the drainage network in flash-flood prone areas of the San Ignacio and Santa Elena municipalities. Part of the funds will be used to finance the upgrade of drainage networks, pollution remedial treatment infrastructure, climate risk communication measures, and a comprehensive public	CCCCC	Concept note submitted to the GCF (March 17 th 2020) and awaiting feedback.
Fund level strategic impacts		Total financing: USD 10,860,000.00	Status
Adaptation. Increased resilience of: <ul style="list-style-type: none"> Most vulnerable people and communities Ecosystem and ecosystem services 		<u>GCF:</u> USD 9,842,500.00 (grant and equity)	<u>Other:</u> n/a

	awareness and education programme on climate risk management. These activities will be supported by a multi-disciplinary team from various specialised agencies and implanted via an integrated and participatory approach.		
Action	Lead	Timeline	
Pending GCF review.	CCCCC and San Ignacio & Santa Elena Town Council	4 years	

Country projects/programmes pipeline				
Project Title	Description	Accredited Entity		Submission timeframe
Mainstreaming Coral Reef Resilience and Restoration as an ecosystem-based Adaptation Strategy to Climate Change in the Caribbean Region (MaCREAS)	(Multiple countries-6) It is expected that the MACREAS project will contribute significantly to sustaining the ecosystem services of Caribbean reefs to ensure that they are strengthened and restored. Towards this end, the investment proposed under this project is expected to yield significant positive socio-economic and sustainable development benefits by contributing to the reduction of coastal erosion and the hazard mitigation associated with storms surges and sea level rise (SLR) given that the Caribbean is one of the most vulnerable regions in the world to the impacts of climate change with the majority of infrastructure and residents in these countries located in coastal communities and low-lying areas. CCCCC will work with a variety of collaborating agencies and partners that are established in the target countries. This shall include the following organisations who will function as National Coordinating Partners, including Fragments of Hope in Belize.	CCCCC		CN answered (December, 2017) Draft Pre-feasibility study submitted (November, 2018) GCF Concept note stage (Submission expected in October 2020)
Fund level strategic impacts		Total financing		Status
(Adaptation) Increase resilience of: <ul style="list-style-type: none"> • Most vulnerable people and communities • Health and well-being, and food and water security • Ecosystems and ecosystem services 		<u>GCF:</u> USD 8,156,200	<u>Other:</u> n/a	This is a SAP project. Substantial reformulation of Project implementation strategy recommended. No-objection letter provided by Belize NDA.
Action	Lead	Timeline		
Concept note to be submitted	CCCCC	4 years		

Programme Title	Description	Accredited Entity	Submission timeframe
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Climate Actions for Building Resilience in Coastal Communities in the Caribbean (CA-BRIC Caribbean)	<p>(Multiple Countries [Barbados, Belize, Guyana, Jamaica, Saint Lucia, and Saint Vincent and the Grenadines])</p> <p>The objective of the proposed programme is to demonstrate Enhanced Direct Access through climate compatible development initiatives, which build resilience, reduce emissions and promote development simultaneously in the freshwater resources and coastal infrastructure sectors in the Caribbean.</p> <p>This programme has three main components:</p> <ol style="list-style-type: none"> 1. Capacity building for transparency, inclusiveness, effectiveness, efficiency and devolved decision-making for EDA implementation 2. Direct access for the implementation of concrete community-based adaptation actions. 3. Public awareness and lessons learnt for increased projects' efficiency and effectiveness. 	CCCCC		N/A
Fund level strategic impacts		Total financing: USD 30,000,000.00		Status
<p>Adaptation. Increased resilience of:</p> <ul style="list-style-type: none"> • Most vulnerable people, communities and regions • Health and well-being, and food and water security • Ecosystem and ecosystem services 		<p><u>GCF:</u> USD 30,000,000.00 (grant)</p>	<p><u>Other:</u> n/a</p>	At the GCF funding proposal stage (October 2020)
Action	Lead	Timeline		
Prepare and submit the funding proposal.	N/A	30 years		

Programme Title	Description	Accredited Entity	Submission timeframe
Belize Transport Sector Transformation (Be-EVs)	<p>(National)</p> <p>The overall goal of this project is pilot the use of Electric Vehicles in Belize aimed at supporting the reduction of GHG emissions in the transport sector of Belize. The Project is aligned with Belize's Nationally Determined Contribution (NDC), which aims at achieving at least a 20% reduction in conventional transportation fuel use by 2030 and promoting energy efficiency in the transport sector through</p>	CCCCC	N/A
Fund level strategic impacts		Total financing: USD 9,600,000.00	Status
Mitigation N/A		<p><u>GCF:</u> n/a</p>	<p><u>Other:</u> n/a</p>

	<p>appropriate policies and investments.</p> <p>This programme has three main components:</p> <ol style="list-style-type: none"> 1. Enhancing the policy and legislative framework to support transition to a low-carbon transport sector 2. Adoption of new technologies to reduce energy intensity in the Transport Sector 3. Capacity and awareness building programme 			
Action	Lead	Timeline		
To be developed into a concept note/funding proposal.	N/A	4 years		

Programme Title	Description	Accredited Entity		Submission timeframe
Optimized Sugarcane Bio refinery in Belize	(National)	CCCCC		N/A
Fund level strategic impacts	<p>A sugarcane bio refinery is needed to produce ethanol for local use and export. The ethanol will reduce gasoline's CO2 emissions and will contribute to Belize NDC Targets and Belize National Sustainable Energy Strategy Goals for mitigation. Belize's GSR Optimized Sugarcane Bio refinery (GSR Project Ph1) will produce 25 MPGY of ethanol for local use and export. The ethanol will reduce gasoline's CO2 emissions by 204,500 tCO2eq/year (39% of Belize's CO2 emission profile for fossil fuels). Local use ethanol will earn Belize dollars. However, hard currency is required to repay Foreign Direct Investment and to maintain operations. A such, USD will be earned from export ethanol (along with its Internationally Traded Mitigation Outcomes [ITMOs]). 5.1 M tCO2eq reduced over project</p>	Total financing: USD 175,000,000.00		Status
<p>Mitigation. Reduced emissions from:</p> <ul style="list-style-type: none"> • Energy access and power generation • Low-emissions transport 		<p><u>GCF:</u> USD 9,980,000.00 (grant)</p> <p>USD 25,020,000.00 (equity)</p>	<p><u>Other:</u> USD 140,000,000.00 (International Development Finance Corporation)</p>	<p>Developing a concept note (October 2020).</p> <p>CCCCC has signed an NDA with the GSR Energy regarding the CN.</p>

	lifetime at a cost-effective USD 3.57/tCO ₂ eq.		
Action	Lead	Timeline	
CN to be finalised for submission through EDA modality.	GSR Energy	n/a	

Programme Title	Description	Accredited Entity		Submission timeframe	
Revitalizing and Caring for Diverse Ecosystems of Indigenous Communities for Climate Change Adaptation and Mitigation: A Model for Sustainable Development and Environmental Stewardship in the Maya Region	<p>(National)</p> <p>The objective of this project is to build indigenous people's resilience to climate change by revitalizing and caring of diverse ecosystems. The project will achieve this through four components:</p> <ol style="list-style-type: none"> 1. Build Belize's indigenous people's capacity to effectively participate with the GCF 2. Enhance natural resources stewardship and sustainable management of ecosystems in 50% of the 41 Maya villages in southern Belize including those in and around critical watersheds and primary forested areas 3. Promoting food production and security in 10 prioritized Maya communities 4. Catalyse a Maya local economy that is built from a Maya way of life (resource stewardship and community stewardship) 	N/A		N/A	
Fund level strategic impacts			Total financing: USD 8,500,000.00		Status
n/a			<u>GCF:</u> USD 7,000,000.00	<u>Other:</u> USD 1,500,000.00	(At the project idea stage (October 2020)
Action	Lead	Timeline			
To be developed into a concept note/funding proposal.	Maya Leaders Belize	5 years			

Programme Title	Description	Accredited Entity	Submission timeframe
Combatting climate change and biodiversity decline in Belize through reimagination of the	(National) Belize is at disproportionately high risk from climate change. Mitigation or adaptation inaction	PACT	N/A

urban connection with nature	would result in biodiversity losses from ocean acidification, sea level rise, temperature increases, extreme weather events and migration of species and peoples. This project is comprised of cross-cutting initiatives in mitigation and adaptation in the population centres of Belize to reduce the carbon footprint of the tourism industry and to safeguard biodiversity through a more innovative relationship between humans and nature.		
Fund level strategic impacts		Total financing: USD 15,000,000.00	Status
Cross-cutting n/a	The Belize Tourism Industry Association (BTIA) and Friends of Swallow Caye (FOSC) aim to tackle the critical challenge of strengthening the resiliency of nature, the workforce and the economy by engaging the country's major population centres and by combining their resources in the tourism and conservation industries respectively, as executing entities of this proposal.	<u>GCF:</u> TBC	<u>Other:</u> TBC At the project idea stage (October 2020)
Action	Lead	Timeline	
To be developed into a concept note/funding proposal.	Belize Tourism Industry Association or Friends of Swallow Caye	5 years	

Programme Title	Description	Accredited Entity		Submission timeframe
Scaling up the Integrated Utilities Services (IUS) model to support energy sector transformation	(Multiple Countries [Barbados, Belize, Guyana, and Jamaica])	CDB		N/A
Fund level strategic impacts	The overall aim of the programme is to assist CARICOM countries to scale up distributed RE and EE among households and businesses through a flexible on-bill approach referred to as the 'IUS' model – one in which the electric utilities play a key role. Under the programme, CDB will work with electric utilities to broaden their business models to provide energy service company type services to their customers to increase investment in distributed energy resources such as renewable power and efficient cogeneration systems, battery systems, energy management and smart applications, and efficient end-use technologies. The programme will assist each utility to support a critical mass of their customers to invest in distributed renewable energy, energy efficiency measures and other distributed energy resources, while also equipping the utilities to scale up the provision of services using the IUS model – reaching more customers and accelerating the transformation toward a low-emissions energy sector beyond programme closure.	Total financing: USD 49,395,000		Status
Mitigation. Reduced emissions from: <ul style="list-style-type: none"> • Energy access and power generation • Low-emission transport • Buildings, cities and industries and appliances 		<u>GCF:</u> USD 21,000,000.00 (grant)	<u>Other:</u> USD 28,395,000.00	Concept note submitted (Sept 2020) and feedback received. GCF funding proposal under preparation (Oct 2020).
Action	Lead	Timeline		
Finalise and submit the funding proposal.	CDB and national NDAs of Barbados, Belize, Guyana, and Jamaica.	6 years		

Table 32: Country Readiness Programme pipeline

Country Readiness Programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
Belize's Multisector National Adaptation Plan – Building Climate Resilience in Natural Resource Dependent Sectors	<p>(National Project)</p> <p>Readiness support for the development of a multisector National Adaptation Plan for national sectors that are included in the National Climate Change Policy Strategy and Action Plan (NCCPSAP). The objective of this project would be to facilitate the design and development of an integrated NAP for a total of 11 sectors; including fisheries and aquaculture, forestry, health, water, agriculture, energy, tourism, coastal and marine resources, land use and human settlements, transportation and solid waste. The purpose of the plan would be to identify and prioritize adaptation actions that can be implemented in the different sectors, to identify coordinating and governance mechanisms for implementing the prioritized actions and to identify funding for implementation and ensuring that vulnerability is decreased to safeguard livelihoods and increase resilience. The process would be conducted with the assistance and inclusion of all relevant stakeholders and government agencies. It will also follow the UNFCCC NAP process technical guidelines for least developed countries. In preparation for the final NAP document a stocktake and gap analysis should be carried out in order to identify the needs and gaps that exist, as well as to prioritize them. A monitoring and evaluation plan and a capacity development plan should also be developed, as well as a climate risk and vulnerability assessment for the different sectors.</p>	PACT (TBC)	TBD
		Total financing:	Status
		TBD	GCF Proposal stage (under preparation).
Action	Lead	Timeline	
Project idea to be discussed; CN and FP to be developed. As part of the broader NAP proposal consider an activity focused on the infrastructure and	NCCO	3 years	

development sector to identify gaps and solutions, prioritise, pilot and prepare concept notes for potential projects, in order to overcome the lack of a comprehensive sectoral plan on critical infrastructure (NCRIP is currently outdated).

Country Readiness Programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
Water National Adaptation Plan (NAP)	The National Hydrological Service (NHS) is charge with the responsibility of managing all of Belize's freshwater resources. However, the office faces several constraints which have restricted their capacity for Integrated waster resource management (IWRM). For example, the department have only six staff members, the Principal Hydrologist, four technical officers and one clerical support staff. In addition to the lack of human capacity, there are significant data and information gaps, increasing demand for fresh water, outdated regulatory framework, ineffective coordination mechanism, the lack of a strategic planning document and the increasing impacts of climate change on freshwater resources. As a result, this Readiness request will support capacitation and empowerment of the National Hydrological Service, to effectively plan and manage Belize's freshwater resources in changing climate.	CCCCC	N/A
		Total financing:	Status
		USD 850,000.00	In the review process. GCF internal NAP review just ended. Interdivisional review ongoing.
Action	Lead	Timeline	
The NDA along with CCCCC and MNR are addressing comments.	MNR/NDA	30 months	

Country Readiness Programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
Enhancing adaptation planning and increasing climate	(National Project) This Readiness seeks to increase the resilience of the coastal zone and	FAO	N/A
		Total financing: USD 600,000.00	Status

resilience in the coastal zone and fisheries sector of Belize	<p>fisheries sector through improved climate data and information gathering, monitoring and dissemination, assessments of impacts of climate change on select communities, mainstreaming of climate change considerations into the relevant plans and policies and strengthening of coastal and fisheries communities and organizations communication network for appropriate climate response.</p> <p>The activities under this readiness will provide important baseline information for building coastal resilience and improving adaptive capacity for fishing communities in the future including the GCF fast track project ideas “Belize coastal vulnerability reduction programme” and “increasing resiliency of the fisheries sector in Belize identified in the country programming framework.</p>	GCF: USDUSD 600,000.00	<p>Readiness proposal submitted May 2020</p> <p>GCF Proposal stage (integrating GCF feedback)</p>
Action	Lead	Timeline	
<p>This project was in the old pipeline. Fisheries and Coastal Zone have submitted a fisheries and coastal NAP readiness with FAO-UN as DP (V2 under GCF review) USD 600,000 grant from the NAPS allocation. First draft submitted to the GCF.NDA to review and resubmit mid-August. V2 proposal submitted. FAO along with the NDA, Fisheries, CZMAI are reviewing and addressing GCF feedback on version 2. NDA to review and resubmit ending of October.</p>	FAO	18 months	

Country Readiness Programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
Comprehensive Building Sector Reform Project	<p>(National Project) This Readiness request seeks to create an enabling environment to promote climate resilient settlements and infrastructure. The project will promote the capacity of human settlements inclusive of</p>	CCCCC	N/A
		Total financing:	Status
		USD 425,717.00	Project idea stage

	<p>critical infrastructure to respond to climate change and climate variability through the following areas:</p> <ul style="list-style-type: none"> • Comprehensive assessment of the policy, regulatory and institutional framework for climate resilient settlement planning and urban land management; • Increasing awareness of the vulnerabilities of human settlements to climate change and best practice in climate action for building climate resilient human settlements and promoting climate-resilient infrastructure and buildings to support sustainable urban development; • Identify Appropriate climate technology solutions in accordance with national strategies and plans for climate adaptation and mitigation and determine the feasibility of selected climate technologies for mitigation and adaption assessed and incorporated into planning processes; and • Strengthen the project pipeline through the development of projects for submission to the GCF. 	
Action	Lead	Timeline
This is high level still. It would take place next year and MIHD is putting together their idea note and then 5Cs will work on it and then integrate into Readiness programme next year. Put together a concept note and see how it goes, then forward it as a project to submit to GCF. USD 500,000 budget	Ministry of Infrastructure Development & Housing (MIDH)	36 months

Country Readiness Programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
Enhancing Climate Change Resilience of	(Regional Project) This Readiness proposal aims to support PAHO/WHO in helping	PAHO/WHO	N/A
		Total financing: USD: 1,785,059.00	Status

Health Systems in the Caribbean	CARICOM Member States implement the 2019 Caribbean Action Plan on Health and Climate Change. The plan addresses the common challenges posed by climate change on health and provide a roadmap for integrated action to protect health and promote sustainable development, under a changing climate. This proposal aims to fulfil the vision of the Action Plan to “ensure that the region is fully engaged in global climate change processes and agreements (...), benefit Caribbean countries and territories by strengthening their technical cooperation methods, and facilitate the access to human, technical and financial resources necessary to address the effects of climate change on health”.	GCF: USD 1,400,000.00 Belize: USD 70,000.00	Submitted to GCF (awaiting feedback)
Action	Lead	Timeline	
Awaiting feedback	Jamaica	18 months	

Country Readiness Programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
Enhancing Coherence and Complementarity and Building Climate Resilience in the Caribbean	(Regional Project) This GCF Readiness project will support the development of a regional GCF concept note that support the establishment of a regional climate finance monitoring, reporting and verification (MRV) system to collect and publish information on funding going to climate change programmes, projects; incorporates ideas for adaptation and mitigation investments in urban spaces; and seeks to better understand the climate finance landscape through mapping of climate funds and donors, which will bring greater coherence and complementarity. This readiness proposal will provide benefits to the Ministry responsible for climate change and environment, Ministry of Finance, public sector, private sector, and civil society.	CDB	N/A
		Total financing: USD 1,700,000.00	Status
		GCF: Belize: USD 300,000.00	Submitted to GCF (awaiting feedback)
Action	Lead	Timeline	
Awaiting feedback.	Guyana	18 months	

Table 33. Country Project Preparation Facility pipeline

Country Project Preparation Facility pipeline				
Project Title	Description	Accredited Entity		Submission timeframe
Increasing Resilience in the Fisheries Sector of Caribbean SIDS, through Climate Change Adaptation (CCA) and Enhancing Livelihoods in Vulnerable /Fishing Communities (IRCFish)	<p>(Multiple countries-15)</p> <p>The programme will: increase resilience of fisheries sector of Caribbean SIDS to climate change impacts, primarily through reducing vulnerability of fishing and other communities to climate change impacts; improving adaptability to climate change; and reducing loss in ecosystem services of coastal/marine habitats.</p>	CCCCC		CN submitted (June 2017)
Fund level strategic impacts		Total financing: USD 85,000,000.00		Status
<p>(Adaptation)</p> <p>Increased resilience of:</p> <ul style="list-style-type: none"> Ecosystem and ecosystem services Most vulnerable people and communities 		<p><u>GCF:</u> USD 50,000,000.00</p>	<p><u>Other:</u> USD 35,000,000.00</p>	<p>CN answered. Initial proposal was not admissible because the project size exceeds the accreditation scope of CCCCC.</p> <p>CN under internal revision, project idea to be repackaged.</p>
Action	Lead	Timeline		
CN under internal revision	CCCCC	TBD		

3. Monitoring, evaluation and update of Country Programme implementation

Monitoring and evaluating GCF-related activities through the Monitoring Reporting and Learning Framework

Aims and structure of the Monitoring Reporting and Learning Framework (MRLF)

As GCF-related activities are implemented in Belize, the Monitoring Reporting and Learning Framework (MRLF) established by the NDA helps to capture and keep track of the progress to date. As such, it constitutes a useful **tool to monitor and evaluate the implementation of the Country Programme**.

Furthermore, as the Country Programme includes all the international climate-related frameworks under which Belize is committed, the MRLF system offers an opportunity to comply with the reporting obligations under the Paris Agreement’s enhanced transparency framework, in accordance with the guidance provided.

As per the MRLF, monitoring and evaluation of GCF activities is done at two levels: the project/programme and the national level.

At the project/programme level, the AE is responsible for preparing a monitoring and evaluation plan for each project/programme to report to the NDA and the GCF. The table below illustrates the GCF reporting requirements. The AE will report to the GCF according to the schedule agreed in the Funded Activity Agreement (FAA).

Table 34. GCF reporting requirements at the project / programme level (source: GCF 101 and GCF 2015)

Reporting Document	Function	Frequency	Responsible authority
Inception Report	To review and sequence activities and, if necessary, to reorganise the project work plan and implementation schedule.	At commencement of the project	AE, EE
Annual Performance Report (APR)	Records the status of implementation of each project activity, updates achievement indicators against targets and identifies implementation-related problems and mitigation measures. The APR includes a narrative report, accompanied by supporting qualitative and quantitative data as needed, describing progress by the AE in implementing the project. The report is based on the logical framework submitted in the funding proposal that specifies project component outputs, outcomes, and activities. The APR considers the GCF Investment Framework criteria, including updates on the indicators and a report on Environmental and Social Safeguards (ESS) as well as a Gender Action Plan. The report should align with the modalities set out in the GCF’s Results Management Framework (RMF) and its Performance Management Framework (PMFs) for adaptation and mitigation, as amended and updated from time to time. The APR shall also indicate challenges or problems (if any) encountered during implementation, as well as identifying lessons learned.	Yearly and final	AE, EE
Mid-term Evaluation Report	Presents preliminary or initial evaluation findings, measures and reports on performance to date, and recommends adjustments (activities and outputs) that may need to be made to ensure the successful implementation of the project.	At mid-point of the project/programme implementation	AE, EE

Reporting Document	Function	Frequency	Responsible authority
Final Evaluation Report	To measure the overall impact, effectiveness, efficiency, sustainability, replicability, and lessons learned of a project.	Upon completion of the project	AE, EE
Yearly audits and financial information	Regular financial reports and yearly/final financial statements.	On annual basis	AE, EE

While the AEs are primarily responsible for the M&E of the GCF-funded activities they carry out, the Executing entities (EEs) are also responsible for reporting project/programme level outputs, activities, and inputs.

An integrated online portal was developed for the MRLF on the new NDA website. This includes a knowledge management system that allows the NDA Secretariat to capture all documents pertaining to the M&E cycle searchable by implementing entity and by project/programme. This is an iterative platform, allowing for an ongoing process of learning and revision as well as for dissemination of GCF documents.

At the national level, the NDA oversees the overall MRLF. It will assess the impacts of all GCF-funded activities in the country, based on AEs reports and with the support of relevant outside expertise. As part of the MRLF, a mechanism will be put in place to conduct annual participatory reviews of the GCF-funded activities, including projects/programmes and readiness support. Consultations will involve local stakeholders, notably project-affected people and communities, including women, indigenous people, and civil society organisations. The NDA will ensure consultations are conducted with equal representation of women.

In addition, it is envisaged that the BNCCC will support the NDA in overseeing the MRLF and, in particular, support the organisation of stakeholder consultations and provide feedback on the outcomes. The results of the consultation will feed into a report to be generated by the MRLF-Focal Point within the NDA office, to be reviewed by the BNCCC and made publicly available on the online portal, which will inform the review of the Country Programme. Suggestions to amend the BNCCC ToR were proposed accordingly. Further amendments could be done in the future to consider the evolving functions to implement the MRLF.

Entry points for MRLF

To maximise the use of resources, it is advisable that the GCF MRLF utilises relevant data and information that are already being collected and feeds data and information into existing M&E processes. Reflecting on the existing regional and national M&E frameworks, the following entry points have been identified:

- The M&E framework was developed to monitor the implementation of **the Growth and Sustainable Development Strategy (GSDS) 2016 – 2019**, and **Horizon 2030: National Development Framework for Belize 2010-2030**. This will also be used to monitor progress towards the international sustainable development agenda as reflected in the Sustainable Development Goals (SDGs) 2030.
- The **Public Sector Investment Programme (PSIP)** has the potential to act as a tracking system as it should capture all information on climate change-related expenditures. The GoB has also promoted the modernisation of Belize's public expenditure management by supporting the strengthening of the procurement system, public financial management system (PFMS), and

public investment management system (PIMS)¹²². The NDA will liaise with the PSIP team to report quarterly on progress and expenditure of GCF funding.

- A **Monitoring Reporting and Verification (MRV) System** to comply with the Modalities, Procedures, and Guidelines set in the Paris Agreement. This has three main products: 1. National GHG Inventory Report; 2. Biennial Transparency Report, providing information to track NDC implementation as well as support needed and received; 3. Adaptation Communication, providing information on climate impacts and adaptation. Impact and progress indicators, institutional arrangements, data collection and storage and an impact assessment of a selected NDC related policy will be integrated into this system. The process is on-going and led by the NCCO.¹²³
- A **National Registry** was developed through GCF Readiness funding to track and monitor GCF-funded activities and other sources of finance for climate change projects, including GEF, AF, bilateral and multilateral donors.¹²⁴

¹²² Interamerican Development Bank. (IDB) (2013). Strategic Planning, Public Investment Management and Monitoring & Evaluation Systems in Belize.

¹²³ Communication from Colin Mattis from NCCCO on 12 November 2020.

¹²⁴ Ministry of Economic Development and Petroleum (MEDP). (2018). GCF Readiness Proposal. Support for the accreditation of the Development Finance Cooperation and Social Investment Fund of Belize.

Country Programme's review and updating procedure

The GCF Country Programme is a living document. As presented here, the current Programme is a five-year outlook. However, it will need to be regularly updated as projects are developed and implemented and new prioritisation processes to identify adaptation and mitigation projects/programmes are undertaken. Besides updates to the Country Programme's portfolio and pipeline, changes to national climate and development circumstances, updates to climate change policy frameworks, and changes to the institutional landscape will also need to be reflected in the Country Programme.

A participatory approach will be used to revise the Country Programme, involving all stakeholders from the government, private sector, associations, civil society, academia, and others.

A standalone **standardised procedure for reviewing the Country Programme** has been developed and constitutes the basis for the regular review and update of the document. The procedure recommends that minor updates occur annually and consist of changes and updates that are made to the existing version based on new information being made available. Major updates should occur biennially and consist of implementing updates, revisions, changes that will require wider stakeholder validation. Figure 12 provides an overview of the standardised procedure, which is available as a separate document.



Figure 12: Illustration of the standardised procedure to update Belize's GCF Country Programme

Annexes

Annex 1. Belize's vulnerability profile: mitigation and adaptation-related sectoral challenges

Key emitter sectors and related mitigation challenges

Agriculture

Approximately 38% of Belize's total land area is potentially suitable for agriculture. However, only 9.7% is used for crop and livestock production. The sector is vital to the economy of Belize because of its export earnings and the employment it creates for a large percentage of the population in rural Belize. Small farmers account for more than 75% of the farming population, with 24% of farms having less than 5 acres, 33% between 5 and 20 acres, and 74% of farms in the country is below 50 acres¹²⁵. The base of the productive sector agriculture employs about 27% of the population. Agriculture and agribusiness have thrived in Belize due to adequate rainfall and a stable year-round tropical climate.

Three main sub-sectors characterised Belize's agriculture sector: a) fairly well-organised traditional export crops for sugar, banana, citrus, and marine products b) a more traditional, small-scale farm sector producing food primarily for local consumption; and c) a large-scale commercial sector¹²⁶.

Major exports are sugar (25.6%), citrus (21.9%), and bananas (17.4%). These commodities are grown in specific zones, e.g., sugarcane in the north, citrus in the south and west, and bananas in the south. The citrus industry has seen a rapid decline during the past eight years, from a production of eight million boxes of citrus to two million boxes primarily due to Citrus Greening disease. This phenomenon has caused the reduction of the number of growers from 495 in 2018 to 329 in 2019 (33% reduction) and has significantly impacted many Belizeans' livelihood adversely. Belize, as compared to other citrus-producing countries, has the highest per capita dependence on citrus.¹²⁷

Other commodities produced and exported to a lesser extent are corn, beans, and livestock. Vegetables for domestic consumption are grown by small subsistence farmers scattered around the country.

Greenhouse gas emissions from agriculture primarily come from livestock, manure management, soil management, and biomass burning. Emissions continuously increased over the three reference years (2012, 2015, and 2017) of 207.04 Gg CO₂eq, 232.07 Gg CO₂eq, and 293.40 Gg CO₂eq respectively, mainly methane (CH₄) from enteric fermentation as livestock populations increased, CH₄ from manure management, direct nitrous oxide (N₂O) from soil management, and biomass burning.¹²⁸

The regulatory entity responsible for agriculture in the Government of Belize (GoB) is the **Ministry of Agriculture, Food Security, & Enterprise (MAFSE)**. See [Key national entities active on climate change issues in Belize](#) for more information on this Ministry.

The policy framework for the agriculture sector is currently the National Food and Agriculture Policy 2015-2030. Table 42 **Error! Reference source not found.** describes this policy in more details.

¹²⁵ Fourth National Greenhouse Gas Inventory Report, May, 2020

¹²⁶ Fourth National Greenhouse Gas Inventory Report, May, 2020

¹²⁷ Ministry of Forestry, Fisheries, the Environment and Sustainable Development (MFFESD). (2020). Belize's first biennial update report.

¹²⁸ Fourth National Greenhouse Gas Inventory Report, May, 2020

Land Use and Forestry

Belize is blessed with large forests that are some of the most diverse and productive ecosystems. Economically, they contribute to formal and well-established industries such as timber and ecotourism. These forests were originally full of tropical hardwoods, but now faster-growing species are becoming more dominant. Although there is a rather profitable export market, much of the lumber cut is used in the local markets. For example, the Mennonite community logs their trees for construction and furniture manufacturing. Local families and other entities also used wood to produce charcoal for consumption by households and small scale commercial and industrial entities, such as white lime production.

The 2015 National Forest Policy forms the main framework for the forestry sector in Belize. The document acknowledges the importance of this sector to the national economy and national development and the different ways in which it will continue to play an integral role in providing and maintaining livelihoods in a sustainable manner. More details on this policy are provided in Table 41**Error! Reference source not found..**

Belize manages 34.9% of its terrestrial areas in Protected Areas (PAs) for forest conservation or resource use. Over the past 50 years, Belize's forests have seen widespread change due to pressures arising from the increasing demand for food, timber supplies, and fuel. In addition, insufficient protection measures in the form of legislation and enforcement have also contributed to the degradation of Belize's forest resources. Deforestation is primarily due to land-use change caused by multiple drivers, including agricultural conversion, infrastructure expansion, unsustainable and illegal logging, as well as hurricanes, pests, and wildfires.¹²⁹ The Forest and Other Land Use sector showed a general increase in emissions between 2009 (-9,868.83 Gg CO₂eq) and 2017 (-6,683.66 Gg CO₂eq) as shown in Table 6, mainly from deforestation and, to a lesser extent, from soil carbon in agriculturally impacted soils.³⁷ While the national forests continued to remove CO₂, this function is declining as deforestation, and forest conversion continue. From the year 2000 onward, the general trend is one of fluctuating decreases and increases of emissions, which can be attributed to natural disturbances, and in some instances, attributed to the change in land use.¹³⁰ The current inventory revealed that the most significant causes of GHG emissions in this sector were land conversions to grasslands and croplands.¹³¹

REDD+ was internationally established as a climate change mitigation mechanism whereby developing countries would be provided with financial rewards and incentives for reducing emissions from deforestation and forest degradation, sustainable forest management, and the conservation of forest carbon stocks. Belize acknowledges the need for and the recognition of the multiple benefits of REDD+ as it relates to the enhancement of ecosystem services and the potential delivery of wider social objectives. Although emissions reductions and, therefore, climate change mitigation will remain at the core of REDD+ in Belize, many other ecosystem services are flowing from forests that contribute to, human well-being and can be enhanced through REDD+ activities and investments. These include watershed protection, building of soils, supporting fisheries, protecting coastlines with mangrove forests, and many others. These services are largely underpinned by biodiversity, which also supports ecosystem resilience, which could contribute to human adaptation to climate change.

The Belize's national REDD+ strategy is currently being developed by the Forest Department and the National Climate Change Office (NCCO). The REDD+ national strategy is one of the products of the

¹²⁹ Forest Department, MAFFESD (2014). Forest Management in Belize. National Forest Policy stakeholder consultations.

¹³⁰ First Biennial Update Report to the United Nations Framework Convention on Climate Change, 2020

¹³¹ Belize's Fourth National Greenhouse Gas Inventory, May, 2020

REDD+ Program of Belize. Under this programme, Belize has completed a National Forest Monitoring System (NFMS) that includes collecting activity data and emission factors in different land-use and monitoring fire disturbances. The system is being improved over time. The data collected are integrated into the forest sector greenhouse gas inventory tool for Belize, which monitors the country's reference level.

The NFMS has activity data up to 2018 that is being updated with new activity data for 2019 and 2020. Also, the collection of data continues for above-ground biomass for emission factors. The National Forest Reference Level (NFRL) was submitted to the UNFCCC in January 2020, and the Safeguards Information System has not yet started and will be completed by September 2020.¹³²

Overall, NDC activities related to reserves and sustainable forest management are expected to potentially reduce GHG emissions by cumulative 410.5Gg CO₂ per year by 2030.⁴ This objective is supported by the on-going REDD+ Project, which assists Belize in preparing to participate in future REDD+ carbon payment transactions and climate finance mechanism. The project includes the establishment of a REDD+ Organisation Framework, Consultation and Grievance Redress, the preparation of REDD+ Strategy, the development of a National Forest Reference Emission Level (NFRL) and a Forest Reference Level (FRL), design of National Forest Monitoring and Safeguards Systems and design of Monitoring and Evaluation Framework.⁶⁷

In this regard, Belize is ready to start implementing REDD+ activities as related to the REDD+ Strategy and is seeking support for the development of the following projects (see below), that will contribute to achieving Belize's NDC objectives.¹³³

- Critical forested landscapes secure Belize's climate resilience;
- Improving livestock management to reduce further degradation of forest associated with livestock production and consequently reduce conflicts between wildlife and humans;
- Contributing to carbon offsets through forest protection, community-based agroforestry, and sustainable forest management;
- Forest inventory and sustainable forest management – a pilot project in freshwater creek forest reserve;
- Management and Protection of Key Biodiversity Areas (KBA) project – second phase.

In addition to the three universal challenges of finance, capacity building, and cost-effective technology, other challenges to be faced by the sector include (i) regulatory, in the form of weak legislation, (ii) lack of human resources, which is linked to (iii) institutional capacity and the strengthening of the Forest Department.

Energy

The analysis of local energy generation sources in Belize in 2019 revealed that renewables made up 86.4% of the primary energy supply, comprising 58.1% biomass, 22.2% solid biofuel (firewood), 6.0% hydro, and solar energy at 0.05%. Crude oil accounted for 12.7%, and petroleum gas accounted for 0.9% (Figure 13**Error! Reference source not found.**). There are four hydropower plants (three on the Macal River and one on the Columbia River). These supply power to the local electricity sector. The power plant BELCOGEN has an input through the conversion of biomass from sugarcane to energy.

¹³² Personal communication with REDD+ team at Forest Department, November 2020.

¹³³ Personal communication with REDD+ team at Forest Department, November 2020.

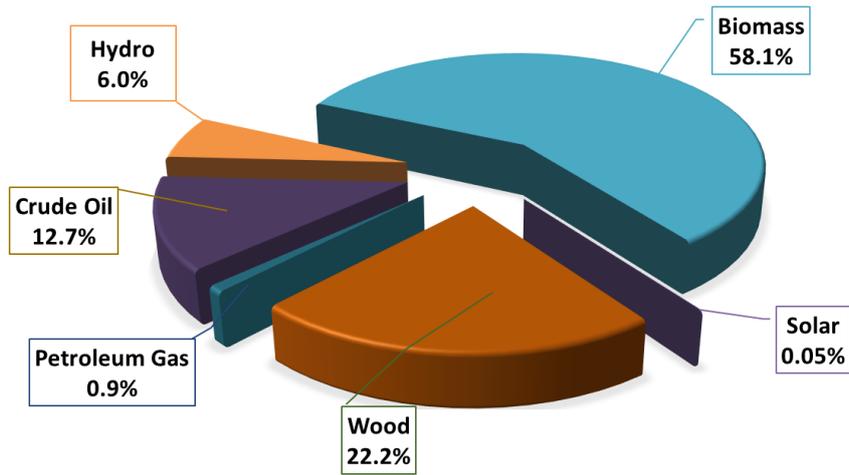


Figure 13: Belize's Indigenous Energy Production by Primary Energy Content in 2019 (Source: Ministry of Energy)

In 2019, Belize also imported a significant amount of its energy in its generation mix in the form of oil products and electricity. Imported electricity from Mexico accounted for 11.5% of the secondary energy supply, diesel accounted for 32%, gasoline 31.1%, and LPG accounted for 11%.

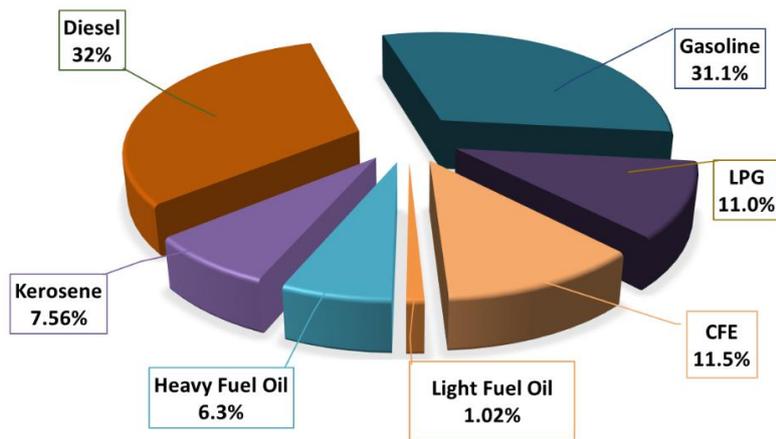


Figure 14. Belize Secondary Energy Supply in 2019 (Source: Ministry of Energy).



Figure 15. Chalillo Hydroelectric Facility (Source: Rapid Ecological Assessment, Upper Macal, Cayo District, <http://biological-diversity.info/chalillo.htm>).

Since 2012, the energy sector showed increases in emissions from transport, electricity generation, and residential purposes due to the rise in the use of petroleum fuels. The electricity generation sub-sector saw a slight increase in the use of petroleum fuels. The largest growth in the use of petroleum fuel was in the transport sub-sector (land, sea, and air), which contributed to increasing greenhouse gas emissions between 2012 and 2015. The use of renewable energy resources (hydropower and biomass) combined with the import of electricity from neighbouring Mexico reduced greenhouse gas emissions for electricity generation¹³⁴. Belize's commitment to mitigating greenhouse gas emissions and fighting climate change has seen a steady increase in employed RE technology over recent years. It leads the way among CARICOM member states in the transformational shift towards clean energy solutions (RE) for electricity generation¹³⁵.

The use of biomass continues to increase as an alternative to petroleum products, mainly for industrial and domestic energy production. In addition to BELCOGEN, there has been an increase in biomass use over the past two years as Santander Sugar Energy Ltd. produces electricity for the national grid. The rise of biomass has also led to increased greenhouse gas emissions from this source. However, sugar cane plants, which are the source of biomass, capture some volumes of CO₂ emitted through photosynthesis, thereby mitigating the adverse effect of the additional generation of this gas¹³⁶.

In 2017, the transport sector remained the main consumer of energy from petroleum products with (95.81% of total energy consumption) followed by the electricity sector (4% of total energy consumption).¹³⁷

Belize Electricity Limited (BEL), which was nationalised in 2011, is the primary distributor of electricity in Belize, serving a customer base of approximately 80,363 accounts. Figure 16 **Error! Reference source not found.** illustrates the key entities in Belize's electricity sector.

¹³⁴ Belize's Fourth National Greenhouse Gas Inventory Report, May, 2020

¹³⁵ Annual Energy Report, 2019, Ministry of Energy

¹³⁶ Belize's Fourth National Greenhouse Gas Inventory Report, May, 2020

¹³⁷ Belize's Fourth National Greenhouse Gas Inventory Report, May, 2020.

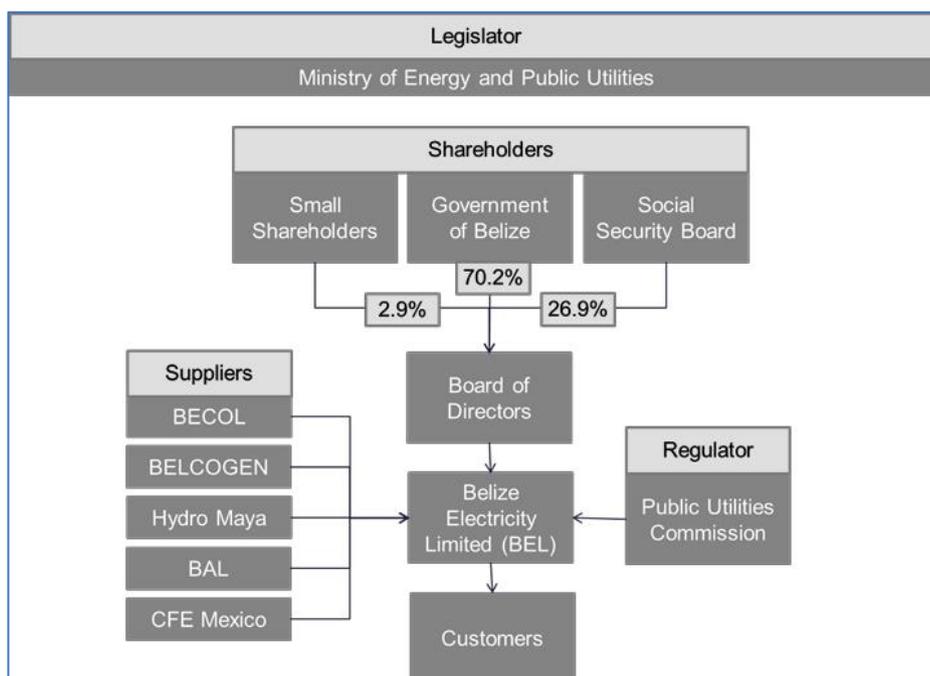


Figure 16. Key entities in the Energy Sector in Belize (Source: IDB Based on Castalia (2014)).

The Belize National Sustainable Energy Strategy (2012-2033) provides a framework of actions to mainstream sustainable energy. It sets the following 2033 goals for Belize, among others: becoming a net electricity and biofuels exporter, tripling energy recovery from waste streams, and reducing fossil fuel imports by 50%.¹³⁸ More details are provided in Table 41.

Key challenges of the sector include:

- Energy Planning- Implementation of policies and strategic plans will be a challenge given the need for reliable baseline data to develop concrete action plans and the need to carefully prioritise sector interventions in accordance with institutional capacities.
- System expansion: it is anticipated that the need for energy will grow and accommodations will be needed for the growing demand.
- Sustainability of Indigenous Petroleum: local fuel resources are being depleted.
- Electricity Prices: These prices are high in Belize by Latin American standards
- Electricity Coverage- Electricity coverage in Belize is estimated at 90 percent. Remoteness and high grid connection cost are the primary reasons that some communities do not have electricity. Many of these very rural communities are occupied by indigenous peoples.
- Sustainability of the Electricity Sub-sector- Since 2007, BEL's profits have decreased significantly as a result of increased operating expenses, depreciation, amortization, finance charges, and increased corporate taxes.¹³⁹

In particular, mitigation challenges to the energy sector involve:

- shifting the energy matrix away from fossil fuels to alternative energy technologies;
- developing a local electricity micro-generation market;
- identifying funding investments in renewables;

¹³⁸ International Energy Agency (IEA). (2017). Belize National Sustainable Energy Strategy 2012-2033.

¹³⁹ Gischler, C., Rodriguez, E., Sánchez, L.R., Gonzalez Torres, C., Servetti, G., Olson, L. (2014). The Energy Sector in Belize. Inter-American Development Bank, TECHNICAL NOTE No. IDB-TN-721.

- promoting and facilitating clean production systems in the processing of appropriate clean energy and clean production technologies.

Transport

The transport sector is the biggest consumer of energy in Belize, accounting for 95.81% of total consumption in 2017, almost half of the country's energy needs. The growing economy, evident in the tourism industry, has expanded the public and private sector vehicle fleet, the local maritime ferries, and the local aviation fleet, which has resulted in increased use of petroleum fuels¹⁴⁰.

Greenhouse gas emissions from the transport sub-sector primarily come from petroleum products such as gasoline (premium and regular), diesel, kerosene, and aviation fuel. From 2012 to 2015, total emissions in transportation rose, but there was a slight decline in 2017. For marine and land transportation, and all fuel types, total emission increased from 487.47 Gg CO₂eq in 2012 to 674.13 Gg CO₂eq in 2015, and a slight decrease of 658.51 CO₂eq in 2017. Fuel consumption in national aviation has become significant compared to the last inventory report, which categorized it as insignificant¹⁴¹.



Figure 17. Belize's typical means of public transport (Source: http://www.buy-belize.com/RealEstate/information_stann_creek.html).

The regulating authority for this sector is the Ministry of Public Utilities and Logistics (MPUL). The sector is governed by the Comprehensive National Transport Master Plan approved in March 2018. Climate-relevant provisions include energy efficiency in light duty vehicles and the adjustment of taxes applied to new and used vehicles based on emissions, age of vehicle or fuel consumption. Another proposed action addresses the implementation of regulation on heavy-duty vehicles by limiting the age of vehicles being imported. A third proposed action is a switch to electric vehicles or those using biofuels. Energy efficiency in the transport sector can also be achieved by using vehicles that weigh less which translates to smaller vehicles. Replacing 25% of gasoline powered vehicle fleet with smaller vehicles could potentially reduce gasoline imports by some 3.8% annually.¹⁴²

The NDC states the following objectives for the sector: achieving at least a 20% reduction in conventional transportation fuel use by 2030 and promoting energy efficiency in the transport sector through appropriate policies and investments.⁴

¹⁴⁰ Belize Fourth National Greenhouse Gas Emission Report, May, 2020

¹⁴¹ Belize Fourth National Greenhouse Gas Emission Report, May, 2020

¹⁴² GoB, Office of the Prime Minister, Department of Public-Private Sector Dialogue (2018). Comprehensive National Transportation Master Plan for Belize, Final Report, 17 April 2018.

The key challenge to all of the above-proposed actions is access to finance and affordability to acquire “new” vehicles and new related technology associated with electric vehicles or those running on bio-fuels.

Solid Waste Management

Biodegradable waste during its decomposition phase generates a mixture of CO₂ and methane. For a long time, uncontrolled dumping and burning had been the normal way of disposing of garbage in Belize. This practice not only releases GHG but as a pollutant that impacts negatively on human health. Figure 18 **Error! Reference source not found.** shows the composition of the different types of waste in Belize, with biodegradable organic material forming 33%, followed by plastics at 19% of the waste in Belize.

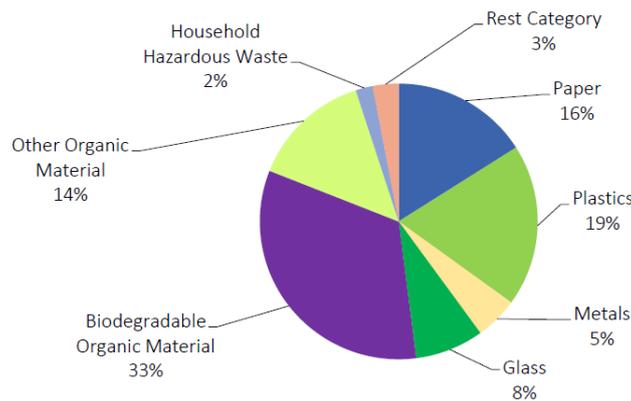


Figure 18: Composition of waste per type in Belize (source: National GHG inventory)

Since 2010, the GoB has closed large open dumpsites near Belize City and San Ignacio Town. It has commissioned a new regional sanitary landfill facility, including an access road, to serve the Western Corridor. Now 50% of waste is disposed of through the landfill. This forms part of the Solid Waste Master Plan and includes other major results such as design, construction, and bringing into operation of two new transfer-loading stations to serve Belize City and San Ignacio / Santa Elena.¹⁴³

Greenhouse gas emissions in the waste sector primarily come from wastewater and discharge. The Waste sector displayed changes in emissions across the study period, with a decline in 2015 but rising again in 2017. The level of GHG emissions was almost steady across the three reference years; this most likely due to the construction of the managed landfill at mile 23 on the George Highway. The improved management of solid waste resulting from the construction and use of the managed landfill and the waste transfer station infrastructure strengthened by law enforcement has resulted in a great reduction in open burning of solid wastes. GHG from this sector has been reduced compared to the period between 1997 to 2007, even with the inclusion of wastewater emissions¹⁴⁴.

The governing authority for this sector is the Belize Solid Waste Management Authority (BSWMA).

Mitigation and adaptation options are addressed in the National Solid Waste Management Policy for Belize of March 2015. Further information on the policy is available in Table 41. As stated in the NDC,

¹⁴³ GoB, Ministry of Natural Resources and Immigration, Belize Solid Waste Management Agency (2016). Solid Waste Master Plan for Emerging Tourism Areas, Waste Generation and Characterization Study, July 2016.

¹⁴⁴ Belize's Fourth National Greenhouse Gas Inventory Report, May., 2020

the implementation of the Solid Waste Management strategy and plan will focus on preventing, re-using, recycling or recovering waste wherever feasible and beneficial and disposing of waste safely only as a last resort.⁴

Perhaps the major challenge comes from changing local perception of garbage, the segregation of waste for recycling purposes, garbage disposal, and inherent charges for such disposal. This would fall under the education awareness and stakeholder communications programme. No other challenge would be greater than behavioural changes of the whole population.

Industrial Processes and Product Use sector

Belize, limited by energy and labour costs, is not a highly industrialised country. However, there are indications that industrial activities increased slowly as the country's development progresses. Greenhouse gas emissions from Industrial Processes and Product Use (IPPU) arise primarily from refrigerants used in stationary and mobile sources, lime production, road paving with asphalt, and food and beverage production. The increased use of refrigerant resulted in a 30% increase in emissions between 2012 and 2017. Carbon dioxide (CO₂) emissions are generated from lime and dolomite production, asphalt for paving, the use of wheat, and hydrofluorocarbon (HFC) emissions from refrigerants¹⁴⁵.

¹⁴⁵ Belize's Fourth National Greenhouse Gas Inventory Report, May, 2020

Key climate risks and related adaptation challenges

Coastal and Marine Resources

Many marine and coastal ecosystems and coastal zone communities are inherently sensitive to climate change. The coastal zone is one of Belize's greatest assets. Over 40% of the population live and work in the coastal zone, which supports thriving fisheries, aquaculture, and tourism industries.¹⁴⁶ The services they provide – like support for commercial fisheries, tourism, and protection from erosion and storm surges – are worth up to **USD 559 million per year**.¹⁴⁷

The governing authority for this sector is the Coastal Zone Management Authority and Institute (CZMAI).

The sector is regulated by the Integrated Coastal Zone Management (ICZM) Plan of 2016. The Integrated Vulnerability and Adaptation Assessment published in 2020 proposed strengthening the implementation of all elements and activities, and measures relating to climate change adaptation.

The completion of revision and implementation of land-use planning policies and Integrated Framework for Land Resources Development, fortification of sea and river defences, enforcement of the recently approved 'Protection of Mangrove Regulations,' and the further strengthening and implementation of early warning systems for storm surges form part of adaptation strategies addressed in the Management Plan. Longer-term strategies will include the development of substantial physical infrastructure and more complex land-use planning policies. The integration of disaster risk management and ecosystem-based adaptation into the planning for coastal and marine sectors is also very important to the strategy.

The overall adaptation strategy for this sector is to: 1) encourage sustainable coastal resource use, 2) support integrated coastal zone management and development planning, 3) build alliances to benefit Belizeans, 4) promote adaptation to climate change.



¹⁴⁶ MAFFESD, CZMAI (2016). Belize Integrated Coastal Zone Management Plan.

¹⁴⁷ WWF, Valuing Belize's Barrier Reef. Accessed April 2019: <https://www.wwf.org.uk/what-we-do/projects/valuing-belizes-barrier-reef>



Figure 19. Manatees and mangroves populating coastal zones in Belize (Source: <https://www.coastalzonebelize.org/>).

In order to monitor and evaluate activities on the coastal zone, a monitoring network and early warning system need to be in place. However, the usual financial challenge emerges in the form of the high procurement costs followed by the operational and maintenance cost once in place. Leveraging finance for implementing the ICZMP in full is proposed.

The non-financial challenges include limited environmental monitoring enforcement, which is linked to the availability of human resources.¹⁴⁸

Fisheries and Aquaculture

Rising sea levels will adversely impact on fish habitat, including wetlands, coral reefs, and sea grasses where fish spawn, breed, feed, and or grow to maturity. Also, rising near-surface water temperature and increasing acidification may cause massive bleaching and dieback of corals and may impact main commercial species such as the Spiny Lobster and Queen Conch. Overall, this may result in losses for the fisheries and aquaculture industry. Rise in sea temperatures has already resulted in an increased frequency of coral reef bleaching events in 1995, 1998, 2005, 2010, 2015, 2016).¹⁴⁹

The Fisheries sector is considered one of the most productive sectors in the Belizean economy. It directly influences the livelihoods of more than 15,000 coastal inhabitants as fish products are the main source of protein and income generation.



Figure 20. Fisheries and fish products in Belize (Source: <http://www.fisheries.gov.bz/gallery/>).

The governing authority under this sector is the Fisheries Department.

¹⁴⁸ CCCCC and MAFFESD (2014). A National Climate Change Strategy, Policy and Action Plan to Address Climate Change in Belize, 2015-2020.

¹⁴⁹ Dye, S.R. et al. (2017). Impacts of Climate Change on Settlements and Infrastructure in the Coastal and Marine Environments of Caribbean Small Island Developing States (SIDS)

Based on the 2020 Integrated Vulnerability and Adaptation Assessment, which included the fisheries sector, proposed recommendations included introducing policies reducing non-climate change-related stresses that exacerbate impacts of climate change-related hazards such as: reducing pollution, and overfishing and enforcing sustainable fisheries, shifting livelihoods to decrease pressure, implementing sustainable tourism, and declaring new conservation areas.

Other specific adaptation measures proposed are: translocation of fishing activities and aquaculture expansion, sea walls construction, and re-modelling to accommodate sea-level rise and increasing wave height during extreme weather events.

Policy and legislation measures for adaptation in the Fisheries sector included:

- Revision and passage of the Fisheries Resources Bill
- Consider the implementation of conservation measures
- Insurance that focuses on the fishing industry
- The integration of Disaster Risk Management in the management of the risks within the sector
- Consider gender inequalities in the Fisheries sector
- Develop adaptation policies, strategies, and actions based on evidence and data
- Leverage climate funding for implementing additional adaptation measures.

Aquaculture in Belize formally began in 1982 with the development of 4 ha (10 acres) of experimental ponds by a private company in the southern part of the country.

The Fisheries and Aquaculture industry in Belize holds several opportunities for investment, including but not limited to the following:¹⁵⁰

- **Marine Cage Farming Systems** – which are systems within the inner Barrier Reef Lagoon that benefit from major protection from hurricanes due to the various cayes and reef formations in the surrounding areas.
- **Earthen Embankment Ponds** – used to accommodate aquaculture ventures along the coastal plain as well as inland.
- **Freshwater Cage Farming** – used for inland aquaculture developments
- **Raft Culture / Rope Culture** – for oyster and seaweed farming
- **Seaweed Farming** – a valuable commodity towards fisheries diversification, fetching a premium price per pound of dried seaweed both in the local and export markets.
- **Sea Cucumber Farming** – a product in high demand with popularity in Asia stemming from the dried product's unique components that serve different applications in food and medicine.
- **Value Addition for Fisheries Commodities** – these include value-added fisheries products such as “ready to cook,” development of fish feed, or applications in cosmetics through bio prospecting.

Aquaculture operations in Belize have to go through a vetting process with the National Environmental Appraisal Committee prior to implementation as part of the permitting requirements. The Aquaculture Development Act, Chapter 204:01 of 2011 has not been fully enacted or components fully enforced and operationalised.

¹⁵⁰ BELTRAIDE, Belize INVEST. Fisheries and Aquaculture. <https://www.belizeinvest.org/bz/fisheries--aquaculture.html>

The overall strategy entails the sustainable management of the fisheries resources, and the conservation and preservation of fisheries resources and marine habitats in promoting reef ecosystem resilience. However, this strategy is divided into major activities, including (i) the Development of Conservation Programmes, Policies and Plans (ii) Effective Monitoring, (iii) Conduct further research on marine resources, and (iv) Mariculture /Aquaculture.

One of the major challenges will be coordination due to connections and interactions with other programmes, policies, and multiple agencies. Effective monitoring and research require significant human resources input and time.

Agriculture

All of Belize's main export commodities and other locally consumed food crops are vulnerable to the negative effects of climate change and variability. Higher temperatures may favour some crops like rice. However, economically important crops in Belize, such as sugarcane and citrus, will be adversely affected. In general, warmer weather will cause soil aridity, proliferation of pests and diseases, and pressure on water resources for water irrigation. Rain-fed agricultural production¹⁵¹ will be affected, demanding improved management techniques and consequently increasing the cost of production. Sea level rise will also cause flooding and saline intrusion, and soil salinisation. The combined impact is low agricultural yields, a decrease in food production, and higher food prices.

The National Adaptation Strategy to Address Climate Change in the Agriculture Sector (2014) in Belize seeks to provide a road map outlining comprehensive and implementable strategies and actions that will strengthen Belize's capacity to adapt to the impacts of climate change on agriculture in the future. Implementing activities in this strategy will require investment in infrastructure and equipment, research and training, education, and early warning systems. Leveraging climate funding is also a recommended strategy for implementing additional adaptation measures in this sector. Once again, the challenge of human resources comes to the forefront. More information on this strategy is available in Table 42. Other key policy measures included in the Integrated Vulnerability and Adaptation Assessment are integrating disaster and risk management within the sector and considering gender inequalities in the agriculture sector.

Water resources

Belize is recognised as having an adequate supply of freshwater, and the availability of this resource is oftentimes taken for granted. However, model projections show a progressive decrease in rainfall, across all regions of Belize, from the 2030s to the 2090s and across all seasons and all emissions scenarios. This stands to negatively impact the country's water resources. The increase in population and change in demographics along with pollution, agricultural demand, and growing tourism sector have all led to reductions in water quantity and quality.

Belize has 39 identifiable river basins or catchments (see Figure 21Figure 22**Error! Reference source not found.**). Of these, there are 18 major watersheds, the largest being the Belize River Watershed.

¹⁵¹ According to the "Belize Farm Registry," nearly 76% of farmers depend on rainfall alone.



Figure 21. Belize's Watersheds (Source: Databasin U.K. Directorate of Overseas Surveys, <https://databasin.org/datasets/5d0671448f6c492c92fd9c1e4573f90c>).

There are also five trans-boundary or shared watersheds and an unknown quantity of shared water reserves with Guatemala and Mexico. The Rio Hondo in the north and the Mopan branch of the Belize River are the two largest shared watersheds. These two rivers supply the majority of potable and agriculture water demands in Belize.

There are seven groundwater provinces (see Figure 22 **Error! Reference source not found.**). These include: the Coastal Plain and Shelf Province; the Coastal Plain and Cayes Province; the Vaca Plateau Province; the Campur Province; the Maya Mountains Province; the Toledo Province; and the Savannah Province.

Except for the Savannah Province, groundwater reserves have not been extensively studied to evaluate the quantity of that resource. Interest in the Savannah Province stems from the fact that it is a major source of potable water for approximately 25 communities comprising about 22,000 persons. The investment value of tourism developments in this particular province exceeds USD 500 million, which has motivated research into this groundwater reserve.

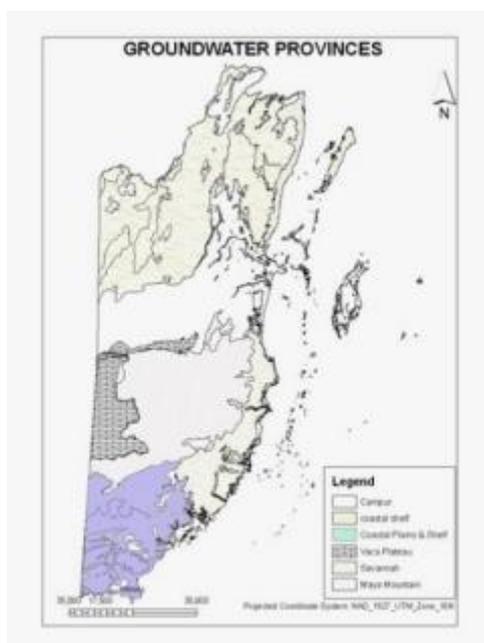


Figure 22. Groundwater Provinces (Source: Savannah Groundwater Province Threats and Challenges Rudolph S. Williams Jr. Coastal Aquifer Management in the Caribbean Workshop 14- 16 December 2011, Trinidad & Tobago).

The main policy framework for the water resources sector is currently the 2008 National Integrated Water Resources Management Policy for Belize, which entails climate change considerations. Further details about this policy are available in Table 42.

The 2020 Integrated Vulnerability and Adaptation Assessment, which includes the water sector made the following adaptation recommendations to have as part of a broader adaptation strategy:

- Implementation of water conservation practices, including water harvest, storage, temporal transfer, and efficient use of rainfall water
- Water recycling/reused of water as a viable option for improving vulnerability
- Storm Water management to avoid inland flooding
- Monitoring and Early Water System to provide information about water availability, forecasting, and warnings against floods and droughts.
- Temporary or permanent retreat from areas at risk of flooding.

Recommended policy and related measures to support adaptation in the Water sector include:

- Implementation of the National Integrated Water Resources Management Policy (2008) and the National Integrated Water Resources Act (2011)
- Strengthening as 'climate-sensitive' or 'climate-smart' management of water resources
- Developing the management frameworks for the water sector, including demand-driven management
- Strengthening implementation of cross-sectoral and integrated adaptation measures, and
- Integrating and implementation of Disaster Risk Management in the management of the water sector.

Other key policy measures included considering gender inequalities, leveraging funding to implement

adaptation measures in the water sector, and tapping into climate financing to implement new and adaptive frameworks for the water sector.

Challenges from adopting the strategy and implementing these measures are largely financial. For example, one of the recommended actions involves assessing the country’s water resources (surface and groundwater). Such an endeavour is extremely costly and requires a substantially large human resource investment.

Tourism

Sea level rise due to climate change would result in loss of beaches, saltwater intrusion into coastal aquifers, damage to properties and public infrastructure, and a loss of attractiveness of the destination. Coral bleaching due to higher sea temperatures would make the reef a less attractive tourist spot. Higher temperatures could also discourage older visitors because of their susceptibility to heat stress. Tropical storms and hurricanes, compounded by sea- level rise, are also likely to increase in intensity, size, and duration, causing biodiversity loss, a decline in landscape aesthetics, increase in vector- borne diseases, flooding, and damage to transport and other infrastructure that are vital to tourism. Furthermore, more frequent extreme weather events make the country less attractive as a tourism destination. As a result, a decrease in or absence of tourism arrivals could ultimately result in loss of revenue for the government and loss of employment for large numbers of people who are currently employed in the tourism sector.

Tourism in Belize has grown considerably recently, and it is now the second largest industry in the nation. The sector has been contributing significantly to the country’s GDP.

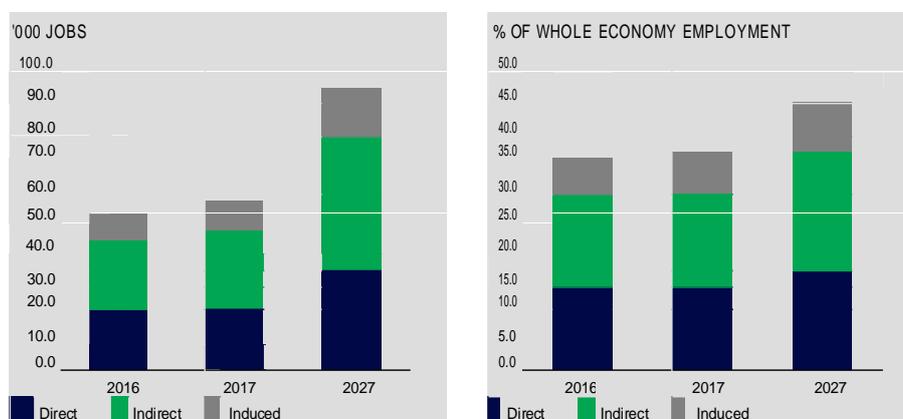


Figure 23. Contribution of Tourism to Jobs in Belize (Source: World Travel & Tourism Council, *Travel and Tourism: Economic Impact, Belize, 2017*).

Figure 23 **Error! Reference source not found.** shows the contribution of tourism to jobs in Belize shown as direct contribution, indirect contribution, and induced or assumed contribution. It also shows projections to the year 2027. By that time, it is projected that tourism would be responsible for 42% of the whole economy’s employment.¹⁵² This economic weight and the associated projections should, however, be read cautiously in light of the COVID-19 crisis’ impact on the industry, as described in the section on [Key Economic Drivers](#) .

According to the Belize Tourism Board *“Belize continues to evolve into the top recreational and*

¹⁵² World Travel & Tourism Council (2017). *Travel and Tourism: Economic Impact, 2017, Belize*.

adventure destination within the Caribbean region and its attractiveness continues to be recognised by its local and international market”¹⁵³



Figure 24. Belize’s barrier reef (Source: Repeating Islands, <https://repeatingislands.com/2009/07/02/belize-barrier-reef-officially-on-endangered-list/>).

Belize boasts the second largest barrier reef in the world and the largest in the northern hemisphere. This, along with offshore atolls, several hundred sand cays, all serve as major tourist attractions (Figure 24 **Error! Reference source not found.**). Belize has recognised the importance of its rich biodiversity and has made ecotourism a focus of its tourism industry.

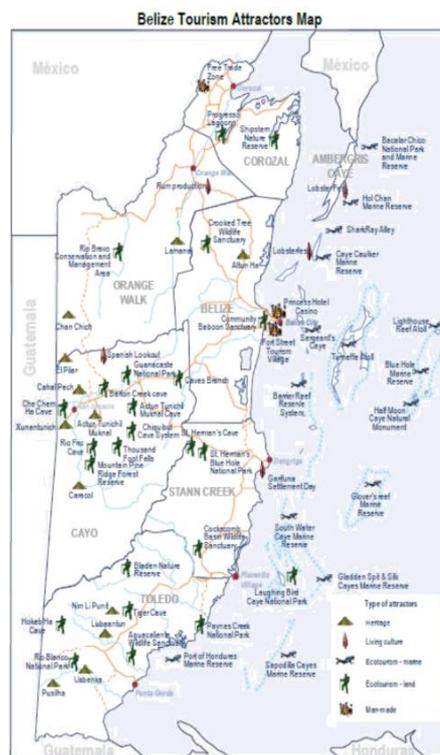


Figure 25. Tourism Activities and Attractions in Belize (Source: Belize Tourism Board, 2012).

The sector caters to overnight or stay-over visitors and cruise ship passengers and has seen a steady rise in arrivals. Figure 26 **Error! Reference source not found.** shows the rapid increase in tourist arrivals, particularly between the years 2013 and 2017. The following year saw an increase of 14.6% in tourist arrivals as compared to 2017.

¹⁵³ Belize Tourism Board. Belize Tourism History, <http://www.belizetourismboard.org/belize-tourism/belize-tourism-history/>

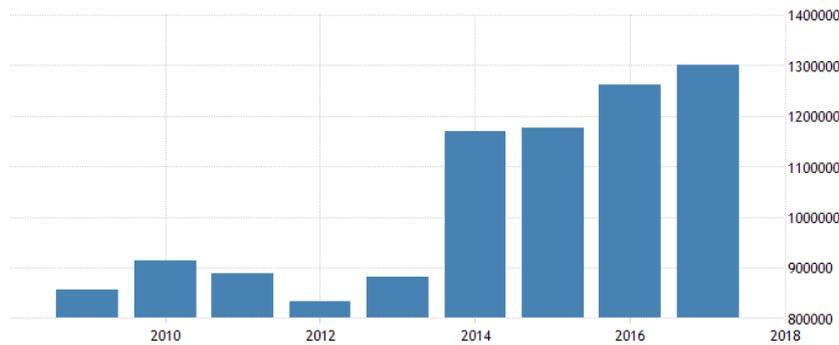


Figure 26. Tourist arrivals from 2009 to 2017 (Source: Tradingeconomics /Central Bank of Belize).

The National Sustainable Tourism Masterplan is the strategic guideline for tourism development in Belize up to the year 2030. Its recommended actions, such as restoration and conservation efforts, sea-level rise vulnerability mapping exercise, and infrastructure improvement to facilitate increased access to site and resources, require large capital expenditures. Lack of coordination will also undermine tourism development at the destinations. Another challenge is that some recommended actions impact other regulations administered by other agencies. For example, the setback requirements, mangrove conservation, and property decommissioning, as mentioned in one of the recommended actions, all fall under different agencies. More information on the masterplan is available in Table 42.

In 2020, the Ministry of Tourism and Civil Aviation (MTCA) (now Ministry of Tourism & Diaspora Relations (MTDR)) carried out a vulnerability and risk assessment (VRA) within the framework of the Sustainable Tourism Program (STP) II for four selected tourist destinations (Corozal District, Toledo District, Caye Caulker Village, and The Mountain Pine Ridge Area). The VRA serves as a basis to define ecosystem-based adaptation (EbA) measures that could be the most effective and relevant for reducing the risk and vulnerability in a tourist destination, business, and population.¹⁵⁴

An Adaptation and Disaster Risk Management Plan was also developed under the STP II. It aims to contribute to the selected tourist destinations' resilience to the impacts of climate change and disaster risks. In this way, this Plan will aid Belize to enshrine the UN Sustainable Development Goals in its sectoral policies. The Plan focuses on preparing for and responding to disaster risks to the specified tourism destination from hazards using EbA measures as a disaster risk management (DRM) tool for each of the destinations to ensure climate-resilient destination. These EbA measures embrace technical measures such as mangrove restoration, policy and legislation, and capacity development. Other measures involve enforcement, strategic planning, and green/grey infrastructure.

Because DRM involves a mixture of policies and actions, reducing risks in tourism destinations requires a coordinated, integrated, multi-sectoral approach that includes all aspects of society. This includes government, non-government organisations, professionals, and the private sector to build an ethos of resilience.¹⁵⁵

Human Health

In Belize, health care is offered through both private and public systems and facilities. The entire health sector is overseen by the Ministry of Health and Wellness (MHW), which is the largest public health

¹⁵⁴ Vulnerability and Risk Assessment, Sustainable Tourism Program II, 2020

¹⁵⁵ Final Adaptation and Disaster Risk Management Plan, August, 2020

services provider. The main sectoral plan is the 2014-2024 Belize Health Sector Strategic Plan (see Table 42 for more information).

Of note in this document is the observation that no mention is made of the impacts of climate change on the health sector in Belize. And as stated by the Intergovernmental Panel on Climate Change (IPCC) with high confidence, *“any increase in global warming is projected to affect human health, with primarily negative consequences.”*¹⁵⁶

Furthermore, although the education programme has been ongoing for some time, it does not involve the effects of climate change on health matters; it merely addresses ways of preventing, for example, the *aegis aegypti* mosquito from breeding.

The overall health sector challenge is to undertake a climate change vulnerability and capacity assessment and embark on a programme to minimize human exposure to climate change-related health risks. A couple of selected recommended actions highlight some of the adaptation challenges in this sector, noting that greater investment in health infrastructure to ensure increased access of the population to improved health care could be costly considering the following:

- 1) retrofitting health facilities and equipment (e.g. Mobile Health Clinic Amphibious Ambulance Services), and
- 2) new building codes for health facilities.

Forestry

An increase in the intensity of storms and hurricanes will negatively impact forestry resources, including flora and fauna. Changes in climatic, hydrologic and soil conditions could lead to changes in the composition of natural vegetation. Extreme weather events such as hurricanes and storms cause uprooting of trees and loss of commercial value and revenue. Increased overall aridity could exacerbate drought potential over the long term, thus causing habitat loss and contributing to decline and death in some tree species. Increased incidence of forest fires is also likely and will result in the destruction of wildlife and loss of habitat. The incidence of pests and diseases (bark beetle) and forest fires will increase.

Forest protection and replanting of mangroves that are implemented for mitigation purposes are expected to be beneficial for adaptation purposes too, as they protect the coastline against storm surges and erosion.

Mangrove swaths are found along most of coastal Belize. Besides being sinks of GHG, they provide various ecosystem services such as protecting shorelines, mitigating the effects of storm surge and winds, controlling erosion and pollutants run-offs, and providing nursery grounds for many estuarine and marine fish species (including commercially important ones). Mangroves contribute USD 174-249 million/year to Belize’s economy via tourism recreation, fisheries, and shoreline protection. A 2010 study focused on the assessment of mangrove cover change over the period 1980 – 2010 using satellite imagery. It showed that a national loss of <4% (76,250 ha to 74,684 ha). Most clearances observed were in development hot-spots of Ambergris, Caye, Placencia Peninsula, Belize City and its outer cayes. Field validation of this study showed it to be highly accurate (more than 90%). Alarming is that mangrove

forest was cleared at a higher rate from 2010 – 2012 as compared to 2004 – 2010.¹⁵⁷ In May 2018, the GoB passed the Forests (Protection of Mangroves) Regulations 2018, which seeks to prohibit the alteration of mangroves unless with a permit and to set penalties for such infractions.

The overall forestry sector strategy entails : (i) Systematically assessing the potential impacts of climate change on Belize’s forests and the extent of the vulnerability of forests to these impacts and actions for adaptation, (ii) Development of a comprehensive monitoring system to evaluate changes in the forest cover, carbon stocks, and forest biodiversity and to use this information for further planning in light of climate change mitigation and adaptation, and (iii) Maintain and restore healthy forest ecosystems by sustainable forest management increasing afforestation and reforestation in order to increase the resilience of human communities.

Some of the recommended adaptation actions involving substantial capital and human resources input are being taken forward by the Forest Department through the implementation of the REDD+ Program of Belize (for instance, the design of the National Forest Monitoring System, the Safeguards Information System, and the delivery of the National Forest Reference Level).

Among other challenges, the Guatemalan exploitation of Belize’s reserves, for example, the Chiquibul forest, which is another source of environmental degradation and a foreign affairs issue.

Biodiversity

Climate change is expected to generate the loss of habitat and animal and plant species.

Over the past 30 years, Belize has established a strong network of both terrestrial and maritime protected areas. The National Park System Act of 1981 provided the legal basis for establishing national parks, natural monuments, wildlife sanctuaries, and nature reserves. This has been replaced by the National Protected Areas System Act (NPASA) of 2015. The GoB has established the Ministry of Sustainable Development, Climate Change and Disaster Risk Management (MSDCCDRM) to create greater coordination between the regulatory agencies with relevant mandate to the National Protected Areas System (NPAS). The National Protected Areas Technical Committee was also established to incorporate protected areas in the plans and strategies of the relevant agencies. The committee provides technical guidance on the implementation of the system plan and serves as a body for national coordination and consultation on matters related to protected areas.¹⁵⁸

The territories under the NPSA still maintain wide populations of the majority of Belize’s wildlife. Private sector engagement and cooperation with the Forest Department is tantamount to supporting and ensuring the integrity of the protected areas and is now a central initiative of GoB.

¹⁵⁷ Cherrington, E. A., Hernandez, B. E., Trejos, N. A., Smith, O. A., Anderson, E. R., Flores, A. I., and Garcia, B. C. (2010). Technical Report: Identification Of Threatened and Resilient Mangroves in the Belize Barrier Reef System, October 2010, Water Center for the Humid Tropics of Latin America and the Caribbean (Cathalac).

¹⁵⁸ GoB, Ministry of Agriculture, Fisheries, Forestry, Environment and Sustainable Development, <http://protectedareas.gov.bz/us/>

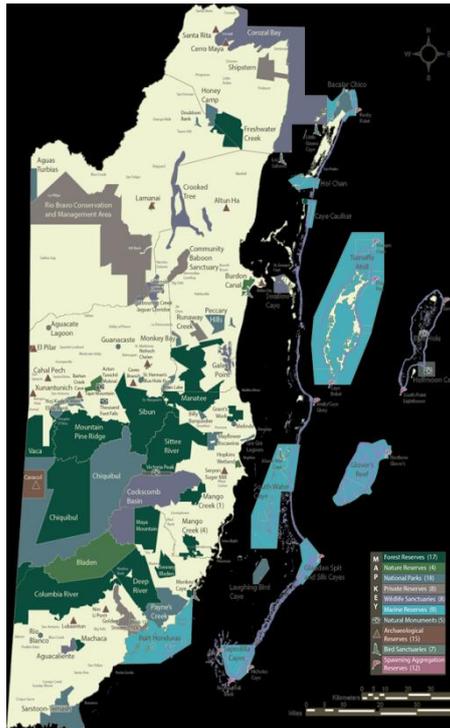


Figure 27. Distribution of Belize’s National Protected Areas (Source: NPAS Secretariat).

Figure 27 **Error! Reference source not found.** illustrates the distribution of protected areas. Currently, there are 103 protected areas, of which 52 lie under the direct administrative responsibility of the Forest Department; furthermore, 9 marine reserves and 12 spawning aggregation sites are also under the direct administrative responsibility of the Fisheries Department. In addition, 16 archaeological sites are considered a part of the NPAS; these are maintained by the Institute of Archaeology. Another eight additional private sites are also recognised by the Forest Department. The NPAS actively support livelihoods in both marine and terrestrial environments and makes Belize a regional leader in biodiversity conservation.

The Project *Management and Protection of Key Biodiversity Areas (KBA) in Belize* was developed as part of the World Bank’s Country Partnership Strategy for Belize 2012-2015, which focuses on supporting the GoB to achieve inclusive and sustainable natural resource-based growth and enhanced climate resilience. The project seeks to strengthen natural resource management and biodiversity conservation through the mitigation of threats to KBAs and supported the implementation of measures identified in the First National Communication on climate change. Indigenous peoples and women near prioritised KBAs will be specifically targeted for social assessment and consultation to ensure that they are among the beneficiaries of the project.¹⁵⁹

Energy

The demand for electricity is likely to increase as a response to rising temperatures and a demand for air-conditioning among increasing populations. Oil price fluctuations will also cause consequent fluctuations in costs of production of electricity. Furthermore, changes in the hydrological cycle will decrease water levels and adversely impact the generation of hydropower, making electricity even more

¹⁵⁹ World Bank (2014). Social Safeguards Operational Policy 4.10 Indigenous People Framework. Management and Protection of Key Biodiversity Areas in Belize Project, February 2014.

scarce and costly.

Recently there has also been rapid urbanisation leading to *ad hoc* housing facilities with illegal and improper water and electrical connections. Figure 28 **Error! Reference source not found.** shows an example of an illegal connection. This underscores the importance of managing urban resilience and proactively planning for future urban growth. Moreover, much of the urbanisation process in Belize has taken place in the absence of proper land use planning and adequate infrastructure provisions. This frequently resulted often in urban settlements springing up in high-risk areas with insufficient infrastructure.



Figure 28. Illegal Electrical Connections in Belize City (Source: Amamdala Newspaper, 9th October, 2018).

Connecting Homes Improving Lives (CHIL), an initiative of the BEL, was officially launched on September 18, 2014, to assist low-income persons who are unable to afford the service entrance fee to have electricity installed in their homes. It assists residents with paying the initial service entrance fee, which can run up to BZD 800 to BZD 1,200 per household. This would assist in the reduction of improper connections to the grid.

The climate change adaptation challenge for this sector revolves around the projected changes in the hydrological cycle resulting in the reduced generation of energy at a time of greater need. This will be compounded by the likely increased generation costs, the *ad hoc* urbanisation and the inadequate infrastructure that is associated with such settlement expansions.

Transport Infrastructure

The climate change threats to infrastructure come from sea- level rise, changes in weather patterns and flooding, rise in temperatures, and incidences of tropical cyclone and associated storm surges.

In Belize, underdeveloped and dilapidated infrastructure, particularly in the transport sector, is a key constraint to reducing vulnerability to climate change and disasters. Critical infrastructure elements are in various states of disrepair and in need of rehabilitation or reconstruction. The road network is particularly vulnerable due to the lack of redundancy leading to unreliability. In addition, hazards or risks, particularly climate risk, have not been adequately incorporated in detailed road designs. This, coupled with inadequate preventive maintenance and rehabilitation, results in unsafe road conditions, especially during flooding events.

It is estimated that 70% of the population lives near primary and secondary road networks. Flooding of one section of a roadway can cut access and severely disrupt economic and social movement.

The World Bank-sponsored project to invest in climate- resilient infrastructure allocates USD 30 million in International Bank for Reconstruction and Development (IBRD) sustainable development bonds. The purpose is to enhance the resilience of road infrastructure against flood risks and the impacts of climate change. The expected results include 1) rehabilitation of 30 km of roads, 2) improvement of 12 bridges and culverts, 3) 50% reduction in road interruption due to flooding. There will be 170,000 direct beneficiaries who live near the road networks in the Greater Belize City area and Belmopan.

The project entitled *Belize Climate Resilient Infrastructure Project* (BCRIP) will improve and strengthen Belize's climate resilience and its anticipated impacts of climate change in relation to infrastructure, in particular, to a 24km section of the Philip Goldson Highway. BCRIP will enable Belize to effectively implement mitigation and adaptation strategies against the impacts of climate change. The project is designed to increase the resilience of the Belizean people to climate change and its impact on the environment and economy of Belize. BCRIP will also improve the Ministry of Works' (MoW) capacity in road maintenance and involves training of road maintenance personnel. It will also serve to operationalise the National Land Use Policy, as well as improve government's personnel capacity in flood mitigation systems.

The 2013 National Climate Resilience Investment Plan (NCRIP) encompasses infrastructure interventions, capacity-building activities, and policy actions. It seeks to identify both physical and non-physical areas that consider current and future risks posed by existing and future climate variability.¹⁶⁰ The GoB is currently reviewing and updating the NCRIP.

The Ministry of Infrastructure Development & Housing (MIDH) has the responsibility for roads, public buildings, waterways, bridges, and culverts. Municipalities are responsible for streets within their jurisdiction, with MoW responsible for roads passing through those municipalities.

While there is no national infrastructure development plan, the Ministry of Rural Transformation, Community Development, Labour & Local Government (MRTCDLLG) has accommodated the design of municipal development plans for the major municipalities.

Besides the universal financial issue, some of the challenges facing this sector come from the fact that the current land use plan does not incorporate disaster risks or climate resilience considerations. A second challenge is the absence of sustainable mechanisms for infrastructure maintenance.

Land Use and Human Settlements

The IPCC states with high confidence that populations at disproportionately higher risk of adverse consequences of global warming of 1.5°C and beyond include disadvantaged and vulnerable populations, some indigenous peoples, and local communities dependent on agricultural or coastal livelihoods. Regions at disproportionately higher risk include SIDS, among others.¹⁶¹

In Belize, land conversion is a major cause of land degradation. Deforestation accounts for the degradation of half a million acres of land in the past 13 or so years. Belize's Third National Communication states that "*the demand for land for the various purposes, together with the climatic*

¹⁶⁰ Ministry of Finance and Economic Development (2013). Belize's National Climate Resilience Investment Plan.

¹⁶¹ IPCC (2018). Summary for Policymakers - Global Warming of 1.5°C.

events, have combined to make the physical economic and socio-cultural landscape very vulnerable to extreme weather events and climate change.¹⁶²



Figure 29. Images of land use and urbanization in Belize (Source: Sustainable Cities, a change in our planning paradigm , <http://www.senseandsustainability.net/2014/10/08/a-change-in-our-planning-paradigm/> and <https://www.dangerous-business.com/2013/02/the-truth-about-belize/>).

The main policy framework for the Land Use and Human Settlements sector is currently the 2011 National Land Use Policy for Land Resource Development. More information on this sectoral policy is available in Table 42.

In November 2011, the GoB and the Interamerican Development Bank (IDB) signed an agreement for a loan of USD 10,750,000 for a Flood Mitigation Infrastructure Project. Counterpart funding from the GoB was USD 750,000. The main objective of this programme is to support the GoB in the rehabilitation, improvement, and protection of the Belize City's drainage and urban road networks aiming at reducing Belize City's vulnerability to flooding events while increasing long- term capacity to provide adequate maintenance to streets, drains and canals. Considering that greater portion of the City is at sea level and is drained by tidal forces, this project was an important investment in light of the impending impacts of climate change. It also included the vulnerable touristic areas of Caye Caulker and Goff's Caye as part of its objective to reduce Belize's climate vulnerability and risk.

All municipalities except for Belize City have developed Urban Development Plans and submitted them to the Ministry of Rural Transformation, Community Development, Labour & Local Government. The Belmopan Municipal Development Plan makes provisions for green areas and well-planned and constructed storm water drainage networks. In its fourth policy listed under Infrastructure and Public Open Spaces under "green" Infrastructure, consideration will be given to *"plants and other landscape in and around open culverts that will contribute to the efficacy of stormwater management in a sustainable way and beautify the city's public realm."*¹⁶³ The development plan considers climate change and the potential for changes in weather patterns and likely flooding potential in the future.

The major challenge presented here is the multiple policies, programmes, and agencies that would be involved in effective policies for land use and human settlements protection. Building the appropriate infrastructural defence to protect communities from damage caused by flooding and sea- level rise will

¹⁶² GoB, MAFFESD - NCCO (2016). Belize's Third National Communication to the UNFCCC.

¹⁶³ Belmopan City Council (2017). Belmopan Urban Development-towards a sustainable Garden City.

be a costly venture considering the extent of the coastline inhabited and the portion of the coastal elevation that is at or slightly above sea level.

Another challenge will be keeping up with the rapid urbanisation and the *ad hoc* settlements, and the infrastructural requirements of these unplanned communities. Enforcing building standards requires a change in philosophy and thinking. This creates a challenge besides the added cost placed upon potential homeowners to build to standard. The cultural and traditional ways of indigenous peoples and the enforcement of building codes or the construction of a climate-resilient infrastructure running through lands occupied by the indigenous people will create a huge challenge. Indigenous people who might wish to carry on traditional housing practices might find such a requirement against cultural traditions. Enforcing existing regulations and develop new regulations, which promote good building practices to meet the threat of sea-level rise and dangerous storms and hurricanes would see some opposition in areas where affordability is a major issue and poverty prevails. A recent issue was the extension of the Southern Highway through to Jalacte village in the extreme south-western Belize when villagers objected to the expansion of the highway, considering it an intrusion.

Disaster Risk Reduction (DRR)

Tropical cyclones and heavy rainfall events are the principal natural hazards affecting Belize. These events bring recurrent floods and storm surges that inflict severe economic losses. Presently, deteriorating road infrastructure and poor drainage system impede post-disaster connectivity, eventually slowing emergency response.

Disaster risk reduction is not explicitly listed in the policy documents as a stand-alone sector as it is considered a cross-cutting issue for Belize's economy. Because disaster risk is closely linked to the impacts on critical infrastructure and human settlements and addresses a broad spectrum of issues, a concerted dialogue and action on the part of all stakeholders engaged in disaster management, sustainable development, natural resource management, and environmental protection will be required for effective national disaster risk management.

In Belize, there is an overarching hazard mitigation policy with clearly defined goals and objectives, but no comprehensive disaster management policy exists. The National Emergency Management Organization (NEMO) has a mandate to preserve life and property throughout the country of Belize in the event of an emergency, threatened or real, and to mitigate the impact on the country and its people.

The GoB is prioritising three areas to further its disaster risk management and climate resilience programme. These include: (i) increasing the flood and climate resiliency of road infrastructure, (ii) integrating NCRIP into the country's development strategy, and (iii) shifting toward strategic, proactive investments that focus on efficiency and reduce climate and disaster vulnerabilities.



Figure 30. Images of major floods in Belize (Source: National Emergency Management Organization (NEMO)).

Belize can adjust its approach to disaster financing to be timelier and more cost-effective and to minimise opportunity costs. As it stands, the GoB is forced to reallocate funds from essential development activities to crisis response. The Financial Secretary in the Budget Department of the Ministry of Finance Economic Development and Investment (MFEDI) will run an above-the-line account to cover immediate emergency costs following a natural disaster. The Department typically observes that these funds would be offset from the reallocation of national funds, as well as donor funds. Financing for long-term reconstruction takes the form of international assistance and loans secured on an *ad hoc* basis after disaster strikes, further limiting fiscal space and exacerbating the country's public debt problems.¹⁶⁴

It is anticipated that building resilience in Belize will require GoB to integrate and improve hazard and risk considerations in the planning and management of road infrastructure. Furthermore, it will be necessary to close the geo-spatial information gaps to support risk-informed resilience planning. Importantly, the IDB-sponsored project *Climate Vulnerability Reduction Program*, under implementation, has, as an objective in Component 2, the development of a climate risk information system aimed at improving risk identification by making risk information accessible.¹⁶⁵

There will also be the need to improve insurance of public assets, incorporate disaster risk analysis in public sector investments and plan from a physical planning perspective. Other challenges include the building of institutional capacity to project and better manage potential fiscal impacts of disasters under a changing climate. Another is the identification and prioritisation of investments for climate resilience. The closure of risk information gaps presents another challenge to be addressed; indicators need to be identified for the monitoring of disaster risk management based on the national hazard mitigation plan. Finally, there is the challenge of identifying cost-effective protection options and appropriate risk financing tools that would be effective in a changing climate.

However, the biggest challenge facing the sector, because of its cross-cutting nature, is to coordinate policies, programme, and activities among multiple agencies. It is almost all agencies that would be involved in the development and operationalising of a comprehensive disaster risk management plan.

¹⁶⁴ World Bank (2018). GFDRR, Advancing Disaster Risk Finance in Belize.

¹⁶⁵ IDB BL-L1028 : Climate Vulnerability Reduction Program. Accessed in April 2019: <https://www.iadb.org/en/project/BL-L1028>

Annex 2: Belize's development profile

As of November 2020, the impact of the COVID-19 pandemic on the Belizean economy and development prospects is projected to be severe due to the collapse in tourism activity and the indirect effects of the necessary containment and mitigation measures (curfew, closure of the international airport, and schools, mandatory quarantines). Besides, the crisis occurred when the economy was already in recession due to a drought and a slowdown in tourism in the second half of 2019. As a result, Belize is projected to experience a deep recession in 2020 and only a gradual recovery as the pandemic wanes.¹⁶⁶ However, as countries are preparing green growth recovery policies, there is an opportunity for Belize to accelerate its transition to a low-carbon and climate-resilient economy by approving such policies to recover from the COVID-19 crisis and enable investment to go back to the pre-crisis levels.

Economy

Belize is a country in economic transition and has a small, open economy primarily dependent on natural resources. As a Caribbean nation geographically located in Central America, Belize stands in a rather unique situation. It is a member of both the Caribbean Community (CARICOM) and Central American Integration Systems (SICA). The CARICOM Single Market and Economy is intended to benefit the people of the region by providing more and better opportunities to produce and sell goods and services and to attract investment. It will create one large market among the participating member states. The objectives of SICA are to realise the integration of Central America in order for the Central American Isthmus to become a Region of Peace, Freedom, Democracy and Development. Among its aims is to attain economic union and strengthen the Central American financial system and strengthen the region as an economic bloc in order to insert itself successfully into the international economy. Being a member of both systems provides a unique opportunity for growth for Belize.

Belize's economy can be classified among the group of the most open economies in the region and globally. It is a diversified economy with primary, secondary, and tertiary industries contributing roles in its economic development. The economy of Belize has evolved from a mono-economy that was traditionally and historically based on agriculture and forest industries to a more diversified economy with growth driven primarily by tourism and agriculture and, until recently, oil.

Over the past 30 years, Belize has gone through periods of rapid economic growth of more than 10% annually (1988, 1987-1992, 2000), a recession (1983), or virtually no growth (1994-1995). Over the long term, Belize has grown rapidly compared with Central American countries but only about average compared with CARICOM. From 1998-2003, the Belize economy was primed by public sector expenditures, resulting in very high public sector debt.

Table 35. Summary of GDP, GNI, HDI and ease of doing business over the years 2012 to 2029 (source: World Bank country Profile <https://data.worldbank.org/country/belize>").

Belize's development profile								
	2012	2013	2014	2015	2016	2017	2018	2019

¹⁶⁶ International Monetary Fund (IMF). (2020). Policy responses to COVID 19. <https://www.imf.org/en/Topics/imf-and-COVID19/Policy-Responses-to-COVID-19#B>

GDP (USD billion)	1.574	1.613	1.704	1.778	1.802	1.838	1.871	1.880
GDP per capita (USD)	4397.8	4332.8	4411.9	4482.5	4367.5	4315.2	4884.7	4815.1
GDP Growth rate (%)	3.8	0.7	4.0	3.8	-0.5	0.9	2.09	0.27
GNI/capita (USD)	4.26	4.31	4.38	4.58	4.48	4.39	4.45	4.45
HDI	0.716	0.715	0.715	0.709	0.709	0.708	0.720	0.720
Ease of doing business	104	106	118	110	112	121	125	135

Table 35 shows the changes in GDP from 2012 to 2019. The 2019 official quarterly statistics on GDP revealed positive growth of 5.2% for the first quarter, then showed a decline of 0.8%, 0.4%, and 2.8%, respectively.¹⁶⁷

According to the latest World Bank annual ratings, Belize is ranked 135 among 190 economies in the ease of doing business. The main weaknesses are linked to getting credit (173/190 economies), starting a business (166/190), and registering property (137/190).¹⁶⁸ The rank of Belize deteriorated from 125 in 2018 to reach 135 in 2019. The ease of doing business in Belize averaged 111.6 from 2010 until 2019, reaching an all-time low of 135 in 2019, and a record high of 75 in 2008.¹⁶⁹

Key Economic Drivers and GDP

Presently the economy of Belize remains a highly open, natural resource and services-based, export economy. Its performance is largely dependent on exports of tourism services and agricultural products.

In Belize, GDP growth since independence in 1981 has been positive though volatile. The primary contributors to the GDP are agriculture and forestry. These two critical economic drivers are largely natural resources-based. Other industries include manufacturing, construction, electricity, and water supply. Secondary industries include the wholesale and retail trade, the service industry, real estate, transport, and communication.

Belize imports almost five times in dollar values as much commodities as it exports. Table 36 **Error! Reference source not found.** below shows the gross imports by section for the period 2009 to 2019. Machinery and transport equipment have consistently remained the top import if not by volume by cost.

¹⁶⁷ Statistical Institute of Belize, Gross Domestic Product. Accessed in November 2020: <http://sib.org.bz/statistics/gross-domestic-product/>

¹⁶⁸ World Bank. (no date). Ease of doing business: Belize. <https://www.doingbusiness.org/en/data/exploreconomies/belize/#>

¹⁶⁹ Trade Economics, Ease of Doing Business in Belize. Accessed in April 2019: <https://tradingeconomics.com/belize/ease-of-doing-business>

Table 36. Gross Imports for period 2009 - 2019 in BZD million (Source: Statistical Institute of Belize, Trade Statistics).

Gross Imports by S.I.T.C Rev. 4, 2009 – 2019											
Sectors	Years / BZD Million										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Food and Live Animals	155.773	155.826	166.595	192.014	201.498	224.115	221.794	229.411	216.084	219.729	230.1877
Beverages & Tobacco	17.6332	22.7266	31.751	29.5235	31.6748	39.1834	40.0179	38.4334	35.2994	37.8824	39.9394
Crude Materials	13.1108	14.7572	19.6563	17.0791	20.5155	31.2392	31.4299	36.0911	35.4509	30.0564	36.6622
Mineral Fuels & Lub.	168.856	223.068	264.792	273.134	279.117	295.677	220.542	187.009	215.665	282.855	295.0507
Oils and Fats	5.32922	6.59606	11.1152	14.1834	13.2686	15.9753	17.6064	13.7139	16.4431	16.782	19.628
Chemical Products	124.627	126.317	146.708	158.095	166.111	166.901	182.949	171.975	174.46	175.104	175.6484
Manufactured goods	178.283	196.916	203.442	199.104	224.496	218.632	244.606	236.194	244.016	244.353	267.5419
Mach. & Transp. Eq't	266.723	234.687	252.501	274.259	320.084	342.792	435.726	458.699	375.511	390.925	397.6473
Oth. Manufactures	94.5733	95.5081	106.626	106.006	134.422	140.793	158.187	178.542	161.332	150.903	144.5629
Commodities n.e.s	0.48032	0.56805	0.00254	0.00316	0.00391	0.57883	1.64725	0.61053	0.32355	0.00618	0.0181
Commercial Free Zone	191.73	262.091	387.479	351.33	332.776	327.085	317.12	305.484	307.243	323.994	329.876
Designated Process Areas	74.5533	64.5116	69.1698	64.8917	80.6334	115.153	115.828	45.3485	41.1132	38.808	31.869
Personal Goods	9.41605	10.0395	5.3271	5.33467	6.94617	6.51184	5.03942	3.91852	3.51296	4.08202	3.1696
TOTAL	1301.09	1413.61	1665.17	1684.96	1811.55	1924.64	1992.49	1905.43	1826.45	1915.48	1971.80

Up to 2015, there were steady increases in imports (Table 36 **Error! Reference source not found.**), followed by two years of decrease - 2016 and 2017. Belize's major source of imports in 2019 was the United States of America, followed by China and Mexico. Much smaller imports come from fellow CARICOM nations.

Table 37. Gross Imports by Origin for period 2009 to 2019 in BZD million (Source: Statistical Institute of Belize).

Gross Imports by Origin, 2009 - 2019											
Origin	Years / BZD Million										
REGION	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
United States of America	469.7	482.68	533.05	507.71	588.26	610.13	681.75	712.31	650.51	814.08	871.28
Mexico	134.98	138.6	152.27	182	210.67	215.46	215.06	206.65	203.77	205.94	215.01
United Kingdom	26.532	30.877	27.177	17.171	19.773	22.753	45.761	25.488	23.256	18.789	19.556
Other European Union	60.14	43.888	51.01	53.011	64.264	58.427	77.223	56.207	65.662	57.804	56.864
Panama	80.041	71.847	78.431	69.29	51.548	65.215	80.212	63.622	59.774	59.514	56.992
Costa Rica	14.86	14.532	16.154	21.969	27.42	20.915	22.35	23.701	22.202	18.867	18.926
Other Central America	156.14	150.81	157.4	169.75	175.3	211.74	213.44	188.39	194.62	214.17	209.13
Caricom	26.157	29.632	35.368	46.231	47.243	56.433	52.095	53.834	47.76	50.516	48.104
Canada	12.241	11.81	13.325	12.948	11.153	16.622	16.857	18.145	20.283	16.55	15.229
Netherland Antillies	102.67	192.47	222.38	235.28	233.22	249.54	178.4	141.44	147.82	30.48	0.0869
China	121.01	149.08	236.63	218.85	209.72	213.18	201.67	223.3	205.34	229.96	268.15
Other	96.605	97.387	141.97	150.74	172.98	184.22	207.68	192.34	185.45	198.8	192.47

TOTAL	1301.1	1413.6	1665.2	1685	1811.5	1924.6	1992.5	1905.4	1826.5	1915.5	1971.8
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Belize recorded a trade deficit of BZD 111.6 million in August of 2020 (Figure 31). This trend started between 2018 and 2019 due to lower goods exports, tourism receipts and remittances inflows, and higher goods imports.¹⁷⁰ Exports totalled BZD 32.1 million while imports totalled BZD 143.7 million.

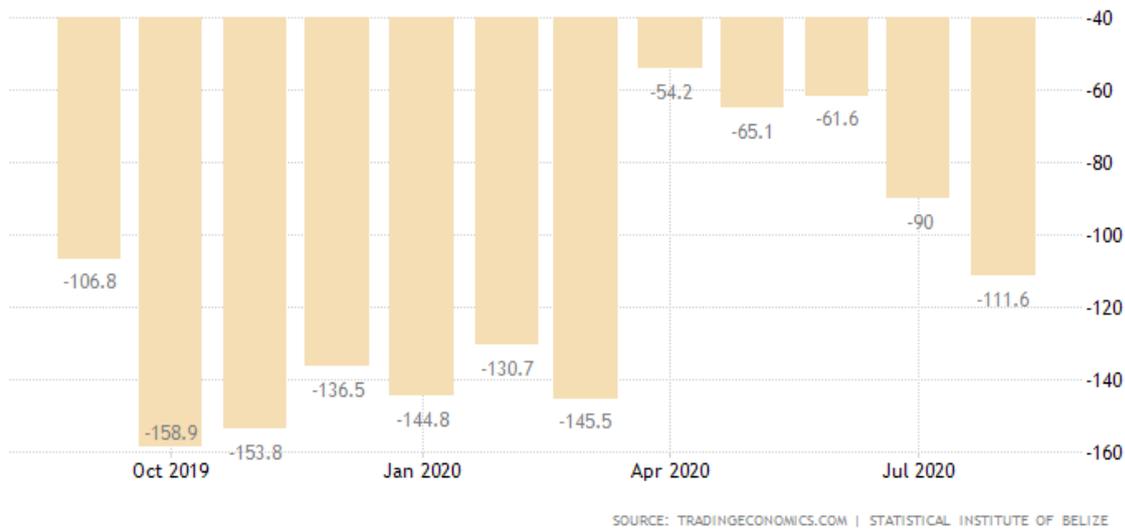


Figure 31. Belize’s Balance of Trade in BZD million (Source Trading Economics/Statistical Institute of Belize).

Contained within the document Horizon 2030 - Vision for Belize by the year 2030, under the section ‘Strategies to Achieve the Goals for Economic Resilience’ can be found the GoB’s agreement to implement policies and provide incentives to create new industries, and to develop the domestic market as a springboard for exports, produce quality goods and services and expand exports. This outlines GoB’s commitment to reducing the trade deficit by 2030.

The Growth and Sustainable Development Strategy (GSDS) was the guiding development plan for the period 2016–2019 and is currently being updated. Its overall goal “*To improve the quality of life for all Belizeans, living now and in the future.*” One of the GSDS Necessary Conditions (NC 1.1) speaks to the penetration of export markets to address and reduce the trade deficit.¹⁷¹

The reality is more recently stated in Belize’s Fiscal Strategy Statement 2016–2019 as “*the economy of Belize is currently challenged by low growth and high levels of public debt*”. It also states that that recent years saw a slowing down in real economic output, flat tax revenue, and a growing deficit. Furthermore, at the same time debt has increased, GDP growth has slowed.¹⁷² In general, growth in Belize can be susceptible to the path of debt, exogenous shocks that could heighten volatility, and the depletion of

¹⁷⁰ Economic Commission for Latin America (ECLA). (2020). Economic Survey of Latin America and the Caribbean: Belize.

¹⁷¹ Ministry of Economic Development (2016). Growth and Sustainable Development Strategy, Belize 2016-2019.

¹⁷² Belize Fiscal Strategy Statement 2018/2019 - Caribbean Elections. Accessed in April 2019: http://caribbeanelections.com/eDocs/budget/bz_budget/bz_fiscal_strategy_statement_2018_2019.pdf

resources available for investments.¹⁷³

Development prospects

Belize has made great developmental progress in the past ten years. However, in terms of social progress, income distribution, poverty levels, employment and compensation rate, levels of crime and corruption, education opportunities, and health services, the state of the environment all seem to suggest mixed outcomes, even in the presence of significant spending on social services.

The Belize framework for sustainable development, the GSDS, incorporates the Sustainable Development Goals (SDGs). As a result, the GoB has taken ownership of the SDGs at the national level. This is evidenced by the Ministry of Finance embarking on an initiative to move towards Programme Budgeting in all line ministries to monitor individual ministry performance in achieving GSDS and SDG targets and achieving ministry objectives. These goals have been incorporated and mainstreamed in Belize's medium- and long-term development plans. In addition to the economic, social, and environmental dimensions of sustainable development, Belize's Horizon 2030 and GSDS 2016-2019 also integrate elements of cultural and institutional sustainability, peace, and good governance.¹⁷⁴

Belize's Voluntary National Review of the Sustainable Development Goals focused on four of the SDGs, as follows:¹⁷⁵

- **SDG #1 - NO POVERTY.** Though there are challenging economic circumstances, Belize has been able to implement innovative programs to reduce poverty in Belize. One such program BOOST is a best practice example.
- **SDG #3- GOOD HEALTH.** There have been improvements in the delivery of health care and related services since the 2013 Millennium Development Goals (MDG) Report such as Baby Friendly Hospitals, Exclusive Breastfeeding Rate Up to 6 months of Age increasing from 10% to 33%, growth in vaccination coverage and the successful and effective implementation of the Integrated Management of Childhood Illnesses. There is a need though for the setting of targets and improvement in the technical expertise available to the national health care system.
- **SDG #5- GENDER EQUALITY.** There is a strong legal framework for the achievement of the targets for this SDG, for example, the Revised National Gender Policy (May 2017). However, there is still much work to be done to integrate women into political and business leadership positions.
- **SDG #14- LIFE UNDER WATER.** Sustainable fisheries management is within the country's reach. Belizean territorial seas have been divided into 9 fishing areas or managed access zones. The SDG target for the conservation of coastal and marine areas by 2020, is 10% to date, and Belize has 21% under protection with 3% no take zone.

Concerning poverty, the existing data shows that the Mayans have the highest poverty incidence levels among existing ethnic minorities; women do not seem disproportionately affected by poverty.¹⁷⁶ While the private sector is the largest employer in Belize, there is a lot of variation in occupations along gender

¹⁷³ Carneiro F. (2016). BELIZE. Right Choices Bright Future. Systematic Country Diagnostic. World Bank Group.

¹⁷⁴ Sustainable Development Unit – MAFFESD, and MEDP (2017). Belize's Voluntary National Review for the Sustainable Development Goals - 2017

¹⁷⁵ Sustainable Development Unit – MAFFESD, and MEDP (2017). Belize's Voluntary National Review for the Sustainable Development Goals - 2017

¹⁷⁶ Carneiro F. (2016). BELIZE. Right Choices Bright Future. Systematic Country Diagnostic. World Bank Group.

and ethnic dimensions.¹⁷⁷ Migrants, representing a fifth of the labour force, appear to fill a gap in the labour market and occupy mostly low-skill jobs.¹⁷⁸

High poverty and crime levels persist in Belize despite the relatively significant amount of resources allocated to social programmes. GoB's expenditure on social services has dominated budget expenditure at the expense of spending on economic and other services. The reality is that the allocations for compensation to the social services have been high in real terms by international standards. One such GoB initiative is the national programme *Building Opportunities for Our Social Transformation Initiative (BOOST)*, with its objectives of reducing poverty through economic aid; and breaking the cycle of family poverty through the development of children.

BOOST, managed by the Ministry of Human Development, Families & Indigenous Peoples' Affairs (MHDFIPA), began in 2011 as a conditional cash transfer programme focusing on families living in poverty. Such transfers are effective to meet any of the three main requirements: immunise children under 5; regular prenatal check-ups for pregnant women performed in health centres; and send children to school with a minimum of 85% attendance. When any of these requirements are met, the programme grants on a monthly basis between BZD44 and BZD82 (USD22 - USD41) per person, with a maximum of six beneficiaries per family. The programme also supports the poorest families' access to financial services such as savings incentives and micro-credits to bring families closer to financial independence. The target population is vulnerable households, including pregnant women; children between zero and four years of age; children who attend school; senior citizens (over 60); and people living with disabilities.

Another social program is *RESTORE Belize*, which was formed in 2010 in response to an increase in violent crime. *RESTORE Belize* is managed by the Office of the Prime Minister (OPM) and aims to improve the quality of life of every citizen through restoring law and order and community building, as defined in [Belize's Horizon 2030 Long-Term Planning Framework](#). The programme is mandated to promote greater collaboration between agencies and to mobilize human, technical and financial resources to accomplish its mission to make Belize a safe, vibrant home for residents through inclusive, multi-sectoral and citizen-centred action. RESTORE Belize focuses on the root causes of crime, addressing areas such as education, parenting skills, mental health, and conflict mediation to ultimately contribute to a culture of peace. To contribute to a culture of peace, *RESTORE Belize* seeks to address the root causes of crime "through inclusive, multi-sectoral, citizen-centred action."

High levels of income disparity and inequality and low national socio-economic development remain among the major challenges confronting the country. There are two emerging challenges to Belize's social and economic progress. These include the level of crime, and changes in the environment.

The surge in crime can be attributed to a faltering education system, poverty levels, an increase in unemployment (especially among youth), drug trade, and economic slowdown. Tourism, one of the main engines of growth in Belize, is threatened by high levels of crime. In turn, GDP growth is compromised as well. Fighting crime is essential but comes with high financial costs. One of the keys to addressing crime is a strong public-private relationship. The growth in the private sector has to be large enough to generate jobs for the growing young population. Of note is the fact that Belize City was listed among the top ten worst cities in the world because of the level of crime. Immigration from neighbouring Central American countries has added to the social pressures and, to some extent, to the

¹⁷⁷ Carneiro F. (2016). BELIZE. Right Choices Bright Future. Systematic Country Diagnostic. World Bank Group.

¹⁷⁸ Carneiro F. (2016). BELIZE. Right Choices Bright Future. Systematic Country Diagnostic. World Bank Group.

level of crimes.

Other issues with negative implications for economic growth include environmental problems (deforestation), and climate change impacts especially extreme events (droughts, flooding, tropical cyclones),, as discussed in the previous sections. Development challenges in Belize will be exacerbated by the potential impacts of climate change and climate variability. Belize has developed several policy frameworks over the last decade to respond to these issues (see the next section).

Considering agriculture and tourism as two of the four GoB's growth strategy pillars, current environmental policies and economic sustainability might both need to show more concerted action and compromises. In the context of the COVID-19 crisis, both industries are also at risk and at the heart of economic recovery measures, as described below.

Key economic drivers and anticipated sectors for growth

As stated in the GSDS, the principal strategy to achieve income growth of approximately 33% over a ten-year period is to intensify efforts to improve productivity and competitiveness.

An improved business climate would create the enabling environment for expansion into value-added activities in sectors such as tourism, agri-business / agro-processing, as well as information and communications technology (ICT).

According to Belize Trade and Investment Development Service (BELTRAIDE), Belize has competitive advantages of:¹⁷⁹

- Strategic location: close market proximity to North American, Central American, South American, and the Caribbean markets;
- Availability of high-yield arable land: over 80,8654 ha (1,998,230 acres) (38%) of the total land area are considered agriculturally suitable;
- Well-positioned for organic and eco-labelled production: branded with an aura of quality and distinctiveness pursued by consumers in the new era;
- An abundant pool of skilled and vibrant workforce;
- Not within the high hurricane landfall probability belt;
- All-year round mild average water temperature of 27 °C (80 °F);
- Long-standing democratic system with an independent judiciary;
- Stable foreign exchange rate: fixed (pegged) to the US dollar since 1978;
- No limitation on the repatriation of profits or dividends;
- Availability of government incentives: Fiscal Incentives Program, Export Processing Zone Program, Commercial Free Zone Program, Qualified Retired Persons Program;
- Preferential Market Access: European Union, CARICOM nations, Caribbean Basin Initiatives (USA);
- Favourable trading relationships with Central American nations.

Tourism was up until the 2020 COVID-19 crisis, anticipated to remain one of the primary economic drivers. Until 2005, when petroleum began to be exploited for both commercial use and export, the sector was one of the main engines of growth in the local economy and the principal source of foreign

¹⁷⁹ BELTRAIDE, Belize Invest, Agribusiness and Agro-processing. Accessed in April 2019: <https://www.belizeinvest.org.bz/agribusiness--agro-processing.html>

exchange. From the mid-1980s to 2010, tourism inflows averaged a steady annual increase of about 7%. Visitor arrivals increased also by 7% yearly through this period with more rapid annual growth (14%) in the 1980s. The total contribution of travel and tourism to GDP was, until the 2020 crisis, forecast to rise by 5% per annum, reaching 47% of GDP, and contributing some BZD 819 million to the economy by 2027.¹⁸⁰ However, since the COVID-19 related travel restrictions were imposed in 2020, the country has already lost 80% of tourism-related jobs and associated livelihoods. While the extent of the long-term economic impacts of this crisis are unknown, the current situation paints a gloomy picture for the sector's economic prospects.¹⁸¹ As part of recovery measures for the sector, the following initiatives are underway¹⁸²:

- **Tourism Restart**
 - Develop Barometer to track COVID-19 impact and performance
 - Digital integration across the tourism industry
 - Review and revamp of National Tourism Master Plan to fit the context of post-COVID 19 industry
- **Paperless Entry and Exit Requirements:** installing of kiosks, passport, readers, x-ray machinery to minimise person to person contact
- **Second Home Tourism/ Retirees:** expand scope and potential of Qualified Retirement Programme
- **Tourism Incentives:** Import duty and Goods and Services Tax (GST) waivers on new equipment for qualified applicants
- **Tourism Development Trust:** Drafting of legislation to enact a trust to manage assets financed by the International Financial Institutions and develop full investment mechanism for the management of public assets
- **Tourism Platform for Investment in forest reserves:** Develop Public Private Partnership (PPP) framework for investment in protected areas
- **Multi-destination agreement:** between Belize-Cuba and Taiwan Air Services Agreement
- **Shared economy:** mandatory registration of vacation rentals and mandatory registration for GST and Business Tax for vacation rentals.

Agriculture remains another critical pillar of the Belizean economy and a base of the productive sector agribusiness; hence it will play an important role in future growth expansion. Belize's proximity to the North American, Central American, South American, and Caribbean markets offers easy access to top markets. Agribusiness is the business sector encompassing farming and farming-related commercial activities. The business involves all the steps required to send an agricultural good to market: production, processing, and distribution. It is an important component of the economy in countries like Belize with arable land, since agricultural products can be exported. Agribusiness provides a sector for growth with opportunities for investment and trade in areas such as agricultural machinery and

¹⁸⁰ World Travel & Tourism Council (2017). Travel and Tourism: Economic Impact, 2017, Belize.

¹⁸¹ United Nations Development Programme (UNDP). 2020. UNDP Belize: Support to the National Response and recovery to Contain the Impact of COVID 19.

¹⁸² Government of Belize (2020). Economic recovery strategy for Belize.

equipment, modernization of systems, and the incorporation of sustainable technology in agricultural practices and processes. Opportunities in other agricultural -related sectors include storage and export-handling facilities for agro-products. Sub-sector opportunities also exist in value added investments, trade, advanced packaging and preservation methods; improved production and processing; product marketing and branding; and storage and export handling.

The COVID-19 crisis has not spared this sector either. In 2020, the Belize Sugar Industries (BSI) is reporting a decrease in production at the end of this year's sugar season that had been affected by an extended drought period as well as the coronavirus pandemic. As described in the Economic Recovery Strategy for Belize, as part of the immediate COVID-19 relief effort, the Belizean Government has programmed to invest USD 233 million in initiatives to manage the health response and to support the Belizean population, and protect local jobs. A total of USD 16 million has been allocated as direct relief to farmers, as well as an additional USD 50 million in agriculture-related support.⁵⁴

Another among the most promising sources of growth for the private sector is in the ICT industry. It provides relatively high paying jobs for Belizeans. The fact that Belize is an English-speaking country that is relatively geographically close to the US makes it even more attractive for private investments. This provides a wide baseline of potential recruits for call centre staffing purposes. Opportunities are available in Business Process Outsourcing (BPO), Information Technology Outsourcing (ITO), or Knowledge Process Outsourcing (KPO). As of early 2015, the BPO sector comprised of over 18 centres employing over 2,200 agents and has grown since. BELTRAIDE continues to support the national BPO Strategy, industry infrastructure, and labour force training, but more extensive investment and cross-training are needed in this industry.

The financial system in Belize

Assessing the size of Belize's private sector is important in evaluating its current and potential contribution to the overall economy. The size of the private sector can be measured in various ways, including by its shares of total consumption, investment, credit, and employment. The private sector accounts for about two-thirds of the economy and the public or state sector the other one-third. The Belize Chamber of Commerce and Industry (BCCI) lists over 300 members.¹⁸³ However, these are mostly large and medium-scale companies, and hence it significantly understates the size of the private sector.

It is a known fact that the financial system plays a crucial role in the process of economic development and that the availability of credit is a binding constraint for both macro and micro enterprises in the development process. Since the 1980s, Belize's financial system has seen some growth and diversification. It is, however, still largely undeveloped and high cost of domestic credit has negative implications for private sector development.¹⁸⁴

Belize's financial sector is made of five domestic banks, five international (offshore) banks, nine domestic insurance companies, 12 credit unions, the state-owned Development Finance Corporation (DFC), the Social Security Board, 44 money service providers (MSBs), and 54 money lenders. Both domestic and international banks play important roles in mobilising savings for domestic investment and facilitating external trade, on which the small open economy of Belize strongly depends. Both also provide

¹⁸³ Belize's Chamber of Commerce and Industry (BCCI). (2020). About the BCCI. <https://www.belize.org/>

¹⁸⁴ Rowland, B., Durante, J.J., Martin, D. (2008). Belize: a Private sector Assessment, Private Sector Development Discussion Paper #6, IDB.

significant credit to the economy. Their exposure to the government appears limited but non-negligible. Non-bank financial institutions have significant exposure to domestic banks via bank deposits.¹⁸⁵

Two basic factors are shaping private sector development in Belize. The first is the population size, and the second is the fact the country is land abundant and has always had a comparative advantage based on natural resource exploitation. More can be done to assist the private sector development by establishing a “level playing field” for businesses when it comes to taxation, licensing, and other administrative requirements and incentives. More can also be done in terms of policy implementation such as tax reforms.

In the IDB report “*Belize: a Private Sector Assessment*,” it was identified that the following priority actions would be conducive to significant private sector growth: (i) a lower cost of domestic finance, (ii) a different incentive framework, (iii) improved infrastructure, (iv) secure property rights and a low cost transactions framework, (v) a flexible and adaptive labour market, (vi) revamped trade and investment promotion (vii) improving access to finance and (viii) raising the skills level of the labour force through innovative strategies and actions.¹⁸⁶

To address these issues, the Prime Minister in 2011 established the Economic Development Council (EDC). The EDC is a public-private advisory body whose overall objectives are: (a) to strengthen the collaboration between public and private sectors through meaningful dialogue that leads to positive outcomes facilitating economic development, and (b) to advise on and help develop reforms that improves doing business, enhance the public sector processes and enhances confidence of doing business in Belize. The EDC comprises 10 members, including five senior managers from the public sector and five representatives from the private sector, and is co-chaired by a representative from the private sector and a counterpart from the public sector. The EDC came into force with the Economic Development Act of 2017.¹⁸⁷

The major factor stifling economic growth in Belize is the public sector debt. This high level of public debt also presents a challenge. The servicing of the high level of external public debt could act as a constraint to private sector growth. In 2019, Belize’s external debt peaked at 105% of GDP (Table 38**Error! Reference source not found.**).

Table 38. Total Public Debt/GDP (%) (Source: Global Finance Magazine).

¹⁸⁵ International Monetary Fund (IMF). (2016). Belize: selected issues. <https://www.imf.org/external/pubs/ft/scr/2016/cr16335.pdf>

¹⁸⁶ Rowland, B., Durante, J.J., Martin, D. (2008). Belize: a Private sector Assessment, Private Sector Development Discussion Paper #6, IDB.

¹⁸⁷ GoB, Office of the Prime Minister, Economic Development Council. Accessed in April 2019: <https://edc.gov.bz/edc/>

Table

	2013	2014	2015	2016	2017	2018	2019
Belize	78.9	77.3	80.7	95.9	99.0	97.5	105.1
Dominican Republic	33.9	33.3	32.7	34.6	37.2	36.5	53.8
Guyana	58	51.9	50.1	50.7	52.2	57	39.8
Haiti	21.5	26.3	30.2	33.9	31.1	33.3	47.6
Jamaica	140.5	139.7	121.3	113.6	101	97.4	93.9
St Kitts & Nevis	101.1	75.3	66.1	61.5	62.9	63.6	56.2
St Lucia	69.5	70.7	67.8	69.2	70.6	71.8	61.3
St Vincent & the Grenadines	75	79.4	79.4	82.8	73.8	73	75.2
Trinidad and Tobago	25.1	23.9	28	37	41.8	42.6	45.1
Antigua & Barbuda	95	102.1	98.2	86.2	86.8	62.7	84.5
Barbados	135.2	139.2	146.7	149.1	157.3	123.6	122.2
Grenada	108.6	101.8	90.1	82	70.4	64.6	59.1
The Bahamas	43.9	47.8	49.6	50.5	54.6	54.5	58.8

38Error! Reference source not found. shows the total debt as a percentage of GDP as compared to other CARICOM nations. In 2013 debt restructuring on Belize's USD 547 million "superbond" resulted in an extension of the bond's term to 2038 (from 2029 previously) and a lower interest rate that will reduce debt-service costs and ease pressure on the fiscal accounts. However, by the end of 2019, Belize ranked second in the region in public debt to GDP ratio.

The challenges ahead leading towards sustained economic development would involve first and foremost addressing the national debt. For existing leading sectors, there is the need to diversify further the production and export bases. Besides tourism and agriculture, another "winner" needs to be identified. Just as important is the development of a strong public-private partnership. Effective investment in education and public service reform is needed.

To address poverty and the macroeconomic challenges that Belize faces, a stronger private sector and a clearly articulated policy for private-sector development are needed. To realize the future growth of Belize, public-private collaboration is vital in the context of an agreed strategy that supports key traditional and emerging sectors and incorporates a climate change lens in these sectors.

According to the IDB *"in relative terms, Belize remains poor—particularly when compared with other Caribbean countries—and its income advantage over its poorer Central American neighbours has been diminishing."*¹⁸⁸

¹⁸⁸ Martin, D. (2015). Rekindling Economic Growth in Belize, 2015, IDB Technical Note No. IDB-TN-820.

Annex 3: Belize’s climate change response: national frameworks

Table 39: National frameworks relevant to climate change – International reports and communications.

National frameworks relevant to climate change	
Title/ Year	Description
International reports and communications	
First National Communication to the UNFCCC, 2002	As signatory of the UNFCCC, Belize fulfilled its obligation by preparing its First Communication in 2002. This includes an overview of the national circumstances with respect to climate change; the national GHG inventory; and relevant adaptation and measures.
Second National Communication to the UNFCCC, 2012	Submitted 10 years after the first one, the Second Communication provides updated information regarding the national circumstances and the national greenhouse gas inventory. It integrates the results of a number of vulnerability assessments conducted in the country and two programmes focused on climate change mitigation. Finally, it presents the steps taken to implement the convention, including a technology needs assessment.
Third National Communication to the UNFCCC, 2016	It provides a set of robust recommendations to facilitate more effective coordination and planning for climate change mitigation and adaptation at the national and local level. Aims at setting the stage for the development of projects and programmes that will attract financial resources to support the implementation of the necessary climate change activities throughout Belize.
Fourth National Communication to the UNFCCC, 2021 (expected)	It is currently under development (2020) and is expected by 2021. An Integrated vulnerability and adaptation (V&A) assessment, considering gender and focused on coastal zones, water, agriculture and fisheries, in Central Belize and South-Central Belize was developed in 2020. Besides, the fourth GHG inventory (2012-2017) was also included under the activities, as well as a Mitigation Assessment and Strategy. ¹⁸⁹
First Nationally Determined Contribution (NDC), 2016	It presents an action-based approach that is dependent on cost effective technology, capacity building and adequate financial support. The activities mentioned cover multiple sectors e.g. forestry, electricity, waste and transport. In terms of adaptation, the main actions aim at increasing resilience and reducing vulnerability of livelihoods with respect to critical infrastructure, tourism, food security, sustainable forest management, protected areas management, coastal and marine resources, water scarcity, energy security and health.
Second Nationally Determined Contribution (NDC), 2020/2021 (expected)	The updated NDC is being finalised, and should be validated by national stakeholders in December 2020. The NDC will include a financial strategy to ensure NDC-related activities’ implementation is matched up against the required climate finance resources.
Belize Technology Needs Assessment. Barrier Analysis and Enabling Framework. Adaptation , May 2018	It identifies the main barriers to the uptake of six prioritized adaptation technologies as well as the enabling framework and ‘measures’ that would facilitate the smooth transfer of these technologies. The vulnerable sectors selected by key stakeholders through a participatory, consultative process were: Agriculture Sector, Coastal and Marine Ecosystems, and the Water Sector. Prioritized technologies were categorized as market goods; capital goods; publicly available goods; and non-market goods.
Belize Technology Needs Assessment. Barrier Analysis and Enabling Framework. Mitigation , May 2018	It identifies the main barriers to the uptake of six prioritized mitigation technologies as well as the enabling framework and ‘measures’ that would facilitate the smooth transfer of these technologies. The prioritized technologies include “Off-grid PV Systems”, “Gasification” and “On-grid PV Systems”.
Mapping of climate change stakeholders, national climate finance architecture	Developed by the NCCO, it aims to get an understanding of: the perception of climate change at the organizational level in the public and private sector; the ongoing or planning activities on climate change adaptation and mitigation activities; as well as to identify organizational needs with regards to climate change.
Biennial Update Report (BUR), 2020	The NCCO has prepared Belize’s First Biennial Update Report to the UNFCCC. This report provides an update and analysis of the national context and domestic actions and policies

¹⁸⁹ Documents communicated by Colin Mattis from NCCO on 12 November 2020.

implemented to address this phenomenon. It provides an overview of current national circumstances, a national inventory of greenhouse gases updated for reference years 2012, 2015 and 2017, the actions developed to mitigate climate change, and the needs and support received regarding climate change for the reporting period of 2015-2018.

2020-2050 Low-emission Long-Term Development Strategy (LEDS) and Action Plan, 2021 (expected)

The long-term low greenhouse gas emission development strategy, in accordance with Paris Agreement's article 4 is currently being prepared as part of the Fourth National Communication. Its main objective is to define pathways to achieve low-emission development in Belize. In addition, it also aims to (i) link the LEDS to the national climate change policy, to national development plans and sectoral planning processes; (ii) engage stakeholders across the economy to enhance buy-in and ownership of climate mitigation strategies; and (iii) link financial, technological and capacity needs for the LEDS to be implemented. **Error! Bookmark not defined.**

[The Caribsave Climate Change Risk Atlas \(CCCRA\) - Climate Change Risk Profile for Belize, 2012](#)

Developed by the CARIBSAVE Partnership, it provides detailed climate modelling projections for Belize. The report includes robust data in the areas of: Community Livelihoods, Gender, Poverty and Development; Agriculture and Food security; Energy; Water Quality and Availability; Sea Level Rise and Storm Surge Impacts on Coastal Infrastructure and Settlements; Comprehensive Disaster Management; Human Health; and Marine and Terrestrial Biodiversity and Fisheries. It also analyses the vulnerability of Belize to climate change impacts and its adaptive capacity. Recommendations are provided to support the decision making, policy and planning processes to improve climate change resilience.

Table 40. National frameworks relevant to climate change – National Development, Environment and Climate Change policies.

National frameworks relevant to climate change	
Title/ Year	Description
National Development, Environment and Climate Change policies	
National Climate Resilience Investment Plan (NCRIP), 2013	It provides the framework for an efficient, productive and strategic approach to building economic and social resilience and development. High importance is given to building climate resilience and improving disaster risk management capacities across all sectors. The GoB is reviewing and updating the plan.
National Climate Change Policy, Strategy and Action Plan 2015-2020 (NCCPSAP), 2014	It provides policy guidance for the development of an appropriate administrative and legislative framework for low-carbon development, in line with sectoral policies. This includes a Climate Change Action Plan which is a five-year programme covering adaptation and mitigation. The plan was developed based on the results of the First and Second National Communications to the UNFCCC, which identified a number of priority sectors for climate change mitigation and adaptation efforts, including: coastal zone, human settlement, fisheries and aquaculture, agriculture, forestry, tourism, water, energy and health.
National Climate Change Policy Strategy and Masterplan, 2021-2025, 2021 (expected)	This document will provide an update of the NCCPSAP and is currently under development.
National Development Framework Horizon 2010-2030, 2010	As the nation’s primary planning document, it outlines four critical success factors for the development of the country and to ensure a better quality of life for all Belizeans, living now and in the future. One of its four main pillars is responsible for environmental stewardship. The strategies to achieve this pillar, namely integrating environmental sustainability into development planning and promoting sustainable energy for all, address the areas of concern relating to Belize’s emission profile and climate change impacts.
Growth and Sustainable Development Strategy (GSDS) 2016-2019 , 2016	It is the development plan for 2016–2019, stemming from Horizon 2010-2030. It adopts an integrated, systemic approach and encompasses medium-term economic development, poverty reduction and longer-term sustainable development issues. Among the conditions to ensure ‘Sustained or Improved Health of Natural, Environmental, Historical and Cultural Assets’ Disaster Risk Management and Climate Change Resilience are considered critical and an integral part of this plan. The GSDS is being reviewed and updated. A gap analysis has been conducted under this process.
National Communication Strategy for Climate Change, 2021 (expected)	This strategy, which is currently being developed, will communicate in a cross-sectoral manner about all of Belize’s on-going climate-related public and private initiatives. It aims to increase and improve the level of awareness, interest, positive attitudes, behaviours and practices towards climate change adaptation and mitigation among the public, vulnerable communities and stakeholders in Belize. The key target audiences are: the policy sphere (government ministries, departments and agencies); international development agencies; academia and schools; municipalities and town councils; civil society; farmers and farmer groups; private sector; media; youth, women and people with disabilities; indigenous people; residents, cultural leaders and vulnerable communities. ¹⁹⁰
National Environmental Policy and Strategy 2014 – 2024 , 2014	It outlines a set of priorities, action plans and anticipated results for 2014-2024 based on a clear assessment of existing environmental challenges and resources as well as institutional framework and capacities to address them. It includes considerations on climate change challenges.
The Revised National Gender Policy – Part 2 , 2013 update	It builds on the achievements of the previous Policy (2002) and is based on an updated “Situation Analysis of Gender Issues” in Belize and aims at continuing national efforts to achieve gender equality and gender equity. Special areas of attention are identified for five policy priorities, including: Health, Education and skills training, Wealth and employment

¹⁹⁰ Terms of Reference for National Climate Change Communication Strategy and Action Plan Consultancy, shared by Colin Mattis from NCCO on 12 November 2020.

generation, Violence producing conditions, and Power and decision making. Climate change is not explicitly considered in this policy.

[Enhancing Gender Visibility in Disaster Risk Management and Climate Change in the Caribbean Country Assessment Report for Belize](#), 2009

It presents the results of the Caribbean Risk Management Initiative (CRMI) study in Belize, including a survey of institutions with responsibility for disaster risk management and gender affairs. The main objective of the study was to determine the structure and gender composition of these agencies, the extent of their awareness of gender issues and the incorporation of gender into their plans and procedures. The results are analysed in the context of gender differences in vulnerability and risks.

[Revised Low Carbon Development & Roadmap for Belize](#), 2016

It updates the first Low Carbon Development Road designed in 2015 and integrates the key elements of the GSDS. Its main objective is to assist the country in embarking on a pathway to low carbon sustainable development. The roadmap is structured in two tiers where activities are classified depending on their level of priority or urgency. Climate change is mainstreamed into the document, and one of the priority actions is focused on carrying out institutional and regulatory reforms to reinforce climate change management.

[Pollution Regulations](#), 1996

[Pollution Regulations amendment](#), 2009

They provide indications on the emission of contaminants into the environment, air pollution, particulate emissions from stationary sources, emission of organic compounds from stationary sources, emissions of carbon monoxide from stationary sources, emissions of nitrogen oxides, emission from combustion engines, water pollution, marine crafts, pollution of land; noise abatement; and prohibition of the manufacture of ozone layer damaging substances. The regulations were updated in 2009.

Table 41. Sectoral frameworks relevant to climate change mitigation.

Sectoral frameworks relevant to climate change mitigation	
Title/ Year	Description
<p>Land Use and Forestry National Forest Policy, 2015</p>	<p>It consists of 11 guiding principles and 15 policy statements, each with a set of strategies for the implementation of the policy statement. One of the objectives of the National Forest Policy is to provide guidance for actions to be taken with regard to the direct and indirect threats posed by climate change on forests and forest-dependent people in order to reduce their vulnerability and increase their resilience and adapt to climate change. To achieve this the policy document states that the GoB shall seek to mainstream adaptation and mitigation to climate change in its management objectives under the national forest programme. Secondly, the GoB shall also seek to systematically assess the potential impacts of climate change on Belize’s forests, the extent of the vulnerability of forests to these impacts, and actions for adaptation. Finally, it will seek to develop a comprehensive monitoring system to evaluate changes in the forest cover, carbon stocks and forest biodiversity and to use this information for further planning in light of climate change mitigation and adaptation.</p>
<p>National REDD+ Strategy, 2021 (expected)</p>	<p>It is currently being developed and its adoption originally expected by the end of 2019 has been postponed due to the COVID-19 crisis. It will cover all five REDD+ activities, notably reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest-carbon stocks; enhancement of forest-carbon stocks; and sustainable management of forests. The REDD+ Readiness Preparation Project is being implemented by the Ministry of Fisheries, Forestry, the Environment and Sustainable Development through the NCCO. The project development objective is “to assist Belize in carrying out key Readiness Preparation activities in order to strengthen their capacity to participate in future REDD+ carbon payment transactions”. <small>Error! Bookmark not defined.</small>⁶⁰</p>
<p>Belize Forest Reference Level (FRL) 2001 – 2015, 2020</p>	<p>The FRL is a key component of national forest monitoring systems and provides a baseline against which emission reductions can be measured, and subsequent results-based payments be made. It is in line with the timeline of actions that Belize presented in its 2015 NDC and with the 2015-2020 NCCPSAP. It is valid for a period of five years (2016-2020).</p>

National Land Use Policy for Land Resource Development, 2011	It addresses issues relating directly to the use of land, including housing, agriculture, and infrastructure; but also, its resources, such as fertility, geology, ecology, and hydrology, landscape and social values. It contains the first National Land Policy and a framework for implementation including a National Land Use Planning Office (NLUPO), Local Land Use Planning Areas, Local Land Use Planning Committee, and Local Land Use Plans. It states that climate change adaptation and mitigation issues must be considered and mainstreamed into land use planning. The major strategy incorporating climate change involves the implementation of land use strategies based on technical studies that integrate climate vulnerability analyses to determine areas of urban settlement, industrial enterprise, agriculture, forests and other natural ecosystems including protected areas. ¹⁹¹ The adaptation strategy outlined for this sector involves: (i) Promoting the adoption of an integrated land tenure and land classification policy and developing and implementing programs which discourage the establishment of human settlements in areas prone to natural hazards (flooding, land slippages, high winds and storm surges), and (ii) developing housing and settlement patterns/practices that enhance climate change adaptation and are resilient to climate change.
National Integrated Planning Framework for Land Resource Development, 2011	The Planning Framework contains the implementing plan and administrative structure of the related policy.
Forests (Protection of Mangroves) Regulations , 2003	It strengthens the conditions under which alteration of mangroves is permissible by introducing an application process for alteration. It also introduces penalties to transgressors.
The Forest Act, Chapter 176, Laws of Belize, 1980	It conferred authority upon a ministry within the GoB to regulate the use of forests on both public and private lands and to create forest reserves by decree on national lands. The Forest Act is currently being revised.

Energy

National Energy Policy Framework , 2011	It aims to provide options to pursue energy efficiency, sustainability and resilience over the next 30 years. It provides a framework of actions and tasks to overcome barriers to sustainable energy. It also makes the link between sustainable energy and climate change, including consideration on risks and impacts.
Ministry of Energy, Science & Technology and Public Utilities Strategic Plan 2012-2017 , including Belize National Sustainable Energy Strategy (2012-2033), 2012	It provides the outline for the Sustainable Energy Strategy in the development of a low carbon economy 2012 – 2033. It identifies Science, Technology and Innovation (STI) strategic options and the technology needs to transition the energy sector and economy toward low carbon development. It also identifies strategic elements required to build resilience of the economy to climate change. It outlines a framework of programmes to increase the economy’s resilience to climate change by encouraging a transition to low-carbon development and replacing imported fossil fuels with domestic (also called indigenous) renewable sources. The strategic goals include: 1) increase energy efficiency by 30% by 2033 (2011 base year); 2) reduce dependence on fossil fuels by 50% by 2020; 3) triple the amount of energy derived from waste materials; 4) become a net electricity exporter by 2020; and 5) build the Ministry of Energy’s institutional capacity to accomplish these mandates.
Sustainable Energy Action Plan: Belize 2014-2030	It is a tool to achieve Belize’s renewable energy and energy efficiency potential while meeting the Government’s economic social and environmental goals. It provides a framework of actions and tasks to overcome barriers to sustainable energy for the period 2014-2030.
Belize’s Annual Energy Statistics Report, 2019	The report presents each year a summary of Belize’s energy sector, including total installed capacity, volume and consumption.
Electricity Act, 1993 Electricity Act revised , 2000	It contains provisions on areas of supply of energy; electricity tariffs, charges and quality of service standards by-laws; electricity vesting; licensing of wiremen; and electricity

¹⁹¹ Meerman, J., McGill, J., Cayetano, M. (2011). National Land Use Policy for Land Resource Development.

[Electricity Act revised](#), 2003

bye-laws.

The act was updated in 2000 and 2003.

Transport

[Preparation of a Comprehensive National Transportation Master Plan for Belize Final Report. Comprehensive National Transportation Master Plan, 2018](#)

It aims to facilitate sector planning as well as a more efficient and effective transport within Belize, and between Belize and its trading partners. The plan aims to foster the development of Belize's economy, particularly of the agriculture and tourism sectors. It also aims to build resilience of the transport sector to the impacts of climate change. It does not specifically address climate change mitigation options but rather more infrastructural plans. However, in its short, medium, and long term and under its Environmental and Energy Action Plan speaks to energy efficiency in light-duty vehicles and the adjustment of taxes applied to new and used vehicles based on emissions, age of vehicle, or its fuel consumption.

Solid Waste Management

[National solid waste management policy](#), 2015

The policy was developed based on the results of analysis of the sector, concluding that the existing system for solid waste management in Belize was environmentally and financially unsustainable. Programmes within the policy document seek to address Institutional strengthening, waste segregation, storage, collection and transport, waste minimisation, re-use and recovery, cost recovery, education awareness and stakeholder communications. Climate change is not explicitly considered in this policy.

[Hazardous Waste Regulations](#), 2009

It provides indications on the management of hazardous waste including the hazardous waste management facility; storage; transportation; treatment; land disposal; landfill disposal prohibition; requirements for waste classification; investigation offences and penalties.

Solid Waste Management Authority Act, Chapter 222 of the Laws of Belize, 1991

It established the Belize Solid Waste Management Authority (BSWaMA) with the mandate to ensure that solid waste is managed in an environmentally sound manner in Belize.

Table 42. Sectoral frameworks relevant to climate change adaptation.

Sectoral frameworks relevant to climate change adaptation	
Title/ Year	Description
Coastal and Marine Resources	
Integrated Coastal Zone Management Plan , 2016	It was designed to “recommend actions that will ensure sustainable use of coastal resources by balancing conservation ideals with the economic and social needs of the country”. ¹⁹² Therein lies the major challenge of balancing conservation with economic needs. It recommends actions that will ensure sustainable coastal resources use by balancing conservation ideals with the economic and social needs of the country. It contains sections on climate change adaptation including considerations on socio-ecological vulnerability and resilience; socio-economic adaptation capacity; ecosystem-based adaptation; and governance for resilience building. The ICZM plan is being updated, and is conducted with support from the regional project, “Integrated Ridge to Reef Management of the Mesoamerican Reef Eco-region” also known as MAR2R that is currently being implemented. CZMAI is implementing Component 3 for Belize, which focuses on strengthening Integrated Coastal Zone Management. The updated plan is expected in 2022.
Vulnerability Assessment of the Belize Coastal Zone , 2008	It includes an assessment of the capacity to adapt to climate change using four criteria: governance, social, economic and ecosystem. Based on the results, it was concluded that the required structures to reduce the country's vulnerability to climate change are in place, but some key factors need to be streamlined and improved. It should be noted that Readiness support is being sought for the development a climate vulnerability assessment and adaptation plan for the coastal zone, among other targets. This proposal has undergone two rounds of review by the GCF, and Belize through its delivery partner FAO

¹⁹² MAFFESD, CZMAI (2016). Belize Integrated Coastal Zone Management Plan.

is in the process of submitting a revised proposal entitled “Enhancing adaptation planning and increasing climate resilience in the coastal zone and fisheries sector of Belize”.

[Coastal Zone Management \(CZM\) Act, 1998](#)

The Act was passed to address multiple uses and increasing demand for coastal lands and seeks to address issues such as rapid development, over-fishing and population growth. The Act also established the Coastal Zone Management Authority and Institute (CZMAI) and defines its functions, including the development of a Coastal Zone Management Plan. A further legal review of the CZM Act (1998) was conducted in 2018 and the Act is pending updates which include mainstreaming climate change considerations into ICZM.

[Coastal Zone Management Act Chapter 329, 2000](#)

Forests (Protection of Mangroves) Regulations 2018

These updated regulations place greater emphasis on the management and conservation of mangroves in critical areas on the mainland and on the cayes. They also recognise the significance of mangroves as an important feature of the country’s coastline and cayes – the role they play in coastline protection, contribution to our economy, and their aesthetic, ecological, and environmental values and functions. The new regulations also provide for an improved application process for alteration permits, institute a new systematic fee system, and strengthen penalties and fines to deter illegal mangrove alteration.¹⁹³

Fisheries and Aquaculture

[Fisheries Act, Chapter 210, 210s & 211, Revised Edition, 2003](#)

Fisheries management was facilitated through the Fisheries Act and its subsidiary legislation. The primary legislative tool is the 1980 Fisheries Act, which was revised in 1993, and focuses on new formulae for fishing licensing and regulation of the aquaculture sector. There have been subsequent amendments in 2003. It promotes sustainable fisheries, for the conservation and preservation of marine environment. The existing Act is outdated. New Act and Regulations are pending. New legislative framework will mainstream climate change in the fisheries sector.

[Fisheries Resources Act, 2020](#)

This act replaces previous legislation in place for almost seven decades and aims to modernise and transform Belize’s small-scale fishing industry. The legislation aims to ensure the sustainable use and management of the fishery resources and the conservation for the coral reefs, mangroves and coastal waters that support them, as well as provide greater decision-making authority, food security, and resiliency of local communities.

[Aquaculture Development Act, Chapter 204:01 Revised Edition, 2011](#)

It regulates the development of the aquaculture industry. It has not been fully enacted, or components fully enforced and operationalised.

National Fisheries Policy, Strategy and Action Plan for Belize, 2020

The policy aims to provide an enabling framework for the sustainable development, growth and management of the aquatic resources of Belize that is based on the best available scientific information, allows for the objective use of the precautionary principle, is climate-smart, optimises enforcement mechanisms, recognises the importance of active participation of all stakeholders, ensures equitable access to resources, and is coherent with relevant national, regional and international policies and agreements. The policy consists of five priority areas, including conservation and management of fish and ecosystems, research and development of the fisheries sector, enforcement and compliance, capacity building and knowledge management as well as fisheries governance.

Agriculture

[National Food and Agriculture Policy 2015 to 2030, 2015](#)

The policy aims to: provide clear directions to the GoB, in the form of a road map, for the reform of the sector during the 2015-2030 period; and send a strong message to industry stakeholders that there is a high level of commitment by the GoB to address their concerns and to ensure growth and development in the sector. Five pillars were identified to aid in achieving the goal, objectives, and targets of this policy. These include:

- Sustainable Production, Productivity and Competitiveness,
- Market Development, Access and Penetration,

¹⁹³ Breaking Belize News. (2018). New Mangroves Regulations come into effect on June 23, 2018. <https://www.breakingbelizenews.com/2018/06/21/new-mangroves-regulations-come-into-effect-on-june-23-2018/>

- National Food and Nutrition Security and Rural Livelihoods,
- Sustainable Agriculture and Risk Management – This pillar focuses on climate change adaptation, environmentally sound production practices, conservation of natural resources, and risk management mechanisms such as crop insurance. It expands on areas of variability and climate change, agro-biodiversity, clean production, and sustainable land management and other natural resources,
- Governance Accountability, Transparency, and Coordination.

Several initiatives have been implemented over the last three decades to address the weak public policy and governance system and mechanisms in the Agriculture and Food Sector of Belize. These initiatives have been aimed at creating a dynamic agriculture sector to meet the country's food needs, creating employment, and providing foreign exchange earnings.

[National Adaptation Strategy to address climate change in the agriculture sector in Belize](#), 2015

It sets out a strategy to address the current and projected impacts of climate change on the agriculture sector in Belize. It introduces measures to tackle the following identified detrimental effects of climate change: direct effects from rainfall changes (excess, shortage and variability), direct effects from temperature increase, indirect effects of rainfall and temperature changes (greater than changes in pests and diseases status) and indirect effects of rainfall and temperature changes (greater than changes in soil fertility). The overall adaptation strategy involves: (i) diversifying livestock, (ii) increasing access to drought resistant crops and livestock feeds; (iii) adopting better soil management practices; and (iv) providing early warning/meteorological forecasts and related information.¹⁹⁴

Water resources

[National Integrated Water Resources Management Policy \(including Climate Change\) for Belize](#), 2008

It is the culmination of a series of efforts to draft a national water policy and was prepared under a contract issued by CCCCC. As such, the policy strongly emphasizes that climate change will have severe impacts on water resources. It states the government of Belize will “*promote and account for increased investment in the development of water storage infrastructure. This will include the use of ‘no regret’ and other adaptation measures to respond to the predicted adverse effects of Global Climate Change on water resources.*” The overarching policy states that: “*Belizeans have a fundamental right to water and it is hereby declared that the policy of the Government is to bring about the planned development, coordinated management, sustainable use and protection of Belize’s water resources consistent with the social, economic and environmental needs of present and future generations, and to ensure that all Belizeans have access to affordable, safe, adequate and reliable water.*”¹⁹⁵ The overall adaptation strategy for the water sector includes the enabling and enacting of measures aimed at a more rational and efficient use of water resources. Its update is being considered under the Integrated Transboundary Ridges-to-Reef Management of the Mesoamerican Reef (MAR2R) Project, currently executed by the World Wildlife Fund (WWF) and the Central American Commission on Environment and Development (CCAD)¹⁹⁶.

[National integrated water resources act. Chapter 222:01, Revised edition](#), 2011

It establishes a National Integrated Water Resources Authority and defines its roles and responsibilities. It also provides indications for the control, conservation, and proper uses of water resources of Belize.

Tourism

[National Tourism Policy](#), 2005

It aims to develop a vibrant and progressive tourism industry by including tourism as a national priority sector in its national development agenda. The Policy emphasizes on the need of increasing private sector engagement, accessing investment capital, the need of PPPs in the sector and Institutional strengthening of public and private entities to develop

¹⁹⁴ CCCCC and NCCO – Ministry of Forestry, Fisheries and Sustainable Development (2015). A National Adaptation Strategy (and Action Plan) to Address Climate Change in the Agriculture Sector in Belize.

¹⁹⁵ CCCCC and Ministry of Natural Resources (2008). National Integrated Water Resources Management Policy (including climate change) for Belize, 2008.

¹⁹⁶ Communication from Tennielle Williams on 3 November 2020; Ministry of Natural Resources, and Belize Fisheries Department (no date), MAR2R. Available at: <http://www.fisheries.gov.bz/ecosystem-management-unit/regional-project/mar-2r/>

and deliver the tourism master plan. Climate change is not explicitly considered in this policy.

[National Sustainable Tourism Masterplan \(NSTMP\) for Belize 2030](#), 2011

It presents an action plan to develop a dynamic, competitive, and sustainable tourism industry. It promotes the creation of a sound and competitive investment climate, enhancing foreign investment promotional and facilitating activities that encourage professionalisation of tourism SME local community. It also includes considerations on the vulnerability of the sector to natural hazards and climate change. According to the Plan *"the expected implementation results will lead Belize into the future equipped with a dynamic, competitive, and sustainable tourism industry"*.¹⁹⁷ The overall strategy entails (i) the identification and assessment of coastal tourism areas that are vulnerable to climate change, (ii) provision of support to coastal planners and policy makers in selecting appropriate policies and adaptation strategies that meet climate adaption, developmental and environmental goals.

[Analyzing Vulnerability of the Belize Coastal Tourism Sector](#), 2014

It is aimed at identifying which tourism areas are the most and least vulnerable to the impacts of climate change and should be prioritized for adaptation action. This assessment illustrates that the highest potential impact to the tourism areas is expected to be in the popular destinations of Ambergris Caye, Central Region, Caye Caulker, Turneffe Atoll, Lighthouse Reef Atoll and South-Central Region. As such, these areas are considered the priority for adaptation interventions.

Vulnerability and Risk Assessment for Emerging Destinations of Corozal District, Toledo District, Caye Caulker Village and The Mountain Pine Ridge Area, 2020

The report contains a participatory vulnerability and risk assessment of the four selected tourism destinations, providing an overview of the most significant climate-related impacts, vulnerabilities, and disaster risk in these areas. It was developed as part of the Sustainable Tourism Programme II (STP II), led by the Inter-American Development Bank (IDB), which aims to increase the tourism sector's contribution to national sustainable and resilient socioeconomic development in Belize and promotes a systematic approach to disaster risk reduction considering climate change scenarios.

Adaptation and Disaster Risk Management (DRM) Plan for Emerging Destinations of Corozal District, Toledo District, Caye Caulker Village and The Mountain Pine Ridge Area, 2020

Also developed under the STP II, the Plan formulates recommendations for climate change adaptation and disaster risk management, with a specific focus on ecosystem-based adaptation (EbA) and on the priority climate-related hazards identified with stakeholder inputs. It provides a plan of action with the development of road maps for each of the four destinations.

Tourism Destination Development Plans (TDDPs) and Small Scale Investment Project Plans for Emerging Destinations of Corozal District, Toledo District, Caye Caulker Village and The Mountain Pine Ridge Area, 2020

These plans, also developed under the STP II, aim to support the development of tourism in the four target areas. The goal is to encourage tourism growth, increase visitation, extend visitor stay and improve visitor experiences through structured development that coincides with industry trends. These plans support the implementation of the NSTMP.

Human Health

[Belize Health Sector Strategic Plan 2014 – 2024](#), 2014

It aims to develop an integrated health services delivery network that is based on primary care so as to achieve a greater outcome and impact on the health of the population, while at the same time being more efficient and sustainable.¹⁹⁸ The plan recognizes climate change is a serious threat for the country, half of Belize's population lives in coastal areas, the vulnerability to natural disasters is extremely high. The Plan reflects an innovative approach in the organisation and delivery of health and wellness services to the population. This document represents the first sectoral plan developed by the MoH.

¹⁹⁷ Ministry of Tourism, Civil Aviation and Culture, Belize Tourism Board (2011). National Sustainable Tourism Masterplan for Belize 2030, June 2011.

¹⁹⁸ MoH (2014). Belize Health Sector Strategic Plan, 2014-2024.

Forestry and Biodiversity

[National Biodiversity Strategy and Action Plan 2016 – 2020](#), 2018

It is a five-year plan set within a 15-year framework (aligning with Horizon 2030) and is designed to achieve the national vision. Climate change is included as one of the causes of biodiversity loss. Resources are being mobilised for updating this document in early 2021.¹⁹⁹

[National Protected Areas System Plan](#), 2005

It is based on the need to ensure that biodiversity conservation is addressed as an important and integral part of national social and economic development. It aims to maximise the potential contribution of the protected areas system to national development and poverty alleviation. Climate change is not explicitly considered in this policy.

[National Protected Areas System Act \(NPASA\)](#), 2015

It establishes a National Protected Areas System (NPAS) and promotes long-term conservation, management, and sustainable use of Belize's protected areas. Adaptation to climate change is considered in terms of ensuring sustenance of the provision of ecosystem goods and services important for national development.

Land Use and Human Settlements

National Land Use Policy for Land Resource Development, 2011

It addresses issues relating directly to the use of land, including housing, agriculture, and infrastructure; but also, its resources, such as fertility, geology, ecology, and hydrology, landscape and social values. It contains the first National Land Policy and a framework for implementation including a National Land Use Planning Office (NLUPO), Local Land Use Planning Areas, Local Land Use Planning Committee, and Local Land Use Plans. It acknowledges that climate change poses a series of challenges that must be met through the efforts of diverse actors. As such, it is noted that all aspects of land use and land development need to be weighed against both their vulnerability and resilience to expected climate change effects. It states that climate change adaptation and mitigation issues must be considered and mainstreamed into land use planning.

National Integrated Planning Framework for Land Resource Development, 2011

The Planning Framework contains the implementing plan and administrative structure of the related policy.

Updated National Land Use Policy (NLUP), (expected 2021)

Both the National Land Use Policy and its Planning Framework are being updated under the Belize Climate Resilient Infrastructure Project (BCRIP). It aims to fully capture one major change in Belizean national policy which is the need to address the impacts of climate change and climate variability. It will include an action plan and integrated planning framework to implement the policy, and to monitor its performance. The policy will promote the use of guidelines on hazard and disaster management and put a halt to the construction of houses in vulnerable areas, with the support of hazard mapping and disaster risk mapping. The NLUP will cover (i) land tenure, (ii) land administration, (iii) land tax and rent, (iv) productive and sustainable use of land, (v) rural land uses/agricultural development and production; (vi) urban land uses, (vii) land use and land cover, (viii) land degradation, (ix) climate change and (x) land use planning.

Disaster risk reduction

National Hazard Mitigation Policy, 2004

It guides activities relating to mitigation of natural and technological hazards. It presents an integrated approach to hazard risk management and sustainable development, at national, sectoral and community levels. It also provides an important benchmark for stakeholder cooperation and a platform for addressing hazard reduction issues within the context of development planning. Addressing the vulnerability to the impacts of climate change is considered a critical part of the hazard mitigation approach.

National Hazard Mitigation Plan, 2006

Based on the National Hazard Mitigation Policy, it outlines a series of strategic interventions to mitigate the impacts of natural disasters. The plan seeks to: (i) enhance sustainable social and economic development, and environmental management through the integration of hazard risk reduction into national development processes, (ii) build the capacity of national institutions to more effectively implement programs and projects to

¹⁹⁹ Communication from Hannah St. Luce-Martinez from the National Biodiversity Office, on 16 November 2020.

reduce vulnerability of the nation and people to natural and technological hazards.²⁰⁰It highlights the need for the integration of hazard risk reduction into national development and sector policy planning, legislative strengthening and capacity building at the institutional and individual level, the establishment of hazard risk reduction information management systems, community empowerment and mobilization, public outreach and education. It stresses the need of an approach linking hazard mitigation, environmental protection and sustainable development and climate change as well as the need to access to adequate financial resources.

[Disaster Preparedness and Response Act, 2000](#)

It defines the roles and responsibilities of the National Emergency Management Organisation and National Emergency Coordinator. It establishes a National Advisory Committee and sets out guidelines regarding the Emergency Operations Centres and Shelters; Specially vulnerable areas; Threatened Disaster Alerts; and the application of relevant Treaties on disaster risk response.

General Environment

[Environmental Impact Assessment \(EIA\) regulations, 2020](#)

These updated EIA regulations set out the process for conducting EIAs for government and private projects.²⁰¹

²⁰⁰ Caribbean Disaster Emergency Response Agency and the Caribbean Development Bank (2006). Belize Hazard Mitigation Plan.

²⁰¹ Environment Law Alliance Worldwide (ELAW). (2020).

Environmental Protection Act, 2000; Environmental Protection (Amendment) Act, 2009. <https://www.elaw.org/eialaw/belize>

Annex 4: Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update

Methodology for the elaboration of Belize's initial Country Programme

As indicated by the GCF, 'country-led' programming of funding priorities is critical, based on existing national priorities and continued dialogue between key stakeholders. Further to this, the following 10-step process was undertaken to identify priority programmes and projects for GCF funding in Belize, as described below.

- **STEP 1: Preliminary stakeholder consultations:** Preliminary consultations with MFEDI, as well as national, regional, and international stakeholders active in Belize, were conducted to collect information on project/programme ideas for engagement with GCF in the course of two in-country missions in April and July 2018. A total of 11 project and programme ideas were recorded, including at national and regional levels.
- **STEP 2: Review of relevant national and sectoral programmatic documents:** Existing relevant Belizean policies, strategies and plans were reviewed, and potential programme/project ideas extracted. Relevant documents were defined as those directly addressing climate change, and those addressing the sectors vulnerable to climate change, as identified via a consultative process and aligned with the priority sectors for mitigation and adaptation actions listed in the Belize's NDC and NCCPSAP. In addition, the cross-cutting areas of gender and indigenous peoples' policies were considered. Programmatic documents pertaining to the present and future were reviewed where available, as well as those published within the last 10 years. Older documents were only reviewed where another more recent document did not exist. The list of documents reviewed is contained in Annex 8: National programmatic documents reviewed in the preparation of the original Country Programme and its 2020 update. This desktop review led to a long list of about 100 potential project ideas. Project ideas collected were at different stages of maturity, and some were already implemented. Also, in some instances, the programmatic documents reviewed referred to an idea as a 'project' but that was too narrow or specific and would not qualify as a project for the GCF. In that case it was suggested, the idea is considered as a potential activity within bigger projects.
- **STEP 3: Questionnaire engagement to build the Country Programme:** A questionnaire was developed and circulated to key stakeholders, with the intention of capturing further information about programme/project ideas proposed in step 1 and any additional ideas not identified in step 1. In particular, the questionnaire was intended to help identify programmes/projects that are at an advanced stage of development and therefore can be quickly proposed to the GCF for support. In order to secure 'country ownership',²⁰² the questionnaire was circulated among key national entities active in climate change in Belize. As advised by GCF, this list includes 'key stakeholders across all levels of government, local and community-based institutions, the private sector, and civil society'.²⁰³ In addition, regional and international stakeholders that are active in

²⁰² GCF. (June 2018). Consolidated country and entity work programmes. GCF/B.20/11.

²⁰³ GCF. (June 2018). Consolidated country and entity work programmes. GCF/B.20/11.

Belize were invited to respond. A total of 11 project/programme ideas were submitted by stakeholders. Results of the questionnaire were compiled and integrated into the long list of programme/project ideas generated under step 1, removing duplicates where necessary.

- **STEP 4: Initial selection by experts:** At this stage, the long list was composed of 123 potential programme/project ideas, including information collected through stakeholder engagement and literature review. This list then underwent an initial selection by removing any programme/projects which:
 - Were only at a high-level programme/project idea stage (i.e. no concept note/proposal has been developed);
 - Were already underway/being funded;
 - Did not have a clear climate change rationale (i.e. are not aligned with any of the 8 GCF impact areas); and
 - Had a narrow scope and limited potential to catalyse impact beyond a one-off programme or project investment.

In relation to projects that were already underway or being funded through channels different from the GCF, it was noted during the consultations that some of such projects could have the potential for reliability and scale-up under the GCF. In this case, the projects were retained in the list. At the end of step 4, the long list consisted of 36 potential programme/project ideas.

- **STEP 5: Refined long list through stakeholder consultations:** Bilateral meetings were then organized in Belize with the intention of clarifying any points related to the long list. This led to reducing the list to 25 potential programme/project ideas, which represented the basis for engaging stakeholders in the participatory prioritisation process.
- **STEP 6: Prioritisation Workshop:** A Prioritisation Workshop was then held on 31st October – 1st November 2018 to identify, in consultation with key stakeholders, Belize's priorities for engagement with the GCF. The main purpose was to identify project/programmes that were aligned with Belize's national priorities for climate change action as well as key investment criteria of the GCF, based on the information available to date. The list of 25 project/programme idea was circulated to the participants during the workshop. The workshop's primary objectives were to stimulate an open discussion among stakeholders regarding these 25 project/programme ideas. The event was used to collect additional and missing information about these projects, discuss their climate change rationale, and identify potential overlaps with other projects. In this case, it was suggested project ideas are merged (or removed if needed) within larger similar projects. Participants were divided into five groups focusing on: 1) Agriculture, water, and forestry; 2) Energy; 3) Land use and human settlements; 4) Waste management; and 5) Health. As a result of the discussions, some projects were removed from the list as already being funded, and others were merged. During the workshop, participants were also given the opportunity to present project/programme ideas that were not included in the list. The resulting consolidated list of priority programme/project ideas was utilised to prepare a preliminary list of priority programme/project ideas to be presented in the country programme, that is nationally agreed by a wide range of stakeholders and for which Belize wishes to seek GCF support. The NDA

stressed important that the Country Programme contains a strong pipeline of national projects, particularly projects that could be submitted through the Simplified Approval Process (SAP) and involve the private sector in Belize. Therefore a two-track approach was recommended to move forward the priority projects and programmes in the pipeline: fast-track and non-fast track.

- **STEP 7: Fast-tracking of project/programme ideas:** On this basis, the first draft Country Programme was prepared, including a pipeline of project/programme ideas identified in the preliminary nationally agreed list that is in line with national climate change priorities as well as GCF investment criteria and priority impact areas.

Since these were at different stages of development, the Country Programme pipeline was refined based on additional criteria relating to the concrete level of maturity of such ideas, in consultation with/based on additional information provided by the concerned proponents, by further prioritising any projects/programmes for which some or all these conditions are met:

- **Preparatory work:** pre-feasibility/feasibility studies or other assessments have been realised;
- **EE:** A national entity that owns the project/programme has been identified;
- **AE:** An accredited entity that owns the project/programme has been identified (noting a proposal can only be submitted through an accredited entity);
- **Co-financing:** Co-financing is available;
- **Private sector:** private sector has a role to play;
- **SAP:** the project is eligible for SAP;²⁰⁴
- **PPF:** the project could qualify for PPF support;²⁰⁵
- **Internal capacity:** the proponent has sufficient internal capacity to develop the project or programme idea without external assistance.

As such, a two-track approach was followed in the Country Programme pipeline to move forward the priority projects and programmes identified: non fast-track and fast-track.

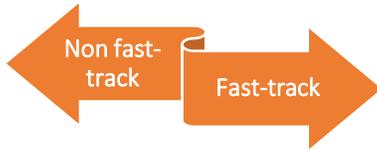
While fast-track projects and programmes would be prioritised in terms of efforts to develop and submit them to the GCF in the shortest possible timeframe, projects and programmes in the non-fast-track list would still be included in the Country Programme pipeline with the understanding that this would be an opportunity for the NDA to continue working towards further refining them along with the supporting agencies to have an indicative second round pipeline for the next iteration of the Country Programme.

²⁰⁴ The SAP is particularly directed to DAEs to encourage them to submit funding proposals.

Eligibility requirements: Projects are eligible under the SAP application window if they meet the following three conditions (GCF, undated-b): (i) A mitigation or adaptation project that is ready for scaling up; (ii) A required GCF contribution under USD10 million; and, (iii) A low E&S risk level (category C).

²⁰⁵ The PPF is available for all accredited entities, especially for DAEs. The PPF can support the following activities: (i) Pre-feasibility and feasibility studies, as well as project design; (ii) Environmental, social and gender studies; (iii) Risk assessments; (iv) Identification of programme/project-level indicators; (v) Pre-contract services, including the revision of tender documents; (vi) Advisory services and/or other services to financially structure a proposed activity; and (vii) Other project preparation activities, where necessary, provided that sufficient justification is available.

Figure 32: Fast-track and non-fast-track approach used to characterise the GCF pipeline projects



- **STEP 8: Informal Roundtable on Country Programme pipeline:** The draft Country Programme was shared with all relevant stakeholders to review and comment on the document. A roundtable was organized with selected stakeholders on the 15th March 2019 to gather further feedback and information on the project/programme pipeline.
- **STEP 9: Validation Workshop:** Identified priority projects/programmes were confirmed at a Country Programme Validation Workshop held on the 27th March 2019 in Belize City, and are presented in in this document (see next section). Limited final face-to-face meetings were also held. The resulting Country Programme provides indications on the priority sectors and measures for adaptation and mitigation for Belize. The Country Programme also points out institutional, technical, financial, and capacity gaps for which GCF resources are needed. In particular, the validated list of fast-track and non-fast-track priority projects and programmes for Belize is a coherent vision of the country's priority climate change investments for the GCF. It ultimately signals the NDA, the accredited entities, and the concerned stakeholders that efforts and resources should be dedicated to developing and implementing such priority activities.
- **STEP 10: Continuous updating:** As 'a consultative process should aim to be an ongoing process rather than a discrete activity only occurring once,'²⁰⁶ it is important to note that this Country Programme is a living document, which will be updated over time, as described in Belize's Standardised Procedure for Reviewing the Country Programme.

Methodology for the latest 2020 update of Belize's Country Programme

The Country Programme was updated in 2020 to take stock of its current implementation status, **focusing particularly on the country's project pipeline**. The following methodology, as illustrated in Figure 33, was applied.

²⁰⁶ GCF (2014). Initial best-practice options for country coordination and multi-stakeholder engagement. GCF/B.08/36. Annex XIV.

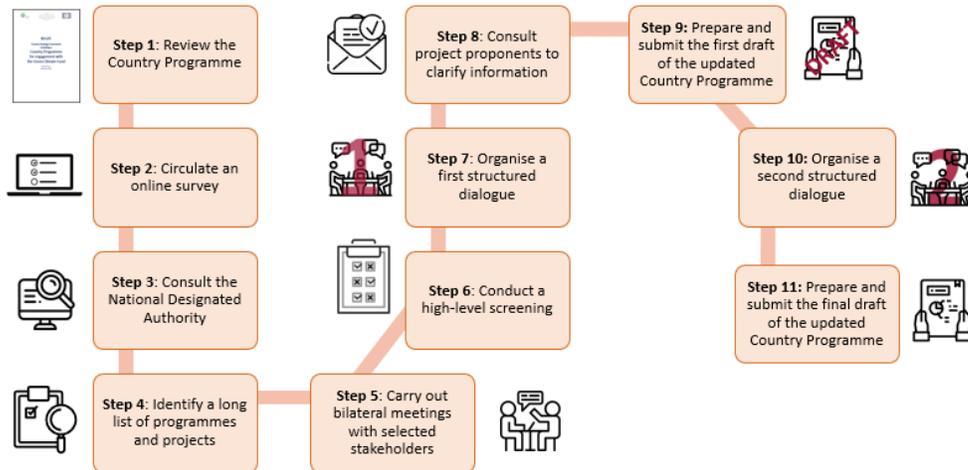


Figure 33: Methodology used for the 2020 update of the GCF Country Programme

- **STEP 1: Review the former Country Programme:** The 2019 version of the Country Programme was reviewed to take stock of the sections that required an update.
- **STEP 2: Online survey.** Acclimatise circulated an online survey to 151 stakeholders and received a total of 30 responses (20% response rate), 10 of which said they did not have a project/programme idea to share and leaving a total of 20 projects from the survey. The survey is available in Annex 7: Survey circulated to stakeholders in 2020 to collect new project/programme ideas to update the Country Programme’s pipeline
- **STEP 3: Consultations with the NDA and the DP:** Acclimatise consulted with the NDA and the CCCC to understand the status of projects pipeline that were included in the 2019 as well as new ones in the process of being identified and/or submitted to the GCF, such as projects in the Readiness pipeline. 13 projects/programmes were identified through these discussions.
- **STEP 4: Long list of projects:** As a result of the aforementioned two steps, a long list of 33 potential projects/programmes for the Country Programme was identified.
- **STEP 5: Bilateral meetings:** Acclimatise, and on occasion the NDA, held 12 bilateral meetings with project proponents who submitted a project via the survey to further refine the level of maturity of such projects.
- **STEP 6: High-level screening:** Following expert screening conducted by the team, 17 projects/programmes were deemed suitable for GCF consideration. Three were removed from this preliminary long list to be prioritised as they had already been approved by the Project Preparation Facility (PPF), leaving a total of 14 projects/programmes. The expert screening criteria used as part of Step 5, as well as for additional project ideas submitted during and after the first Structured Dialogue, were the following ones:
 - Is the proposed project /programme **appropriate for submission to the GCF** considering

- predominantly whether the project or programme identified is a concrete investment of sufficient scale, with a clear climate rationale?
- Is the **collected information about the proposed project /programme complete** considering the inclusion of cost estimates, a description of the project and its activities (at least high level)?
 - Is there **no potential duplication** between the proposed project /programme and projects/programmes that have already been funded/underway or at an advanced stage of development?
- **STEP 7: First National Structured Dialogue:** The event took place between 20 – 22 October 2020, in a virtual training format due to COVID-19 travel restrictions. Its core aim was to have national stakeholders review and prioritise the pre-identified list of 14 projects and programmes, as well as any additional project/programme idea submitted during the event. It was organised as follows:
 - **Day 1:** a brief overview of the GCF and its operational modalities, including Belize’s Country Programme, was provided. Guest speakers in the region launched two Readiness projects. The primary purpose of this introduction was to exemplify what successful projects/programmes look like to receive GCF funding and to share the preliminary long list, which arose from step 6.
 - **Day 2:** the methodology used to identify the preliminary list of projects for prioritisation was presented. One of the main objectives was to stimulate an open discussion among stakeholders primarily regarding these 14 project/programme ideas as well as new ideas received during the course of the event, discuss their climate change rationale as well as identify potential overlaps and opportunities for creating synergies between certain projects, to promote a more programmatic approach. As a result of the discussions, a final list of projects for prioritisation was built in a participatory manner comprising of 17 project/programme ideas that would be prioritised during Day 3 of the workshop.
 - **Day 3:** the prioritisation exercise of the aforementioned 17 projects/programmes²⁰⁷ took place. This exercise was shaped by the stakeholder inputs collected during the Structured Dialogue, as well as expert pre-screening against the three minimum GCF requirements described under step 5. Stakeholders were divided into four sectoral break-out groups (agriculture and fisheries, coastal, marine resources and disaster risk reduction and management, mitigation and natural resources and biodiversity) and prioritised the projects in a virtual break-out room setting. Stakeholders were asked to score the projects based on the following dimensions: (i) alignment with national priorities; (ii) paradigm shift potential; (iii) feasibility; (iv) potential for private sector engagement; (v) targeting of women, indigenous peoples and other vulnerable groups.²⁰⁸ The results of the prioritisation exercise included: a final and prioritised pipeline of priority programme/project ideas to be presented

²⁰⁷ These 17 projects/programmes have now been included in the Country Programme pipeline, under “Projects and programmes” as well as “PPF requests”.

²⁰⁸ More details on these criteria and the general process used during the first Structured Dialogue is available as part of the document “First Structured Dialogue to identify and prioritise potential programmes and projects for integration into the Belize’s Country Programme for engagement with the GCF” shared with the NDA.

in the Country Programme for which Belize wishes to seek GCF support and were nationally agreed on by a wide range of stakeholders.

- **STEP 8: Additional consultations:** Follow-up exchanges (calls and emails) with national stakeholders took place on an as-needed basis to clarify information regarding some projects and to collect additional inputs to update the Country Programme.
- **STEP 9: Preparation of the updated Country Programme’s first draft:** to update the Country Programme, all the inputs collected from the First Structured Dialogue, and in particular the projects prioritisation exercise, were used to update the Programme’s portfolio and pipeline. The latest climate-related national frameworks were reviewed to reflect the most recent climate information available in Belize. The list of documents reviewed is contained in Annex 8: National programmatic documents reviewed in the preparation of the original Country Programme and its 2020 update. A summary of all the updates is provided in Table 43. The Country Programme was shared with the NDA, CCCCC, and the GCF to collect the first round of feedback and integrate it prior to the second Structured Dialogue.

Besides, when updating the GCF pipeline and to reflect the latest 2021 GCF Country Programme Guidance²⁰⁹, the NDA has earmarked the most advanced project/programmes as of March 2021. This is based, among others, on AEs’ level of engagement and progress to date on preparing the project/programme. These projects, and the others prioritised at the first Structured Dialogue, are marked as “fast track”. The additional ones are marked as “non-fast track”.

Table 43: Scope of the Country Programme's 2020 updating process

Main sections	Sub-sections	Scope of updates	
Belize Country Profile	Country overview	Inclusion of most up to date data (e.g. population)	
	Climate profile	Inclusion of most up to date data (e.g. climate projections)	
	Vulnerability profile	<ul style="list-style-type: none"> ○ Update of list of most recent extreme events and associated costs 	
	Development profile	Inclusion of covid-19 related paragraphs to showcase its impact on the Belizean economy and development prospects.	
	Climate change response	<ul style="list-style-type: none"> ○ National frameworks 	<ul style="list-style-type: none"> ○ Inclusion of upcoming climate-related frameworks and latest considerations on existing ones
		<ul style="list-style-type: none"> ○ Key national entities active on climate change issues in Belize 	<ul style="list-style-type: none"> ○ Update of new governmental entities’ name, mandate, and activities
		<ul style="list-style-type: none"> ○ Regional engagement 	<ul style="list-style-type: none"> ○ Update of Belize’s regional involvement in climate resilience projects
		<ul style="list-style-type: none"> ○ Access to climate finance 	<ul style="list-style-type: none"> ○ Update of nationally and internationally funded climate projects.

²⁰⁹ Green Climate Fund (GCF). (2021). GCF Country Programme Guidance. <https://www.greenclimate.fund/document/country-programme-guidance>

		<ul style="list-style-type: none"> ○ Gaps and opportunities ○ Update of Belize's gaps/weaknesses, opportunities and desired GCF supporting role for the country to access GCF finance.
Belize's agenda and GCF engagement	Institutional arrangements for engagement with the GCF	<ul style="list-style-type: none"> ○ Inclusion of latest NDA-related institutional arrangements ○ Inclusion of on-going Readiness and preparatory support projects/programmes ○ Inclusion of latest information on national, regional and international AEs' involvement in Belize, as well as latest developments for prospective AEs.
	Belize's portfolio for engagement with the GCF	<ul style="list-style-type: none"> ○ Update of the country's portfolio ○ Update of the country's pipeline
Monitoring and evaluation of Country Programme implementation	Monitoring and evaluating GCF-related activities through the Monitoring Reporting and Learning Framework	<ul style="list-style-type: none"> ○ Update of latest monitoring and evaluation (M&E) elements available in Belize ○ Integration of CP updating procedure
	Country Programme's review and updating process	<ul style="list-style-type: none"> ○ Reference to the new Country Programme's review and updating process
Annexes	Annex 1: Belize's vulnerability profile :	<ul style="list-style-type: none"> ○ Update of mitigation-related sub-section, overall emissions and sectoral challenges ○ Update of adaptation-related sub-section, including sectoral challenges
	Annex 2: Belize's development profile	<ul style="list-style-type: none"> ○ Inclusion of most up to date economic-related data (e.g. GDP, imports/exports, Human Development Index (HDI) ranking)
	Annex 3: Belize's climate change response	<ul style="list-style-type: none"> ○ Inclusion of latest climate-relevant national frameworks
	Annex 4: Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update	<ul style="list-style-type: none"> ○ Addition of the 2020 GCF Country Programme's updating methodology
	Annex 5: Roles and contributions of key national stakeholders on the elaboration and implementation of Belize's Country Programme	<ul style="list-style-type: none"> ○ Description of stakeholder involvement in the updating process of the Country Programme
	Annex 6: List of stakeholders involved in the Country Programme consultations	<ul style="list-style-type: none"> ○ Removing stakeholders from 2019 initial Country Programme's preparation consultations ○ Addition of stakeholders involved in the 2020 GCF Country Programme's update
	Annex 7: Survey circulated to stakeholders in 2020 to collect new project/programme ideas to update the Country Programme's pipeline	<ul style="list-style-type: none"> ○ Inclusion of the survey questions
	Annex 8: National	<ul style="list-style-type: none"> ○ Addition of all new national programmatic documents used as

	programmatic documents reviewed in the preparation of the original Country Programme and its 2020 update	part of the Country Programme's 2020 update.
	Annex 9: Completed projects and programmes	o Addition of completed projects and programmes, removed from the portfolio

- **STEP 10: Second Structured Dialogue:** This second workshop event was used as a platform to obtain national stakeholders' validation of the updated Country Programme, along with a proposed standardised update process²¹⁰, which aims to ensure the Programme is regularly and consistently updated, to reflect Belize's most recent climate-related national circumstances and needs. Besides, the event also provided the opportunity to collect national stakeholders' inputs into the "Gaps and opportunities" section, in order to best reflect the country's weaknesses to fund climate and development-related priorities, the associated opportunities and how the GCF can play a supporting role in the process.

 - o Day 1 provided a brief overview of the GCF and Belize's engagement with the GCF through the Country Programme, as well as the proposed standardised procedure to update the Country Programme.
 - o Day 2 focused on the review and update of the Gaps and Opportunities section through a group exercise and then a wider plenary to validate the changes. One of the main objectives was to stimulate an open discussion so that stakeholders exchanged on the current gaps and opportunities related to institutional strengthening and existing policy framework, financing needs across mitigation and adaptation, capacity needs of existing actors across public and private sector and technology needs, which hamper/facilitate Belize's access to climate finance and the GCF, and how the latter could play a facilitating role to address the gaps.
 - o Day 3 was centred around the presentation of compiled stakeholder feedback on the updated of the Country Programme (received on the CP's online version shared ahead of the Dialogue with stakeholders and via email). National stakeholders' review, comments and validation was received.
- **STEP 11: Preparation of the updated Country Programme's final draft:** All stakeholders' contributions and feedback collected during the second Structured Dialogue were integrated into the updated final draft of the Country Programme. It was then submitted to the NDA, the CCCCC and the GCF for a final review, before being eventually submitted to the GCF as the official updated Country Programme of Belize.

²¹⁰ Please refer to the document "Standardised Procedure for Reviewing the Country Programme".

Annex 5: Roles and contributions of key national stakeholders on the elaboration and update of Belize's Country Programme for engagement with the GCF

In line with the GCF's Guidelines for developing a Country Programme and Belize's Standardised Procedure for Reviewing the Country Programme, this document was developed based on comprehensive consultation of key national stakeholders across sectoral ministries and government agencies, civil society, vulnerable groups, delivery partners and the private sector, for identifying national priorities for engagement with the GCF. The early involvement of key stakeholders paves the way for the effective implementation of selected national priorities.

Elaboration of the initial GCF Country Programme

During **the initial preparation of the GCF Country Programme in 2019**, five rounds of consultations were carried out to engage the key national stakeholders in the development of the document. A total of 76 participants were included throughout the process, of which 36% were female and 64% male. Key stakeholders included representatives of the public sector (57%), private sector (17%), NGOs/academia (16%) and international/regional organisations (10%). The detailed methodology for the elaboration of the initial Country Programme is available in Annex 4: Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update.

- **Preliminary consultations** with the NDA and national stakeholders, as well as regional and international partners active in Belize, were conducted to collect information on project and programme ideas for engagement with the GCF.
- Subsequently, a **workshop for the "Elaboration of the Country Programme for engagement with the GCF and Prioritisation"** was held in Belmopan. It allowed for further identification of projects and programmes that are aligned with Belize's national priorities for climate change action as well as key investment criteria of the GCF. One-to-one meetings with key stakeholders aimed at collecting detailed information were also organised alongside the workshop.
- The first draft Country Programme was then circulated to all stakeholders. An **informal roundtable** was held on the 15th March 2019, with selected stakeholders to discuss the draft priority projects proposed for GCF funding and collect additional information, as well as for project proponents to form relationships with AEs.
- A second **workshop for the "Elaboration of the Country Programme for engagement with the GCF and Validation"** was undertaken in Belize City, to present the draft Country programme to all key national stakeholders and collect consolidated feedback, in particular on a final pipeline of projects and programmes, with a view to prepare a final version of the Country Programme for endorsement by the NDA.
- **One-to-one meetings with key stakeholders** aimed at collecting detailed information were also organised alongside the workshop.

During the main events, the Government Press Office and other media outlets in Belize ensured media

coverage of the meetings via TV, radio, and press, which contributed to disseminating the meetings' aims and outcomes to the general public. The results of all consultations were reported in writing to the NDA and reflected in the elaboration of the Country Programme, as appropriate.

Table 44. Stakeholders consultations in Belize for the elaboration of the Country Programme (Source: prepared by the authors).

Stakeholders consultations			
Stakeholders group	Date of consultation	Type or objective of the consultation	Outcome
NDA staff and key national and regional stakeholders, and international development partners	9 th – 13 th April 2018	One-to-one meetings	Gathered information on institutional set-up, ongoing concept notes, and funding proposals for GCF, communication and M&E entry points.
NDA staff and key national and regional stakeholders	10 th April 2018	Inception workshop	NDA staff and key stakeholders got introduced to GCF operational modalities and requirements.
NDA staff and key national and regional stakeholders	16 th – 18 th July 2018	Workshop on Building Capacities for GCF engagement	NDA staff and key stakeholders received guidance to perform their roles and responsibilities, through an enhanced understanding of GCF operational modalities and requirements.
NDA staff and key national and regional stakeholders, and international development partners	18 th – 20 th July 2018	One-to-one meetings	Gathered information on institutional set-up, ongoing concept notes and funding proposals for GCF, communication and M&E entry points.
NDA staff and key national and regional stakeholders	Week of 29 th October 2018	One-to-one meetings	Gathered information on institutional set-up, ongoing concept notes and funding proposals for GCF, communication and M&E entry points.
NDA staff, key national and regional stakeholders, and international development partners	31 st October – 1 st November 2018	Prioritisation workshop “Elaboration of the Country Programme for engagement with the GCF and Prioritisation”	A list of priority project ideas for funding under the GCF were identified in a participatory process. This laid the ground for the development of the Country Programme.
Key national and regional stakeholders / Potential EEs	15 th March 2019	Informal roundtable	Updated project descriptions and status for adaptation and mitigation projects

and AEs for projects to be submitted to the GCF			included in Belize’s pipeline for engagement with the GCF.
NDA staff and key stakeholders	27 th March 2019	Validation workshop	Collected consolidated feedback on updated draft Country Programme, including final project pipeline from key stakeholders in the country.
Key national and regional stakeholders / Potential EEs and AEs for projects to be submitted to the GCF	25 th – 29 th March 2019	One-to-one meetings	Gathered updated information on projects included in Belize’s pipeline for engagement with the GCF.

An overview of the initial consultations undertaken is presented below. It was noted that **women’s and indigenous peoples’ associations** were underrepresented during the consultations for elaborating the first Country Programme. As such, the NDA must ensure they are adequately and fairly represented in the upcoming Country Programme stakeholder consultations.

Latest Update of the GCF Country Programme

The **Country Programme is conceived as a living document** that needs to be regularly updated to capture emerging needs, new developments, progress in the implementation process, and main barriers or challenges that could appear. Belize’s standardised procedure for reviewing the Country Programme sets out this updating process.

The latest update of Belize’s GCF Country Programme took place in 2020 through bilateral exchanges (calls and emails), and **two Structured Dialogue Workshops** aimed to update the country’s GCF pipeline. Table 45 **Error! Reference source not found.** summarises the stakeholder attendance and events’ outcomes. The detailed methodology used for the 2020 Country Programme update is available in [Annex 4](#): Methodologies used for the preparation of the original GCF Country Programme and for its 2020 update. The full list of participants engaged in all consultations is included in [Annex 6](#): List of stakeholders involved in the Country Programme consultations

In the run-up to each Structured Dialogue event, a press release was issued to gather national attention on the process.

Table 45. Stakeholders consultations in Belize for the update of the Country Programme (Source: prepared by the authors).

Stakeholders consultations			
Stakeholders group	Date of consultation	Type or objective of the consultation	Outcome
<p>14 organisations, including the NDA, as well as public and private sector organisations and civil society were involved in bilateral calls.</p> <p>151 stakeholders and received the survey, 30 responded (10 did not have a project/programme idea to share), 20 submitted a project idea</p>	October 2020	Survey issued and bilateral calls to update the Programme's portfolio and pipeline	<ul style="list-style-type: none"> • Update of latest status of projects/programmes; included in the 2019 Country Programme's portfolio and pipeline; and • Collection of project ideas to update the pipeline
<p>69 participants²¹¹ from the public sector, including the NDA, the national private sector, national civil society and academia as well as international and regional organisations.²¹²</p> <p>Among the respondents to a poll circulated during the event and asking whether stakeholders had submitted a project idea to be discussed during the Dialogue, 19 participants indicated they had not, and 15 participants said they had.</p>	20 – 22 October 2020	First Structured Dialogue – Virtual workshop to prioritise projects for the Programme's pipeline	<ul style="list-style-type: none"> • Summary of current and prospective GCF-related activities in Belize; • Validation of potential programmes and projects for integration into Belize's Country Programme for engagement with the GCF; and • Prioritisation of the identified programmes and projects.
<p>Bilateral calls with three organisations: the NDA, NCCO and WWF</p> <p>Email exchanges with 15 AEs and six Ministries and government agencies</p>	November 2020	<p>Bilateral calls to collect further information on projects to include in the portfolio and pipeline, and to update specific sections of the Programme;</p> <p>Email exchanges to update AEs' activities in Belize and add new sectoral climate-related frameworks.</p>	<ul style="list-style-type: none"> • Update and fine-tuning of the Country Programme's portfolio and pipeline; and • Update of the relevant sections of the Country Programme
<p>62 participants²¹³ from the public sector, including the NDA, the national private sector, national civil society and academia as well as</p>	29 – 31 March 2021	Second Structured Dialogue – Virtual workshop to validate the updated Country Programme	<ul style="list-style-type: none"> • Summary of updates done to the Country Programme • Introduction of the proposed Country Programme updating procedure

²¹¹ This is the maximum number of participants recorded. Attendance levels varied over the three days.

²¹² The NDA invited stakeholders representing women's (National Women's Commission) and indigenous people's groups (Maya Leaders of Southern Belize, Northern Maya Association of Belize) to the event.

²¹³ This is the maximum number of participants recorded. Attendance levels varied over the three days.

international and regional organisations. ²¹⁴			<ul style="list-style-type: none"> • Group exercise to update the section “gaps and opportunities” of the Country Programme • Validation of the updates done to the Country Programme and collecting additional feedback from stakeholders
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Overall recommendations for stakeholders’ role in the implementation of the Country Programme

The table below presents an overview of the proposed roles and responsibilities of key stakeholders in the implementation of the GCF Country Programme.

Potential roles and responsibilities of different stakeholders			
Category	Function	Stakeholder	Roles and responsibilities
Coordination entities	To carry out planning and administration of GCF-related responsibilities	MFEDI	<ul style="list-style-type: none"> • NDA. Vice chair of the BNCCC; prospective Chair of the Climate Finance Sub-committee (to be established). • Belize’s focal agency and point of contact with the GCF, with specific NDA functions. • Overall responsibility to nominate AEs and DPs and approve concept notes and funding proposals through the no-objection procedure, supported by the BNCCC’s sub-committees, and the NCCO. • Undertake the first technical review of concept notes and funding proposals in no-objection procedure. • Key member of the BNCCC, and the Climate Finance sub-committee (to be established). • Coordinating all investments (including GCF’s grants and loans) and ensuring that those are aligned with national priorities.
		MSDCCDRM	<ul style="list-style-type: none"> • Chair of the BNCCC; prospective Co-chair of the Climate Finance sub-committee (to be established). • Overall responsibility for coordination of climate change action in the country.
		NCCO under MSDCCDRM	<ul style="list-style-type: none"> • UNFCCC Focal Point and serving as BNCCC Secretariat. • Support the NDA and the BNCCC in carrying out the no-objection procedure and the nomination procedures. • Undertake the second technical review of concept notes and funding proposals in no-objection procedure.
Stakeholder engagement	To steer policy dialogue and coordination	BNCCC and its Technical Committee, Climate Finance Committee (to be established)	<ul style="list-style-type: none"> • Comprised of key Ministers and Agencies as well as representatives of private sector, CSO, and academia. • The BNCCC would support the NDA, by providing recommendations to the NDA for final approval / rejection decisions, on the following activities: <ul style="list-style-type: none"> - Implement the no-objection procedure for appraising and approving GCF concept notes and funding proposals, including M&E of its effectiveness; - Implement the nomination procedure of prospective DAEs for GCF accreditation, including M&E of its effectiveness; - Implement the nomination procedure of prospective GCF readiness DPs, including M&E of its effectiveness; and,

²¹⁴ The NDA invited stakeholders representing women’s (National Women’s Commission) and indigenous people’s groups (Maya Leaders of Southern Belize, Northern Maya Association of Belize) to the event.

			<ul style="list-style-type: none"> - Coordinate the annual participatory reviews of GCF-funded activities. • The Technical sub-committee (to be established) would be responsible for the third technical review of concept notes and funding proposals within the no-objection procedure. • The Climate Finance sub-committee (to be established) would be responsible for the final technical review of concept notes and funding proposals within the no-objection procedure, as well as in the DAE and DP nomination procedure.
Accredited Entities or Delivery Partners	To oversee the implementation of GCF approved projects and programmes, working with executing entities	PACT	<ul style="list-style-type: none"> • Currently the only national DAE in Belize. • Enabling direct access to GCF resources. • Submit concept notes and funding proposals to the GCF. • Align EWP with Country Programme's objectives and pipeline.
		CCCCC	<ul style="list-style-type: none"> • Act as DP for GCF Readiness and Preparatory Programme. • Enabling access to GCF resources. • Prepare and submit requests for preparatory support under the PPF of the GCF. • Submit concept notes and funding proposals to the GCF.
		PwC CANARI CDF CDB	<ul style="list-style-type: none"> • Act as DP for GCF Readiness and Preparatory Programme.
		Other regional and international AEs in Belize: CABEL CI EIB GIZ FAO IDB IFAD KfW World Bank IFC IUCN JICA UNDP UNE WWF	<ul style="list-style-type: none"> • Submit concept notes and funding proposals to the GCF. • Prepare and submit requests for preparatory support under the PPF of the GCF. • Provide preparatory support. • Co-finance projects / programmes. • Act as Delivery Partner
Executing Entities	To execute eligible activities supported by the GCF for approved projects and programmes under the oversight of the AE	Line ministries, departments, private enterprises and business associations, CSO and academia	<ul style="list-style-type: none"> • Propose and prioritise projects/programmes of the Country Programme • Carry out the execution of GCF-funded projects and programmes.
Data and service providers	Providing data and services related to climate change to inform funding proposals	National Meteorological Service	<ul style="list-style-type: none"> • Provide hydro-meteorological and climate-related data and services

Annex 6: List of stakeholders involved in the Country Programme consultations

The following stakeholders were involved during the 2020 updating process of the Country Programme

Bilateral calls and survey participation to update the Programme's portfolio and pipeline prior to the first Structured Dialogue

#	NAME	ORGANISATION
1	Lindburgh Smith	Belize Credit Union League
2	Luciano Chi	Sugar Industry Research and Development Institute
3	Denaie Swasey	Protected Areas Conservation Trust
4	Abihail Pech Cosme Hernandez	Progressive Sugar Cane Producers Association
5	Lisa Carne	Fragments of Hope
6	Abel Carrias	University of Belize
7	Dr. Apolonio Aguilar	University of Belize
8	Chantalle Samuels	Coastal Zone Management Authority and Institute
9	Eddie Herrera	Ministry of Tourism and Civil Aviation
10	Simone Bell	Belize Hotel Association
11	Genesis Tucker	Belize Chamber of Commerce and Industry
12	Yorshabell Cattouse	Belize Chamber of Commerce and Industry
13	Wilber Sabido	Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development - Forest Department
14	Raul Chun	Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development - Forest Department
15	German Novelo	Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development - Forest Department
16	Elvis Canul	St. Francis Xavier Credit Union Ltd
17	Ryan Zuniga	Caribbean Community Climate Change Centre
18	Donneil Cain	Caribbean Community Climate Change Centre
19	Leroy Martinez	Ministry of Economic Development and Petroleum
20	Michelle Alvarez	Ministry of Natural Resources

Participants to the first Structured Dialogue

#	NAME	ORGANISATION
1	Aquila Flores	Association of Protected Areas Management Organization (APAMO)
2	Darra Ramclam Barona	Association of Protected Areas Management Organization (APAMO)
3	Jose Perez	Association of Protected Areas Management Organization (APAMO)
4	Wendy Casasola	Association of Protected Areas Management Organization (APAMO)
5	Juvenio Rivero	Atlantic Bank
6	Carolyn Trench-Sandiford	Belize Association of Planners
7	Jacqueline Tiabo	Belize Credit Union League
8	Lindburgh Smith	Belize Credit Union League
9	Olivia Avilez	Belize Sugar Industries (BSI)
10	Frederick Sandiford	Belize Water Services
11	Meghann Gordon	Caribbean Community Climate Change Centre (CCCCC)

12	Ryan Zuniga	Caribbean Community Climate Change Centre (CCCCC)
13	Derek Gibbs	Caribbean Development Bank (CDB)
14	Ainka Granderson	Caribbean Natural Resources Institute
15	Genesisia Tucker	Chamber of Commerce
16	William Usher	Chamber of Commerce
17	Yorshabell Cattouse	Chamber of Commerce
18	Veronica Manzanero	Citrus Growers Association
19	Arlene Young	Coastal Zone Management Authority and Institute (CZMAI)
20	Chantalle Clarke Samuels	Coastal Zone Management Authority and Institute (CZMAI)
21	Franklyn Magloire	Development Finance Corporation (DFC)
22	Alexia Peralta	Economic Development Council
23	Carmen Sosa	Economic Development Council
24	Ishmael Quiroz	Economic Development Council
25	Dennis Mairena	Fund for the Development of the Indigenous Peoples of Latin America and the Caribbean (FILAC)
26	Lisa Carne	Fragments of Hope
27	Maya Trotz	Fragments of Hope
28	Neranda Maurice-George	Green Climate Fund (GCF)
29	Orville Grey	Green Climate Fund (GCF)
30	Stephen Williams	Inter-American Institute for Cooperation on Agriculture (IICA)
31	Willie Chan	Inter-American Institute for Cooperation on Agriculture (IICA)
32	Pablo Mis	Maya Leaders of Southern Belize
33	Tim	Maya Leaders of Southern Belize
34	Beverly Wade	Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development
35	Vivian Ramnarace	Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development
36	German Novelo	Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development
37	Karlene McSweeney	Ministry of Economic Development, Petroleum, Investment, Trade and Commerce
38	Khara Roches	Ministry of Economic Development, Petroleum, Investment, Trade and Commerce
39	Leroy Martinez	Ministry of Economic Development, Petroleum, Investment, Trade and Commerce
40	Ryan Cobb	Ministry of Finance, Public Service, Energy and Public Utilities
41	Michelle Alvarez	Ministry of Natural Resources
42	Roseli Lisbey	Ministry of Natural Resources
43	Keiyari Romero	Ministry of Natural Resources, Director, Policy and Planning
44	Abil Castaneda	Ministry of Tourism and Civil Aviation
45	Eddie Herrera	Ministry of Tourism and Civil Aviation
46	Maria	N/A
47	Rudolph Castillo	Cohune Ltd.
48	Ronald Gordon	National Meteorological Service of Belize
49	Yahaira Vega	Northern Maya Association of Belize
50	Abihail Pech	Progressive Sugar Cane Producers Association
51	Cosme Hernandez	Progressive Sugar Cane Producers Association
52	Denaie Swasey	Protected Areas Conservation Trust (PACT)
53	Joyce Tun	Protected Areas Conservation Trust (PACT)

54	Geraldo Flowers	San Ignacio and Santa Elena (SISE) town council
55	Arlette Sheppard	Social Investment Fund (SIF)
56	Virgnia Vasquez	Social Investment Fund (SIF)
57	Wendel Parham	Social Investment Fund (SIF)
58	William Lamb	Social Investment Fund (SIF)
59	Jeffery Joseph	Sugar Industry Research & Development Institute (SIRDI)
60	Leticia Westby	Sugar Industry Research & Development Institute (SIRDI)
61	Luciano Chi	Sugar Industry Research & Development Institute (SIRDI)
62	Orlando Coco	Toledo Cacao Growers Association
63	Wilbert Ramclam	Toledo Cacao Growers Association
64	Diane Wade	United Nations Development Programme (UNDP)
65	Leshan Monrose	United Nations Development Programme (UNDP)
66	Abel Carrias	University of Belize
67	Pio Saqui	University of Belize
68	Nadia Bood	World Wildlife Fund
69	Paul Hardy	World Wildlife Fund

Bilateral calls and email exchanges to prepare the first updated draft of the Country Programme

#	NAME	ORGANISATION
1	Khara Roches	Ministry of Economic Development and Petroleum
2	Leroy Martinez	Ministry of Economic Development and Petroleum
3	Colin Mattis	National Climate Change Office
4	Nadia Bood	World Wildlife Fund
5	Paul Hardy	World Wildlife Fund
6	Denaie Swasey	Protected Areas Conservation Trust
7	Donneil Cain	Caribbean Community Climate Change Centre
8	Ryan Zuniga	Caribbean Community Climate Change Centre
9	Derek Gibbs	Caribbean Development Bank
10	Miguel Angel Méndez Castellanos	Central American Bank for Economic Integration
11	Steven Panfil	Conservation International
12	Marika Levena	European Investment Bank
13	Battsetseg Tseren	Deutsche Gesellschaft für Internationale Zusammenarbeit
14	Daniel Hincapie-Salazar	Inter-American Development Bank
15	Oliver Page	International Fund for Agricultural Development
16	Claudia Croce	International Bank for Reconstruction and Development and International Development Association
17	Sebastien Delahaye	International Union for Conservation of Nature
18	Jihyea Kim	United Nations Development Programme
19	Shinji Maruyama	Japan International Cooperation Agency
20	Tennielle Williams	Ministry of Natural Resources and Agriculture

21	Michelle Alvarez	Ministry of Natural Resources and Agriculture
22	Roseli Lisbey	Ministry of Natural Resources and Agriculture
23	Ryan Cobb	Ministry of Finance, Public Service, Energy and Public Utilities
24	Chantalle Samuels	Coastal Zone Management Authority and Institute
25	Lumen Cayetano	Belize Solid Waste Management Authority
26	Safira Vasquez	Ministry of Tourism and Civil Aviation
27	Hannah St Luce Martinez	Ministry of Fisheries, Forestry, the Environment and Sustainable Development - National Biodiversity Office
28	Virginie Fayolle	United Nations Environment

Participants to the second Structured Dialogue

#	NAME	ORGANISATION
1	Abel Carrias	University of Belize
2	Abihail Pech	Progressive Sugar Cane Producers Association
3	Alexia Peralta	Economic Development Council
4	Alvan Haynes	Belize Water Services
5	Ansel Dubon	Caribbean Community Climate Change Centre (CCCCC)
6	Arlette Sheppard	Social Investment Fund (SIF)
7	Beverly Wade	Ministry of Blue Economy and Civil Aviation
8	Nadia Bood	World Wildlife Fund (WWF)
9	Carmen Sosa	Economic Development Council
10	Carolyn Trench-Sandiford	Belize Association of Planners
11	CEO Kennedy Carillo	Ministry of Blue Economy and Civil Aviation
12	Chantalle Samuels	Coastal Zone Management Authority and Institute (CZMAI)
13	Colin Escalante	Social Investment Fund (SIF)
14	Colin Mattis	National Climate Change Office (NCCO)
15	Cosme Hernandez	Progressive Sugar Cane Producers Association
16	Darian Coye	Ministry of Tourism & Diaspora Relations
17	Denaie M Swasey	Protected Areas Conservation Trust (PACT)
18	Derek Gibbs	Caribbean Development Bank (CDB)
19	Eric Sanchez	Ministry of Youth, Sports & E-Governance
20	German Novelo	Ministry of Forestry
21	Genesia Tucker	Belize Chamber of Commerce and Industry
22	Ishmael Quiroz	Economic Development Council
23	JB	
24	Jose Perez	Association of Protected Areas Management Organization (APAMO)
25	Joyce Tun	Protected Areas Conservation Trust (PACT)
26	Keith Nichols	Caribbean Community Climate Change Centre (CCCCC)
27	Khaliqa Mohammed	Caribbean Development Bank (CDB)
28	Khara Roches	Ministry of Finance, Economic Development and Investment (MFEDI)
29	Kimberley Westby	Ministry of Finance, Economic Development and Investment
30	Leroy Martinez	Ministry of Finance, Economic Development and Investment (MFEDI)
31	Leticia Juanita Westby	Sugar Industry Research & Development Institute (SIRDI)

32	Luciano Chi	Sugar Industry Research & Development Institute (SIRDI)
33	Mark Antrobus	Ministry of Human Development, Families & Indigenous Peoples' Affairs (MHDFIPA)
34	Michelle Alvarez	Ministry of Natural Resources
35	Narda Garcia	Ministry of Finance, Economic Development and Investment (MFEDI)
36	Neranda Maurice-George	Green Climate Fund (GCF)
37	Orlando	Toledo Cacao Growers Association
38	Paul Hardy	World Wildlife Fund (WWF)
39	Peter Usher	Atlantic Bank
40	projectofficer	
41	Rudolph Castillo	Cohune Ltd.
42	Ryan Cobb	Ministry of Energy and Public Utilities
43	Ryan Zuniga	Caribbean Community Climate Change Centre (CCCCC)
44	Shaun Finnetty	Belize Social Investment Fund
45	Stanley Gideon	Belize Department of Civil Aviation
46	Stephen Williams	Inter-American Institute for Cooperation on Agriculture (IICA)
47	Tanya Santos	Ministry of Human Development, Families & Indigenous Peoples' Affairs
48	Tennielle Williams	Ministry of Natural Resources
49	Timoteo Mesh	Maya Leaders of Southern Belize
50	TR (Guest)	
51	Valentino Shal	Ministry of Rural Transformation, Community Development, Labour & Local Government (MRTCDLLG)
52	Veronica Manzanero	Citrus Growers Association
53	Victor Alegria	Department of Environment
54	Vivian Ramnarace	Fisheries Department
55	Wendel Parham	Social Investment Fund (SIF)
56	Wilber Sabido	Forestry Department
57	Wilbert Ramclam	Toledo Cacao Growers Association
58	William Lamb	Social Investment Fund (SIF)
59	Willie Chan	Inter-American Institute for Cooperation on Agriculture (IICA)
60	Yahaira Vega	Northern Maya Association of Belize
61	Yorshabell Cattouse	Belize Chamber of Commerce and Industry
62	Zamira Leiva	Ministry of Natural Resources

Annex 7: Survey circulated to stakeholders in 2020 to collect new project/programme ideas to update the Country Programme's pipeline

Update of Belize's Country Programme for engagement with the Green Climate Fund (GCF)

Questionnaire to identify new projects/programmes for integration into the Belize's Country Programme for engagement with the GCF.

* Required

Introduction to this questionnaire

In Belize, the Ministry of Economic Development, Petroleum, Investment, Trade and Commerce (MED for short) has been appointed by the Government of Belize to act as the GCF's National Designated Authority (NDA). The MED seeks to strengthen the country's capacity to access, manage, disburse and monitor resources from the GCF with a view to achieve national development and climate change priorities. As a follow-up to Readiness I, Acclimatise has been commissioned by the Caribbean Community Climate Change Centre (CCCCC) to lead Readiness II and provide technical advisory services to:

- Build the capacity of the Belize National Climate Change Committee (BNCCC) and its subcommittees to appraise and review project proposals for the GCF under the no-objection procedure (Phase 2).
- Establish a standardised process for updating Belize's Country Programme and update Belize's Country Programme (Phase 3).
- Build the capacity in integrating gender considerations into the project design in line with GCF's gender policy (Phase 4).

From January to August 2020, the Acclimatise team facilitated a process to deliver Objectives 1 and 3. An inception workshop was held in January 2020, and a virtual training on GCF project requirements was organised between 29th June – 7th August 2020. In addition, a set of gender criteria and related indicators were developed to review and appraise concept notes under the initial no-objection procedure (as part of the NDA review manual).

In order to deliver Objective 2, the Acclimatise team is facilitating a consultative process to identify and prioritise potential programmes and projects for GCF funding. For more information on the GCF, see online info guide: <https://www.greenclimate.fund/gcf10>

You can also find an overview of the GCF project/programme approval process and guidance on how to prepare and submit a full funding proposal that meets GCF investment criteria here: <https://www.greenclimate.fund/document/programming-manual>

This questionnaire is intended to capture potential programmes and projects for GCF funding, which will be prioritised during a structured dialogue held between 20 to 22nd October with Belize's NDA and selected stakeholders.

We invite you to share with us any potential programmes or projects you think would be suitable for GCF funding and you would be interested in submitting and discussing during the structured dialogue.

The deadline for submission is 2nd October 2020.

1. Privacy Notice: We are committed to protecting and respecting your privacy. The personal information provided in this questionnaire will only be used to inform the training materials for the project described in the introduction above. Your personal data will be stored by Acclimatise Group Ltd. only until the end of the project (31 March 2021), when it will be permanently deleted. We will not share your personal data with any third party without first obtaining your explicit consent. Please confirm that you agree to this by ticking this box*: I agree.

About you: First, please tell us a bit more about you

2. First Name*
3. Family Name*
4. Job Title*
5. Organisation*
6. E-mail*
7. Phone Number
8. Do you have a project or programme you would like to submit to the GCF?* Yes No

Potential project(s) or programme(s) for GCF funding: Please complete the following sections with information about your potential programme(s) or project(s) for GCF funding. If you have more than one project or programme, you will be asked to enter information separately for each.

9. What is your project or programme name?
10. Can you provide a brief description of your project or programme, including its objectives and components/activities?
11. What is the expected duration (years) of your project or programme?
12. Have you identified an accredited entity for your project or programme?
Yes No Unsure
13. What is the name of the accredited entity for your project or programme?
14. Have you identified a lead executing entity for your project or programme?
Yes No Unsure
15. What is the name of the lead executing entity for your project or programme?

16. What is the estimated total costs (in US \$) of your project or programme?
17. How much of this funding (in US \$) will be requested from the GCF?
18. What type(s) of financing would you require from the GCF for your project or programme? You may tick more than one box if relevant.
Grant Loan Guarantee Equity Unsure
19. How much (in US \$) will be co-financed from other sources?
20. Have co-financing from other sources already been secured for your project or programme?
Yes No Unsure
21. Please indicate from which organisation and what amount of co-financing is expected (in US \$)
22. Has a no-objection letter already been obtained from the Ministry of Economic Development and Petroleum (the GCF National Designated Authority in Belize) for your project or programme?
Yes No Unsure
23. What is the development stage of your project or programme?
A concept note is being developed
A concept note exists (in GCF template)
A funding proposal is being developed
A full funding proposal (i.e. including all relevant annexes e.g. feasibility study) exists (in GCF template)
24. What further preparatory work would be needed in the medium (12 to 24 months) or long term (beyond 2 years) to complete project design?
Pre-feasibility study for deployment of a specific climate solution (e.g. solar energy)
Environmental and social risk screening
Economic and financial analysis / integrated financial model with key assumptions and potential stressed scenarios
Stakeholder consultations at national and project level implementation including with indigenous people, if relevant
Concept note drafting support
Other
25. What further preparatory work would be needed in the medium (12 to 24 months) or long term (beyond 2 years) to complete project design?
Feasibility study for deployment of a specified climate solution (e.g. drip irrigation), including multi-criteria analysis and recommendations of specific climate technology options (e.g. type of irrigation technology or solar energy technologies) within a specified solution
Project baseline study, including site-specific technical appraisals to identify baselines and determine project/programme activities
Any pre-requisite studies, planning and modelling needed to determine project/programme activities

Advisory services for costing and budgeting according to GCF standards, including the costing in relation to incremental cost for adaptation, in case the project/programme targets adaptation or cross-cutting results

Logical frameworks, including GCF relevant indicators, and project indicators, their baselines and targets

Assessment of the project/programme against the GCF Investment Criteria

Market assessment and recommendations

Economic and financial analysis / integrated financial model and recommendations

Environmental and Social Safeguard studies, which may include Strategic Environmental and Social Assessment (SESA), Environmental and Social Management Framework (ESMF), Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP) and Stakeholder Engagement Plan (including a Project-level grievance redress mechanism)

Other additional due diligence as required by GCF including Integrated Pest Management Plan and/or Integrated Vector Management Plan, Resettlement Action Plan(RAP), Livelihoods Restoration Plan, Biodiversity Management Plan and Indigenous Peoples Plan (IPP) or Community Development Plan

Gender studies, which may include: Gender Analysis, including an assessment of the baseline situation, a project-level Gender Action Plan, including targets based on the baseline of gender issues, and incorporation of gender-responsive indicators and targets in the logic framework of the funding proposal

Detailed engineering design drawings

Stakeholder consultations at national and project level implementation including with indigenous people if relevant

Funding proposal drafting support

Other

26. What would be the estimated costs (in US \$) of finalising the complete project design and undertaking remaining preparatory work?

27. Is this financing already secured?

Yes No Unsure

28. From whom is the financing already secured?

GCF Readiness Support Programme / Project Preparation Facility Other

29. What potential sources of support are considered to undertake the remaining preparatory work?

GCF Readiness Support Programme / Project Preparation Facility Other

30. What would be the timeline for submission?

31. Do you have another potential project or programme you would like to also submit to GCF?

Yes No [same questions again if yes]

Next Steps

32. Are you happy be contacted by the Acclimatise team to answer any questions about your potential project(s) or programme(s) for GCF funding?
33. Do you have anything else you would like to share/discuss with the project team about your potential project(s) or programme(s) for GCF funding?

Document request

For each of your proposed potential GCF programmes/projects, please email the following documentation to Virginie Fayolle (v.fayolle@acclimatiseI.uk.com), Maya Dhanjal (m.dhanjal@acclimatise.uk.com) and Khara Roches (khararoches.gcf@med.gov.bz):

- A draft concept note
- A draft funding proposal
- Any other supporting documents, such as:
 - o Pre-feasibility study
 - o Feasibility study
 - o Gender analysis
 - o Gender action plan
 - o Climate risk or vulnerability assessment
 - o Financial and economic analysis/ Integrated financial model
 - o Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plan (ESMP)

Thank you very much for your cooperation!

Annex 8: National programmatic documents reviewed in the preparation of the original Country Programme and its 2020 update

During the elaboration of the original Country Programme, each document was reviewed, with a particular focus on the following key words: climate, climate change, adaptation, mitigation, programme, project, intervention, action, investment, as appropriate. Wherever a potential climate change programme/project idea was proposed, relevant and available information was captured in the Excel template. Similar programme/project ideas were grouped where relevant. This approach aligns with GCF's recommendation that this type of documents, which may have already identified adaptation and mitigation priorities, provides the basis for preparing and implementing funding proposals. New programmatic documents were used during the 2020 update as sources of information for the Country Profile section and were added along with international and national climate change frameworks.

Table 47: International and national programmatic documents reviewed

<u>Climate change/cross-cutting</u>
• Third National Communication to UNFCCC, 2016
• Biennial Update Report (BUR), 2020
• National Climate Change Policy, Strategy and Action Plan (NCCPSAP) 2015-2020, 2014
• Intended Nationally Determined Contribution (INDC), 2015
• Nationally Determined Contribution (NDC), 2016
• Technology Needs Assessment for Climate Change, 2008
• Belize Technology Needs Assessment. Barrier Analysis and Enabling Framework. Adaptation, May 2018
• Belize Technology Needs Assessment. Barrier Analysis and Enabling Framework, Mitigation, May 2018
• National Development Framework - Horizon 2010-2030
• National Climate Resilience Investment Plan (NCRIP), 2013
• Revised Low Carbon Development Roadmap for Belize, 2016
• Growth and Sustainable Development Strategy (GSDS), 2016-2019
• National Environmental Policy and Strategy, 2014 – 2024
• Environmental Impact Assessment Regulations, 1995; Environmental Impact Assessment (amendment) Regulations, 2007
• Environmental Protection Act Chapter 328 Revised Edition, 2000; Environmental Protection (Amendment) Act, 2009
• Pollution Regulations 1996; Pollution (amendment) Regulations, 2009
• The Revised National Gender Policy, updated Version 2013
• Enhancing Gender Visibility in Disaster Risk Management and Climate Change in the Caribbean - Country Assessment Report for Belize, 2009
• Belize and Climate Change: the cost of inaction
• Climate Change Stakeholder Survey: An Analysis Of Adaptation And Mitigation Activities And Areas For Engagement
• The Caribsave Climate Change Risk Atlas (CCCRA) - Climate Change Risk Profile For Belize 2009-2011

Table 48: Mitigation-related programmatic documents reviewed

<u>Mitigation</u>
Energy
• National Energy Policy Framework, 2011
• Ministry of Energy, Science & Technology and Public Utilities Strategic Plan 2012-2017, including Belize National Sustainable Energy Strategy (2012-2033)
• Electricity Act, 1993; Electricity Act Revised, 2000; Electricity Act Revised, 2003
• Belize Sustainable Energy Strategy Vol 1&2, 2015; Belize Sustainable Energy Action Plan, 2015
• Belize Consolidated Project Plan, 2018
• Belize Forest Reference Level (FRL) 2001 – 2015, 2020
Land Use and Forestry
• National Forest Policy, 2015
• Belize National Land Use Policy for Land Resource Development, 2011
• National Integrated Planning Framework for Land Resource Development, 2011
• Forests (Protection of Mangroves) Regulations, 2003
• Mangrove Regulations (2018)

Transport
<ul style="list-style-type: none"> Moving Belize Forward. The Comprehensive National Transportation Master Plan of Belize – Executive Summary, March 2018 Preparation of a Comprehensive National Transportation Master Plan for Belize Final Report. Comprehensive National Transportation Master Plan.
Waste management
<ul style="list-style-type: none"> National solid waste management policy, 2015 Hazardous Waste Regulations, 2009

Table 49: Adaptation-related programmatic documents reviewed

Adaptation
Coastal and Marine Resources
<ul style="list-style-type: none"> Integrated Coastal Zone Management Plan, 2016 Vulnerability Assessment of the Belize Coastal Zone 2007, 2008
Agriculture
<ul style="list-style-type: none"> National Food & Agriculture Policy 2002-2020 National Agriculture and Food Policy 2015-2030 National Adaptation Strategy to address climate change in the agriculture sector in Belize, 2015
Water resources
<ul style="list-style-type: none"> National Integrated Water Resources Management Policy (including Climate Change) for Belize, 2008 National integrated water resources act. Chapter 222:01; Revised edition 2011
Tourism
<ul style="list-style-type: none"> National Tourism Policy, 2005 National Sustainable Tourism Masterplan for Belize 2030, 2011 Analyzing Vulnerability of the Belize Coastal Tourism Sector, 2014 Vulnerability and Risk Assessment for Emerging Destinations of Corozal District, Toledo District, Caye Caulker Village and The Mountain Pine Ridge Area, 2020 Adaptation and Disaster Risk Management (DRM) Plan for Emerging Destinations of Corozal District, Toledo District, Caye Caulker Village and The Mountain Pine Ridge Area, 2020 Tourism Destination Development Plans (TDDPs) and Small Scale Investment Project Plans for Emerging Destinations of Corozal District, Toledo District, Caye Caulker Village and The Mountain Pine Ridge Area, 2020
Fisheries and Aquaculture
<ul style="list-style-type: none"> <i>No sector specific policy document available. Sectors addressed in National Food & Agriculture Policy 2002-2020</i> Fisheries Act, Chapter 210, 210s & 211 Revised Edition 2003 Aquaculture Development Act, Chapter 204:01 Revised Edition 2011
Human Health
<ul style="list-style-type: none"> Belize Health Sector Strategic Plan 2014 – 2024
Forestry and Biodiversity
<ul style="list-style-type: none"> National Biodiversity Strategy and Action Plan 2016 – 2020 National Protected Areas System Act (NPASA), 2015 National Protected Areas System Plan (NPAPSP), 2005
Land Use and Human Settlements
<ul style="list-style-type: none"> National Land Use Policy for Land Resource Development, 2011 National Integrated Planning Framework for Land Resource Development, 2011
Disaster Risk Reduction
<ul style="list-style-type: none"> National Hazard Mitigation Policy, 2004 (Final Draft) National Hazard Mitigation Plan, 2006 Disaster Preparedness and Response Act, 2000

Annex 9: Completed GCF projects and programmes

This annex presents the description of all the completed projects and programmes that have been implemented in Belize.

GCF projects and programmes

No project/programme has been completed.

Readiness support

Table 50: Completed Readiness support

Country Readiness Programme portfolio			
Title	Description	Delivery Partner	Submission timeframe
NDA Strengthening and Development of Strategic Frameworks	(National Project) Readiness support for strengthening the capacity of NDA and development of a strategic framework/country programme for engaging with the GCF. Specifically, readiness support will be used to: <ul style="list-style-type: none"> • Develop a coordination mechanism; • Develop operational guidelines which include the no-objection procedure; • Train NDA and other relevant stakeholders in the use of GCF guidelines; and • Develop a Country Programme 	CCCCC	Approved (December, 2016)
		Total financing: USD 300,000	Status
		<u>GCF:</u> USD 300,000 (grant)	Completed
Action	Lead	Timeline	
Completed	CCCCC	12 + 4 months (no-cost extension)	

Title	Description	Delivery Partner	Submission timeframe
Mobilising Private Sector to Support Low-Carbon and Climate Resilient Development in Jamaica and other CARICOM States	(Multiple countries-14) The Readiness Grant will support private sector mobilisation for the development of projects/programmes which translate into regional and national benefits. The Readiness Grant will investigate barriers to private sector investment, support the accreditation of the selected private sector entities in the region, inform the best strategy for investment at the regional and country level and promote south-south cooperation among other CARICOM States.	Jamaica's NDA Climate Change Division – Ministry of Economic Growth and Job Creation (MEGJC)	Submitted and approved (August, 2017)
		Total financing: USD 582,000	Status
		<u>GCF:</u> USD 582,000 (grant)	Completed.
Action	Lead	Timeline	
Completed.	Jamaica's NDA-MEGJC	18 months	

Title	Description	Delivery Partner	Submission timeframe
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Building Capacity for a Regional Approach to Climate Action in the Caribbean: Caribbean Community Climate Change Centre	(Multiple countries-14) The objective of this project is specifically aimed at accessing readiness funding to enhance the capacity of the Centre, to facilitate and increase the origination of high-quality funding proposals for GCF consideration. This readiness funding is expected to, inter alia, enhance the Regional Framework and its accompanying Implementation Plan both aimed at articulating clear actions to combat climate change in the Caribbean.	CCCCC	Submitted and approved (January 2019)
		Total financing: USD 1,8 M	Status
		<u>GCF:</u> USD 1,8 M (grant) Belize's financial commitment is USD 583,776.	Completed
Action	Lead	Timeline	
Completed.	CCCCC	36 months	

Title	Description	Delivery Partner	Submission timeframe
Support for accreditation and accredited direct access entities	(National Project) Enhance the capacity of Belize's Development Bank, the Development Finance Cooperation (DFC), to deploy and effectively manage gender-responsive climate finance. DFC will form effective bridges between the GCF (and others) and the private sector, with the objective of stimulating green and inclusive growth. Furthermore, this initiative will adopt a gender-responsive approach to climate finance that takes into account the varying needs, interests, constraints, and barriers facing men and women, with respect to access to finance for climate adaptation/mitigation initiatives, where women possess significant untapped potential to become active agents of environmental and economic change. PWC will assist with GAP Analysis and Action Plan.	PwC	Submitted 22 February 2019
		Total financing:	Status
		<u>GCF:</u> USD 34,409	Completed
Action	Lead	Timeline	
Completed.	PwC	Approximate 6 months (depending on the review process)	