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# Country programme

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## Jamaica

Endorsed by the GCF Climate Investment Committee on 18 March 2020





GREEN  
CLIMATE  
FUND

# JAMAICA COUNTRY PROGRAMME



**MINISTRY OF ECONOMIC GROWTH & JOB CREATION  
CLIMATE CHANGE DIVISION**

**NATIONAL DESIGNATED AUTHORITY**





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## **Jamaica's Country Programme for the Green Climate Fund**

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### **Prepared under the guidance of:**

Jamaica's National Designated Authority

The Climate Change Division, Ministry of Economic Growth and Job Creation

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### **With the support from:**

Climate Analytics Inc.

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## Foreword

Climate change is a major challenge for Jamaica. Experiences of increased drought conditions, periods of intense rainfall, sea level rise, and increasingly high temperatures threatens our path of success to meet our goals of sustainable development towards a low carbon and climate resilient society.

With Jamaica's ratification of the Paris Agreement in 2017, we continue to increase our ambition to meet the objectives of this global agreement. However climate action requires massive transformation in our production methods and consumption patterns. Technology need to be developed and adopted, we need newer, and more efficient transportation systems and cleaner and more efficient ways of producing electricity. Transformation and Innovation is needed in all sectors. However these transformational impacts that we desire cannot be led by the public sector alone we need participation from the private sector and civil society. In all of this access and availability of significant financing becomes a priority.

The Green Climate Fund is therefore deemed critical to advancing our action and to our desire to becoming a climate resilient nation. Financial resources and partnerships are necessary

components in propelling climate solutions to help us implement the Paris Agreement.

This Country Programme (CP) aims to support and streamline our actions as a nation to engage with the Green Climate Fund. The CP prepared with financing from the GCF Readiness and Preparatory Support Programme will provide strategic guidance on the key project proposals that are considered quick wins for climate investment over the next two years. It also direct readiness projects that will strengthen Jamaica's institutional capacity to plan, access and deliver climate finance. The nature of the document remains dynamic and will be updated periodically to reflect changes to national circumstances and national priorities for adaptation and mitigation.

The development of this Country Programme over the past eighteen months is based on synthesis of national climate change and development policies, strategies and action plans and intensive stakeholder engagement from Ministries, Departments and Agencies, the private sector, and civil society.

The Country Programme was prepared by the National Designated Authority, with support from Climate Analytics Inc. We hope that with this first iteration that Jamaica can demonstrate the transformational agenda needed for attaining a low carbon and climate resilient society.

Honourable Daryl Vaz

Minister without Portfolio in the Ministry of Economic Growth and Job Creation

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## 1 Introduction

### 1.1 Country Profile

1. Jamaica is a Small Island Developing State (SIDS) situated in the Caribbean Sea, and the third-largest island of the Greater Antilles with an area of 10,990 square kilometres (4,240 square miles) and population of approximately 2.7 million persons. Jamaica has an Exclusive Economic Zone of 274,000 km<sup>2</sup>. Jamaica is a parliamentary constitutional monarchy with legislative power vested in the bicameral Parliament of Jamaica, consisting of an appointed Senate and a directly elected House of Representatives (Government of Jamaica, 2016).

2. As a SIDS, Jamaica is highly vulnerable to climate change impacts, such as sea level rise, coastal erosion, and changes in precipitation patterns. Jamaica has likewise been experiencing a warming trend in recent years, and studies indicate a likely increase in the intensity of extreme weather events due to climate change. The Climate Change Division (CCD), located within Jamaica's Ministry of Economic Growth and Job Creation, is responsible for Jamaica's obligations as a Party to the United Nations Framework Convention on Climate Change (UNFCCC).





<b>Geographical location</b>	Caribbean
<b>Land area</b>	10,990 square kilometers (4,240 square miles)
<b>Population</b>	2,728,900
<b>Types of climate</b>	The climate is tropical, with hot and humid weather, although higher inland regions are more temperate. Some regions on the south coast, such as the Liguanea Plain and the Pedro Plains, are relatively dry rain-shadow areas. Jamaica lies in the hurricane belt of the Atlantic Ocean and because of this, the island sometimes suffers significant storm damage.
<b>GHG emissions profile</b>	<b>Inventory year 2012:</b> Total excluding LULUCF: 14,922 GgCO <sub>2</sub> Eq Total including LULUCF: 13,296 GgCO <sub>2</sub> Eq (TNC, 2018) According to the Third National Communication, the bulk of Jamaica's emissions comes from CO <sub>2</sub> from the energy sector (5761.13 Gg). Of these emissions, energy industries provide the bulk (2824 Gg) followed by Manufacturing Industries and Construction (1990.01 Gg) and Transport (1743.19 Gg). Other energy sectors emit 350.92 Gg CO <sub>2</sub> . Land-Use Change and Forestry act as a sink of 1625.88 Gg.
<b>Key emitter sectors</b>	<ul style="list-style-type: none"> <li>• Electricity &amp; Heat</li> <li>• Agriculture &amp; Livestock</li> <li>• Road Transport</li> <li>• Mining/Bauxite<sup>1</sup></li> </ul>
<b>Key climate-related risks</b>	Hurricanes, floods, vector-borne diseases, biodiversity loss, coastal erosion, drought, loss of freshwater resources, sea level rise, change in soil fertility, agricultural productivity loss (heat stress, soil salination, etc.), interruption of potable water supplies.
<b>Vulnerable sectors</b>	Agriculture, Water resources, Human Health, Infrastructure, Coastal Resources, Tourism
<b>NDA/FP</b>	Ms. UnaMay Gordon Principal Director, Climate Change Division Ministry of Economic Growth and Job Creation
<b>National/Regional Accredited Entities (AEs)</b>	<ol style="list-style-type: none"> <li>1. Caribbean Development Bank (CDB)</li> <li>2. Caribbean Community Climate Change Centre (CCCCC)</li> <li>3. Corporación Andina de Fomento (CAF)</li> </ol>
<b>International AEs</b>	<ol style="list-style-type: none"> <li>1. Inter-American Development Bank</li> <li>2. World Bank</li> <li>3. Food and Agriculture Organization</li> <li>4. United Nations Development Programme</li> <li>5. UN Environment</li> </ol>
<b>Potential AEs nominated</b>	<ol style="list-style-type: none"> <li>1. Planning Institute of Jamaica</li> <li>2. Development Bank of Jamaica</li> <li>3. Jamaican Social Investment Fund</li> </ol>

<sup>1</sup> Note that key sub-sectors were selected, rather than IPCC sectors, for greater precision.



## 1.2 Climate Change Scenarios

### 1.2.1 Climate Hazards: Historical Trends and Projections

3. As a SIDS, Jamaica is characterized by vulnerability to climate variability. Jamaica faces serious threats from hotter temperatures, droughts, and floods linked to climate change, as well as an existential threat due to sea level rise. There are a variety of studies on the impacts of climate change in Jamaica. Jamaica has just recovered from severe drought that occurred in 2014-2015 and had significant impacts on the country's agricultural sector and water resources (Government of Jamaica, 2018). Climate effects are anticipated in the following key areas:

- a. Temperatures: Maximum, mean, and minimum temperatures show upward trend, and will continue to increase in the future.
- b. Rainfall: There is currently significant year-to-year variability in rainfall due to the influence of phenomena like El Niño. Climate models suggest a drier climate in the future, driven by change in summer rainfall.
- c. Sea Levels: Sea level rise has been occurring and has been increasing recently. Continued sea level rise is expected through 2100.
- d. Hurricanes: There has been a dramatic increase in frequency and duration of Atlantic Hurricanes since 1995. While there is no expected increase in overall frequency going forward, the number of stronger hurricanes is expected to rise in the region as a result of climate change.

4. These effects are discussed in greater detail below:

- a. Temperature is expected to increase in the medium to long term: Over the 1950-2014 period, minimum, maximum, and average temperatures have been increasing in Jamaica, though minimum temperatures have been increasing substantially faster (0.27° C/decade) than maximum (0.06° C/decade). Temperature is further expected to continue to increase substantially, with mean temperatures increasing by 0.42-0.46°C by the 2020s, 0.75-1.04°C by the 2030s, 0.87°C – 1.74°C by the 2050s, and 0.82 – 3.09°C by the 2081-2100 period with respect to a 1986-2005 baseline and over all four Representative Concentration Pathways (RCPs) (Government of Jamaica, 2018). Further detail on temperature projections by zone can be found in Table 1 (Climate Studies Group, Mona, 2017). A map of the relevant zones can be found in Figure 1.

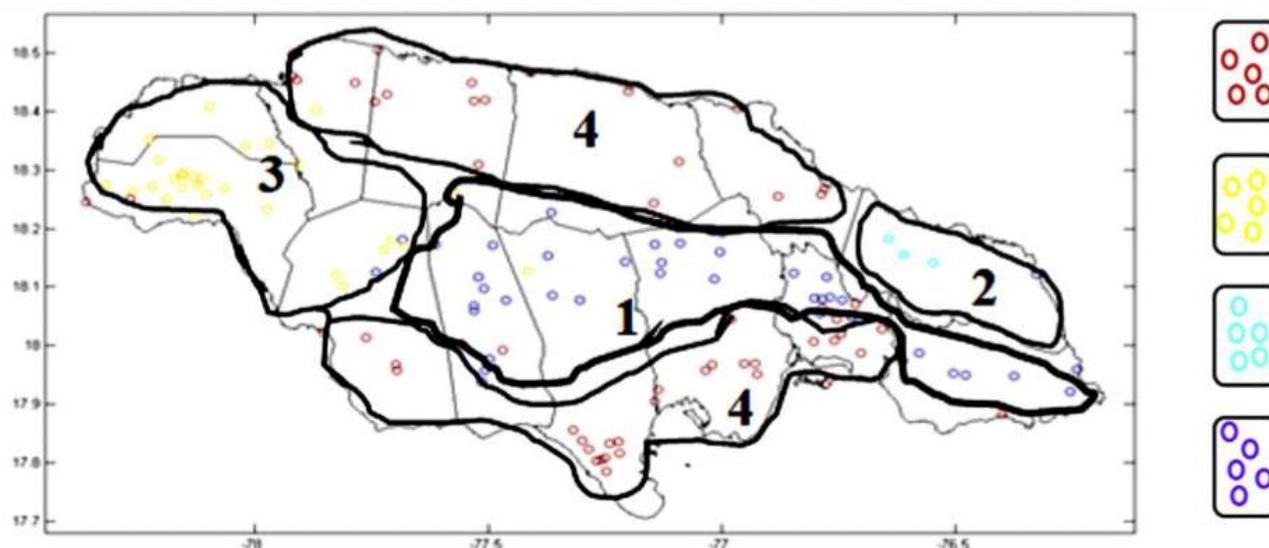


Figure 1 Jamaica's Four Rainfall Zones

Source: (Climate Studies Group, Mona, 2017)

Table 1 Range of temperature change for Jamaica's four Rainfall Zones

		WEST	COASTS	INTERIOR	EAST
Tmean	2020s	1.23 – 1.32	1.18 – 1.31	1.17 – 1.36	1.22 – 1.30
	2030s	2.04 – 2.79	1.48 – 2.83	1.83 – 2.26	1.92 – 2.06
	2050s	2.77 – 2.96	2.11 – 2.98	2.51 – 3.12	2.65 – 2.85
	EOC	3.40 – 3.69	2.76 – 3.62	3.12 – 3.90	3.22 – 3.48
Tmin	2020s	1.35 – 1.47	0.92 – 1.12	1.21 – 1.47	1.23 – 1.35
	2030s	2.13 – 2.88	-	1.88 – 2.39	1.92 – 2.10
	2050s	2.55 – 3.06	-	2.52 – 3.20	2.58 – 2.84
	EOC	3.35 – 3.92	-	3.24 – 4.04	3.22 – 3.56
Tmax	2020s	1.16 – 1.24	0.99 – 1.64	1.15 – 1.32	1.21 – 1.28
	2030s	1.89 – 3.39	-	1.84 – 2.28	1.93 – 2.08
	2050s	2.47 – 3.58	-	2.53 – 3.17	2.67 – 2.88
	EOC	3.29 – 4.19	-	3.32 – 4.03	3.42 – 3.67

Source: (Climate Studies Group, Mona, 2017)



- b. Rainfall: Jamaica should be prepared for drier times - Jamaica has been experiencing significant year-to-year rainfall variability, and groundwater supplies 80% of the country's water demands and represents 84% of the country's exploitable water. Underground water sources and groundwater recharge are already being threatened by rising temperatures and increased evaporation paired with decreased precipitation.
- c. Global Climate models suggest that a drying trend will begin as early as the mid-2020s, provoking 0-2% less rainfall on average. This will increase to 4% drier weather in the 2030s, 10% in the 2050s, and could be up to 21% by the end of the century. This will mostly result from decreased rainfall during the late rainfall season (Climate Studies Group, Mona, 2017). The intensity and occurrence of extreme rainfall events is projected to increase between 2040 and 2010, leading to greater incidents of flooding (Government of Jamaica, 2018)
- d. Sea Level Rise: As temperatures increase, sea level will continue to rise - There have been a variety of estimates of sea level rise, both globally, and for the Caribbean region. According to recent studies, including the IPCC's Fifth Assessment Report, it has been suggested that impacts on sea level rise could be dramatic, reaching 0.98m globally by 2100, and 1.5m for the Caribbean region, with increases of 8-16mm annually for the 2081-2100 period (Climate Studies Group, Mona, 2017). For Jamaica in particular, projected sea level rise over all RCPs for the north coast is 0.43-0.67m by 2100 with a maximum rise of 1.05 (Table 2). These rates of sea level rise are expected to be similar for the south coast.

Table 2 Projected changes in Sea Level by Study

Scenario	Global Mean Sea Level Rise by 2100 relative to 1980 – 1999	Caribbean Mean Sea Level Rise by 2100 relative to 1980 – 1999 ( $\pm$ 0.05m relative to global mean)
IPCC B1	0.18 – 0.38	0.13 – 0.43
IPCC A1B	0.21 – 0.48	0.16 – 0.53
IPCC A2	0.23 – 0.51	0.18 – 0.56
Rahmstorf, 2007	Up to 1.4m	Up to 1.45 m
Perrette et al., 2013		Up to 1.50 m

Source: (Climate Studies Group, Mona, 2017)

- e. Extreme Weather: Hurricane strength is likely to increase - Based on the conclusions of the IPCC report on extremes, Jamaica is expected to experience a similar incidence of hurricanes in a global warming scenario, in terms of genesis, frequency, and tracks. However, it is likely that the wind speeds and quantities of rainfall will increase in a warmer world (Climate Studies Group, Mona, 2017). Maximum wind speeds are projected to increase by 2-11% and maximum rainfall rates are projected to increase by 20-30% (Government of Jamaica, 2018). In addition, an 80% increase in the frequency of Category 4 and 5 hurricanes is expected over the next 80 years.

### 1.2.2 Climate drivers, risks and impacts of key sectors

5. As a Small Island Developing State (SIDS), Jamaica is extremely vulnerable to the impacts of climate change. Jamaica's 2015 Climate Change Policy Framework and Third National Communication to the UNFCCC identify the following areas of vulnerability to climate change (Government of Jamaica, 2015), (Government of Jamaica, 2018):



- a. Coastal & Marine Resources: Jamaica's coastline is approximately 886 km long, and is the location of the majority of the island's human habitation, ecosystems, infrastructure, tourism, and other economic activities. Reef related fisheries contribute USD 34 million per year to the economy annually (Government of Jamaica, 2018). These and other activities are likely to suffer from the impacts of climate change – those identified above concerning sea level rise and extreme weather events – as well as impacts like coral bleaching and storm damage to corals and other coastal maritime ecosystems, which are likely to have a significant impact on the fisheries industry.
- b. Water Resources: As mentioned above, Jamaica has been experiencing significant droughts in recent years, and those are likely to be exacerbated by further warming. As water is a critical input for agriculture, energy, mining and quarrying, manufacturing, tourism, housing, sanitation, health services, urban planning, and development, the climate impacts on water availability are likely to have far-reaching consequences on the island. These impacts will likely happen both due to potential challenges in rainfall patterns and increased evaporation, as well as potential saltwater intrusion into sources of groundwater.
- c. Human Settlements and Infrastructure: Approximately 82% of Jamaica's population lives within 5 km of the coast line and more than 70% of all major industries are located within the coastal zone (Government of Jamaica, 2018). According to the Planning Institute of Jamaica (PIOJ) Damage and Loss Assessment Reports between 2000-2017, Jamaica experienced 15 storms, hurricanes, droughts and flood events that cost J\$127.95 billion (US\$ 984.23 million). This reflects 1.3% of the country's GDP. Hurricane Ivan in 2004 led to damages equivalent to ~7% of GDP. Significant ongoing development in the coastal zone, particularly informal settlements that have not been created within the formal physical planning process (and thus do not meet building and materials standards) are exacerbating the country's vulnerability to climate change and extreme weather.
- d. Agriculture: According to the ESSJ (2018), the Planning Institute of Jamaica's (PIOJ) Agriculture Production Index (API) indicated that gross output increased for the sub-industries Other Agricultural Crops (7.2 per cent), Animal Farming (2.3 per cent) and Traditional Export Crops (0.8 per cent). Post-Harvest Activities declined by 27.9 per cent and Fishing by 23.6 per cent. Agriculture remains a major source of employment and foreign exchange for Jamaica. It is also among the most susceptible sectors to climate change, be it from reduction in quantity or quality of water, soil fertility loss, pest increase, supply chain challenges from threats to the ports, or from extreme weather. In 2008, Tropical Storm Gustav resulted in losses in the crop and livestock sector of J\$1.6 billion (US\$ 12.31 million) and approximately J\$90 million (US\$ 692, 307.69) in the fisheries sector. More recently in May 2017 a trough caused significant damage to the agriculture sector estimated at J\$796.4 million (US\$ 6.13 million). Some 10,262 farmers (8,862 crop farmers and 1,402 livestock farmers) suffered damage amounting to J\$794.2 million (US\$ 6.11 million).
- e. Tourism: Tourism is a major economic force in the Jamaican economy, and one that contributes approximately US\$1.9 billion (J\$ 247 billion) annually to the country's foreign exchange earnings. However, the sector remains extremely vulnerable to a number of the key impacts of climate change, including, *inter alia*: damage to and destruction of hotels and infrastructure; reduction in fresh water resources; altered seasonality and heat stress, as well as increased cooling costs; changes in wildlife and insect populations and vector-borne diseases; extensive coastal erosion due to sea level rise, storm surges, and hurricanes – reducing beach areas; coral bleaching and ocean acidification leading to decreased biodiversity; increased



insurance costs; and extreme weather preventing visitor arrivals. In 2007, Hurricane Dean resulted in an estimated USD 43.7 million (J\$5.68 billion) losses to the tourism sector.

- f. Human Health: Climate change will likely exacerbate challenges to human health in Jamaica and the tropics through the proliferation of vector-borne and water-related diseases, as well as heat waves, floods, droughts, and other elements that are likely to affect the determinants of health. Furthermore, many health facilities are prone to river flooding and extreme weather. The Offices of Disaster Preparedness and Emergency Management (ODPEM) has prepared damage assessment report documents resulting from natural disasters. It was found that the health sector suffered damages of: J\$ 45.2M (US\$ 347,692.31) in 2005 from Hurricane Wilma; J\$ 279.5M (US\$ 2.15M) from Hurricane Dean in 2007; and J\$ 341M (US\$ 2.62 M) from Hurricane Sandy in 2012 (Government of Jamaica, 2018).
- g. Forests: Climate change threatens forests through increased droughts, overall drying of rainy seasons, warmer temperatures and more intense hurricanes and storm surges. These hazards may result in the loss of forest area and quality and could increase the impacts of climate change on human settlements. Drier climate conditions also make forests more vulnerable to fires, which may exacerbate the existing impacts of forest fires.

6. Vulnerable social groups (women, indigenous people, and minorities): The 2015 State of the Jamaican Climate report found that climate change is likely to have significant gender impact in Jamaica. Women represent 70% of the population living below the poverty line, and as such are likely to experience more suffering as a result of natural disasters. Women also are more likely to suffer from sexual violence in shelters, face more risk of HIV infection during disasters, and face more danger of human trafficking following a disaster, among other impacts. Rural women are particularly susceptible to climate impacts. Women are also particularly vulnerable to droughts, as women and children are often primarily responsible for water carrying, and an increase in time spent carrying water reduces women's time and ability to diversify their incomes (Climate Studies Group, Mona, 2017).

7. The Third National Communication identifies the poor as being most vulnerable to climate impacts as they will be least able to adapt. The ability of the Jamaican Government to assist those living in poverty after disasters is limited, due to its present economic state. Therefore, the poor may bear much of the costs of recovery with limited financial resources. This is particularly relevant for rural areas, where levels of poverty are consistently higher.

8. Information on climate impacts on indigenous groups in Jamaica is limited to date.

### 1.2.3 Key emitting sectors and related mitigation challenges

9. In 2012, total Greenhouse Gas Emissions were 14,922 GgCO<sub>2</sub>e excluding LULUCF, and 13,296 GgCO<sub>2</sub>e including LULUCF. This was down from the country's 2006 emissions level of 15,918 GgCO<sub>2</sub>e (excluding LULUCF) (Table 3). While the majority of emissions came from CO<sub>2</sub> (7,387 GgCO<sub>2</sub>e), N<sub>2</sub>O emissions also made a significant contribution (6,594 GgCO<sub>2</sub>e).

10. The energy sector is typically the largest contributor to CO<sub>2</sub> emissions in Jamaica. Public electricity and heat is the number one category of emissions in the country (16%). The vast majority of Jamaican electricity comes from oil-fired generator plants. After electricity, the largest contributors to energy sector emissions are road transport (10%), and mining/bauxite (9%). The latest GHG inventory shows relatively small decreases in emissions from these sectors over the 2006-2012 period, with the exception of mining/bauxite, for which a significant decrease results from a dramatic decline in the industry's economic output.



11. The agriculture sector makes substantial contributions to total emissions through emission of N<sub>2</sub>O, primarily associated with manure management and its use as a fertilizer (Ministry of Economic Growth and Job Creation, 2016).

Table 3 Emissions of Greenhouse Gases (Gg CO<sub>2</sub> EQ)

	2006	2007	2008	2009	2010	2011	2012
CO <sub>2</sub>	11,205	9,857	10,658	7,918	7,285	7,870	7,387
CH <sub>4</sub>	818	835	841	857	847	831	852
N <sub>2</sub> O	3,870	4,985	6,874	6,662	6,643	4,426	6,594
HFC	87	92	95	95	93	92	89
LULUCF	-1,685	-1,638	-1,631	-1,622	-1,618	-1,616	-1,626
Total excluding LULUCF	15,918	15,770	18,468	15,532	14,868	13,220	14,922
Total including LULUCF	14,296	14,131	16,836	13,911	13,250	11,604	13,296

Source: (Government of Jamaica, 2018)

## 1.3 Development Profile

### 1.3.1 Macro-economic & Fiscal Situation

12. As an Upper-Middle Income country in the Latin America & Caribbean region, Jamaica's 2017 Gross Domestic Product (GDP) was 1,897,303 million Jamaican Dollars (approximately USD 15 Billion)<sup>2</sup> (Statistical Institute of Jamaica, 2018), and the population was 2.73 Million people (Statistical Institute of Jamaica, 2018). The country has been experiencing low rates of growth (0.5-1.4%) since 2013 (Statistical Institute of Jamaica, 2018).

13. In 2017, Jamaica Gross National Income (GNI) per capita (PPP) was USD 8,670 (World Bank, 2018). In 2017, Jamaica was 117<sup>th</sup> in the world for GNI per capita (PPP).<sup>3</sup>

14. Jamaica's 2017 Human Development Index value for 2017 was 0.732 and is positioned at 97 out of 187 countries.

15. Jamaica compares relatively well relative to many of its regional peers in terms of the Ease of Doing Business, ranking 75 globally overall. Jamaica scores particularly well in starting a business (95.35/100, 6<sup>th</sup> overall), getting credit (85/100, 12<sup>th</sup> overall), and resolving insolvency (69.83/100, 33<sup>rd</sup> overall). Where the country scored most poorly was in trading across borders (61.54/100, 134<sup>th</sup> overall), registering property (53.61/100, 131<sup>st</sup> overall), and enforcing contracts (51.87/100, 127<sup>th</sup> overall) (World Bank Group, 2018).

16. Jamaica has run a current account deficit in recent years, though this has been declining relative to the country's GDP. The country's principal export good have been Bauxite and Alumina (USD 92M and USD 509M respectively), with significantly smaller exports of sugar, coffee and rum. Services exports, in the form of tourism, are Jamaica's main export

<sup>2</sup> Based on Bank of Jamaica 2017 average exchange rate of 128.36 , [http://www.boj.org.jm/foreign\\_exchange/fx\\_rates\\_annual.php](http://www.boj.org.jm/foreign_exchange/fx_rates_annual.php), Accessed October 1, 2019.

<sup>3</sup> Data was available for 183 countries



commodity. Unemployment has fallen in recent years, from 13.7% in 2014 to 11.7% in 2017 (Bank of Jamaica) and 7.8% as of April 2019 (Statistical Institute of Jamaica, 2019). The unemployment rate is significantly higher for women (15.4%) than for men (8.4%). The headline inflation rate ranged between 1.7% and 6.4% in the 2014-2017 period (Bank of Jamaica).

17. Jamaica has been working to reduce its high debt burden and has been achieving success toward that goal. Public debt fell below 100% for the first time this century at the end of the 2018/2019 fiscal year (The World Bank, 2019). This represents a significant drop from as recently as 2012, when the ratio stood at 138% (The World Bank, 2019). Jamaica's high national debt led it to enter into an Extended Financing Facility arrangement with the IMF in 2013. This arrangement ended in 2016 and was replaced by a Precautionary Stand-By Arrangement which concluded in September 2019.

### 1.3.2 Development Prospects

18. The country's national development strategy is captured in its *Vision 2030 Jamaica – National Development Plan*. This document highlights four key goals: Jamaicans are empowered to achieve their fullest potential; The Jamaican society is secure, cohesive, and just; Jamaica's economy is prosperous; and Jamaica has a healthy natural environment. These, in turn, are communicated with a series of more concrete targets for 2030, including: achieve an HDI score of 0.8 or higher; increase working-age population to 66.5% of total by 2025; move to "higher forms of capital;" achieve developed country status by 2030; foster innovative urban and regional planning based on sustainability principles; and decentralize power and decision-making (Planning Institute of Jamaica, 2009). Vision 2030 is in turn operationalized through the development of a series of Medium-Term Socio-Economic Policy Frameworks (MTF) – Jamaica is currently in the process of implementing its 2018-2021 MTF.

19. Vision 2030 identifies transportation, telecommunications, and water infrastructure as pillar of national competitiveness, and includes the strengthening of the country's economic infrastructure as a key priority (National Outcome 9). As such, a variety of infrastructure initiatives are identified in the Medium-Term Framework 2018-2021, including projects in transport, water, and information and communications technology (ICT). The framework aims to advance the development of Jamaica as a multimodal regional logistics hub (Planning Institute of Jamaica, 2018).

20. In 2016, UNEP and the Government of Jamaica developed a Green Economy Scoping Study for Jamaica. This report reviewed existing policies across sectors, and developed a variety of recommendations, by sector. It also focused on incentivizing "green" investments while discouraging "brown" investments, but recognized the challenges of adding additional incentives given the fiscal constraints and restrictions due to Jamaica's engagement with the IMF (UNEP, 2016).

### 1.3.3 Poverty Eradication

21. Jamaica has made poverty alleviation a key priority for many years, with mixed results. The lowest rate of poverty was recorded in 2007 (9.9%), which was substantially lower than the 28.4% observed in 1990. However, poverty rates rebounded in the 2008-2013 period, largely as a result of the global financial and economic crises of 2008-2009, before finally starting to fall again in 2013-2014. As of 2016, the poverty rate was 17.6% (Planning Institute of Jamaica, 2018).

22. The government has established a series of policies to eradicate poverty from Jamaica, including (Planning Institute of Jamaica, 2018):

- The National Policy on Poverty and National Poverty Reduction Programme (NPP/NPRP), which was approved by Parliament in 2017 in support of the eradication of extreme poverty by 2022;
- The comprehensive Social Protection Strategy (2014);



- The National Food and Nutrition Security Policy (2013);
- The Food Safety Policy (2013);
- The Climate Change Policy Framework for Jamaica (2015);
- The Programme for the Advancement through Health and Education (PATH); and
- Poor Relief Programme.

#### 1.3.4 Gender mainstreaming and social inclusion

23. Jamaica's 2011 National Policy for Gender Equality aims to establish a gender policy that addresses the needs of both women and men. The policy "seeks to propel the historical and political movement for gender equality by providing a policy framework of professional analysis" and presents a "rights-based approach to achieving gender equality, and promotes programmes which must be developed against an understanding of the international commitments" (Bureau of Women's Affairs & Gender Advisory Committee, 2010). Gender inequality is noted as a challenge in Vision 2030, and transforming prevailing gender ideologies is a sector strategy included in the 2018-2021 MTF. Jamaica has submitted a readiness proposal to facilitate a gender-responsive approach to climate change adaptation and mitigation.

#### 1.3.5 Credit & Private Sector Capacity

24. According to the data provided by Tax Administration Jamaica (TAJ), approximately 97.6% of all classified tax payers fell within the Micro, Small, and Medium Enterprises (MSMEs), as defined by the 2013 MSME and Entrepreneurship Policy, with 83% of these falling within the micro-sector (Climate Change Division, 2019).

25. Access to finance is a major constraint for MSMEs: The Bank of Jamaica's National Financial Inclusion Strategy (NFIS) notes that non-traditional financial products are limited. 40% of Jamaicans reported informal borrowing, and 47% of small enterprises consider access to finance to be a major constraint. Only 27% of the MSMEs have a bank loan or credit line, which is significantly lower than the regional average of 48% in Latin America (Climate Change Division, 2019).

26. The World Bank's 2015 Financial Sector Assessment for Jamaica found that the growth of the financial sector had limited the evolution of the financial sector in Jamaica, as public sector borrowing crowded out private sector access to credit, and noted that Small and Medium Enterprises (SMEs) had experienced the most limited access to finance. However, the authorities did embark on major reform efforts, including the Banking Services Act and the Credit Unions' regulations (Garcia Mora, et al., 2015).

27. The financial sector's situation appears to have improved more recently. Total credit expanded by 8.5% in 2017, and financial institution assets increased to 210% of GDP in 2016, indicating a financial deepening. Non-performing loans (NPLs) have decreased to 2.7% (EIU ViewsWire, 2018).

28. Jamaica's Moody's credit rating is currently B3. While the country is no longer at the B1 level that the country maintained in the late 1990s and early 2000s, the rating is on a positive trajectory, having been upgraded twice since its low point of Caa3 in 2013 (Moody's, 2018).

#### 1.3.6 Growth Prospects

29. The IMF's fifth review under the stand-by arrangement, in April 2019, noted many positives in the Jamaican economy. The economy had expanded for the past 15 quarters, unemployment was at historic lows, international reserve



coverage has consistently been high, unemployment has been low (below Bank of Jamaica targets), the stock market was the world's best performer in 2018, and the credit rating was recently increased by Fitch (IMF, 2019).

30. The October 2018 Labour Force Survey revealed that unemployment had fallen 1.8 percentage points from October 2017, to 8.7%, the second lowest monthly rate recorded in Jamaica's history<sup>4</sup> (Government of Jamaica, 2019).

31. Projected oil price increases over the medium term present a risk to the economy. Likewise, weaker than anticipated global demand is a downside risk for Jamaica's economy. Weather-related shocks can also prove damaging to the Agriculture, Forestry, and Fishing industry (Government of Jamaica, 2019).

32. Between the 2019/2020 and 2022/23 Fiscal years, overall growth is expected to remain between 1.5% and 2.8% per year. The goods producing industry in particular, is expected to see fairly strong growth (5-10% every year) (Government of Jamaica, 2019).

33. Agriculture, fishing, and forestry are expected to grow substantially each year (between 5 and 10%, depending on the year), and anticipate a 31% overall growth between 2019/20 and 2022/23.<sup>5</sup> This strong growth is expected to result from stronger demand coming from linkages with other sectors (agribusiness, hotels, restaurants), as well as greater adoption of technologies that will increase climate resilience and reduce vulnerability to external shocks (Government of Jamaica, 2019).

34. Mining and Quarrying are expected to contribute significant amounts to growth – 42% over the 2019/2020-2022/2023 time period.<sup>6</sup> Supply disruptions as a result of planned upgrades to the Alpart (Alumina) production chain are expected in the 2019/2020 fiscal year, but this new capacity is expected to drive significant growth (36.9%) the following year (Government of Jamaica, 2019).

35. Moderate growth is expected in the manufacturing sector in the same time period (between 1.3% and 3% annually), while the services industry anticipates lower growth of 0.8% in 1.1% in 2019/2020, but climbing every year to reach 1.9% in 2022/23 (Government of Jamaica, 2019).

## 1.4 Our Response to Climate Change

### 1.4.1 National Frameworks and Initiatives

- Initiatives under International Institutions (UNFCCC, GCF)

36. Jamaica put forward its INDC in November 2015, which later became the NDC, upon ratification of the Paris Agreement on May 10, 2017 (Table 4). The NDC was predicated on the implementation of the National Energy Policy 2009–2030 and includes a mitigation component with a 7.8% reduction versus BAU, as projected from 2005, by 2030, raised to 10% conditional on support. Although Jamaica's NDC focuses on mitigation, information on concrete adaptation action that Jamaica intends to implement is explicitly mentioned within the document. Ahead of COP24, Jamaica announced its intention to increase its renewable energy target from 20% to 50% of the total energy mix by 2030. In addition, steps are currently underway to enhance its NDC as well as broadening it to possibly include other sectors such as Transport, Forestry, Water, Waste, and Agriculture.

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<sup>4</sup> The lowest was 8.4% in July 2018

<sup>5</sup> Calculations based on annual growth rate data

<sup>6</sup> Calculations based on annual growth rate data



Table 4 Summary of INDC/NDC Targets<sup>7</sup>

Targets		Estimated resources required USD \$
Conditional	<p><b>Adaptation:</b> Referenced as “Additional Information”. Actions on which Jamaica intends to follow through (some of which have already started) include:</p> <ul style="list-style-type: none"> <li>• Development of sector strategies and action plans (SSAPs),</li> <li>• Comprehensive climate change awareness and education programme</li> <li>• National spatial plan</li> <li>• Implementation of high priority adaptation projects and programmes in the five priority sectors</li> <li>• Prioritising data-gathering</li> <li>• Investment in the installation and maintenance of automatic weather stations</li> <li>• National database for climate data</li> <li>• Human and technical capacities for real time monitoring</li> <li>• Enhancing research capacities</li> </ul>	N/A
	<p><b>Mitigation:</b> Reduce emissions 10% below BAU by 2030, subject to enhanced implementation of the National Energy Policy, in particular for Energy Efficiency.</p>	Not indicated
Unconditional	<p><b>Mitigation:</b> Reduce emissions by 1.1 MMtCO<sub>2</sub>e by 2030 (7.8% below BAU)</p>	Not indicated

37. Jamaica prepared its initial climate change Technology Needs Assessment in 2004, in collaboration with UNDP. The country is one of the twenty-three countries and one of five in the Caribbean approved to participate in the Phase 3 of the Technology Needs Assessments Project, which started in mid-2018 (UNEP DTU Partnership, 2018). Jamaica’s segment of the TNA III involves critically examining sectors such as coastal and water resources, agriculture and also energy. The project will identify the relevant technologies for these sectors, the barriers of those technologies and a technology action plan for enhancing implementation. Priority needs identified and included in the technology action plan will be used to inform future updates of the GCF country programme. There are many entry points for GCF financing to support technology in Jamaica. GCF can provide readiness financing to assist with enhancing deployment of the prioritised climate technologies, conducting feasibility assessment(s) of selected technologies and strengthening market preparation and business planning for the deployment or scale-up of prioritised climate technology solutions. Jamaica will explore the use of readiness resources to support the Technology Action Plan, where applicable.

<sup>7</sup> GCF Template Table 1



38. Jamaica has two draft Nationally Appropriate Mitigation Actions (NAMAs) namely a draft Renewable Energy NAMA<sup>8</sup> and a Water Sector NAMA<sup>9</sup>. The draft Water Sector NAMA prepared in July 2019 defines two targets. First, it will reduce GHG emissions by 20% by 2030 through the implementation of multiple energy efficiency project within the NWC water supply system and the irrigation system of National Irrigation Commission. Secondly, it will increase the share of renewable energy generation to 10% by 2030 through the implementation of solar PV systems for power generation in all sub-sectors (water supply, sewerage, and irrigation). The draft NAMA for the Energy sector aims to promote the incorporation of renewable-based electricity generation in Jamaica.

39. The Government of Jamaica has committed to maintaining a ‘no-net-loss’ forest cover as described in its 2017 Forest Policy and its most recent National Forest Management and Conservation Plan [NFMCP] (2016-2026). REDD+ is a national strategic priority as outlined in the NFMCP, with one of the key outcomes “Outcome 3: Strengthened institutional capacity for REDD+ activities”. In 2018 Jamaica accessed GCF readiness financing for the project “Support for REDD+ Readiness in Jamaica” through the Ministry of Economic Growth and Job Creation. It will be executed by the Forestry Department and be administered by the Climate Change Division. The readiness project will assist with building capacity and putting in place planning mechanisms to guide the country in becoming REDD+ ready, including the development of a National REDD+ Strategy. The strategy will better enable the Government of Jamaica to leverage the necessary financial resources and/or incentives for REDD+ in the future (e.g. GCF’s Pilot Programme REDD+ Results-Based Payment).

40. Jamaica has opted for a “hybrid approach” to national adaptation planning, combining national and sectoral actions (Climate Change Division, 2017). A key part of this approach is to ground action in Vision 2030 Jamaica – National Development Plan, the country’s long-term sustainable development framework. In support of this Plan and to further mainstream climate change across all sectors, the Climate Change Policy Framework for Jamaica was promulgated. The Policy Framework calls for the preparation of sector strategies and action plans (SSAPs) to help in this regard. A few of the sectors named are at various stages of preparing the SSAPs. However, that of the forestry sector was completed and is being implemented. GCF NAP readiness resources may potentially be requested to support the development of these SSAPs or other adaptation planning processes, including at the local level. The NAP readiness will build on completed and on-going Vulnerability Assessments. For example, with GEF financing Vulnerability Assessments were completed for the five priority sectors and are documented in the Third National Communications to the UNFCCC. Under the Pilot Programme for Climate Resilience (PPCR) project “Improving Climate Data & Information Management Project”, the health sector began undertaking a Vulnerability Assessment focusing on infrastructure (physical facilities) and systems.

- National and sub-national climate-related initiatives

41. Central to Jamaica’s climate efforts is the 2015 Climate Change Policy Framework. This document establishes “a sustainable institutional mechanism to facilitate the development, coordination, and implementation of policies, sectoral plans, programmes, strategies, and legislation to mitigate as well as adapt to climate change.” It aims to: mainstream climate change considerations into development planning, including through the development of a climate change focal point network embedded in line ministries; support research, data collection, and analysis institutions; facilitate and coordinate the national response; improve communications at all levels on impacts, mitigation, adaptation, and related opportunities; mobilize climate finance; and encourage the private sector to embrace climate change imperatives and promote development and implementation of appropriate technologies and processes (Government of Jamaica, 2015).

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<sup>8</sup> Prepared in 2014

<sup>9</sup> To be completed by 2019



42. Jamaica has raised its renewable energy ambition substantially over the past several years. Jamaica’s National Energy Policy 2009-2030 establishes a series of goals for the energy sector, and calls for a 20% renewable energy contribution to the energy mix by 2030 (Ministry of Energy and Mining, 2009). Most recently, the Prime Minister announced a goal of 50% renewables in the electricity mix by 2030 (Office of the Prime Minister, 2018).

43. Jamaica has worked with a variety of international partners on climate change adaptation and mitigation. In partnership with the Pilot Programme for Climate Resilience (PPCR), Jamaica has undertaken the following initiatives:

- Improving climate data and information management, which includes the installation of a real-time data collection system for stream flow, sea level, rainfall, and other climate parameters;
- An Adaptation and Financing Mechanism project that operationalizes the Special Climate Change Adaptation Fund to provide grants to aid in adaptation activities led by civil society and a Line of Credit to support private sector in the agriculture and tourism sectors;
- An investment plan for the Caribbean regional track of the PPCR, which establishes a scientific platform for applied research and knowledge sharing in the Caribbean.

With financing from the Adaptation Fund, the government has undertaken projects in agriculture, installing gravity drip systems for farmers, and has completed a climate risk atlas for the city of Negril and trained local businesses and communities in disaster risk management (Planning Institute of Jamaica, 2018).

44. A number of Jamaica’s legislative and policy efforts to address climate change mitigation can further be found in Figure 2.

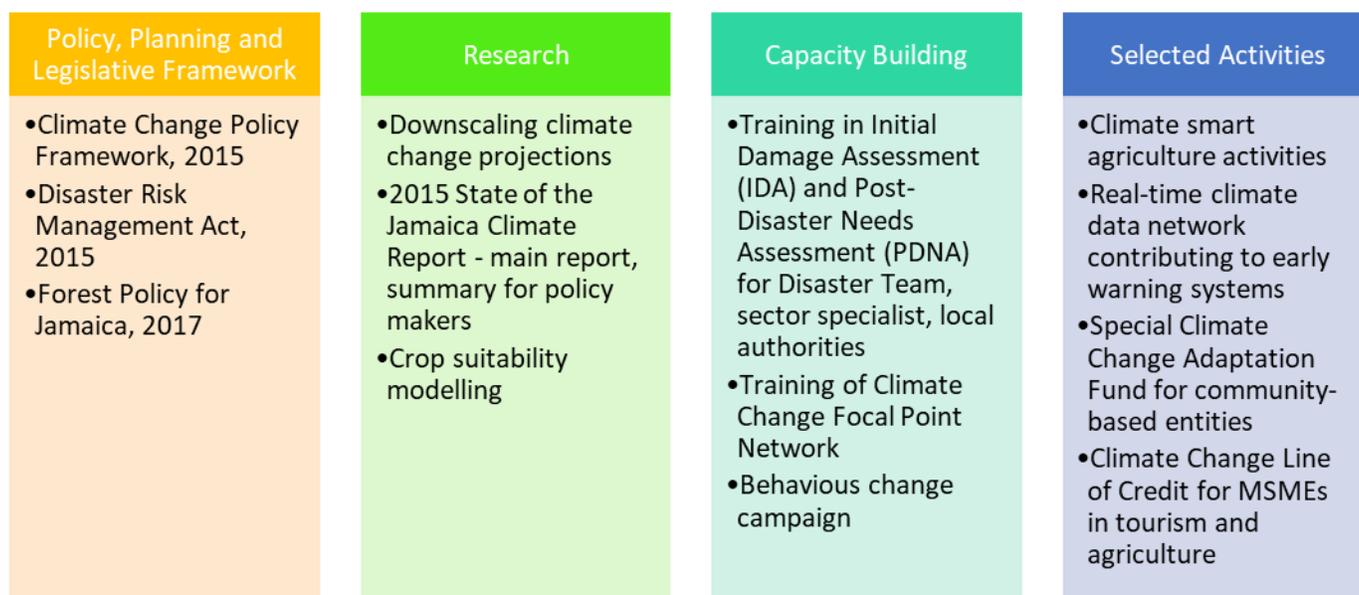


Figure 2 Steps taken to mitigate the impact of climate change

Source: (Planning Institute of Jamaica, 2018)



- National Institutional Framework

45. Since 2012 Jamaica has sought to enhance its institutional arrangements to address climate change. The Climate Change Division (CCD) was established in 2013 with the specific mandate of addressing climate change issues and coordinating related activities across sectors. The CCD is currently housed within the Ministry of Economic Growth and Job Creation (MEGJC).

46. The Planning Institute of Jamaica is the chief government advisory body and interlocutor with international development partners; it currently is under the purview of the Ministry of Finance and the Public Service. The PIOJ hosts the Vision 2030 Secretariat which coordinates the implementation of Vision 2030 Jamaica, including Thematic Working Groups. Climate change is a focus of the Thematic Working Group for Hazard Risk Reduction and Adaptation to Climate Change (HRRACC).

47. In 2014, a Climate Change Focal Point Network (CCFPN) was established with representatives from key Ministries, Departments, and Agencies (MDAs) of government to promote cooperation and a multi-sectoral approach to climate change. Subsequent to this, it was entrenched in the Climate Change Policy Framework and continues to function under the guidance and leadership of the Climate Change Division.

48. The Climate Change Advisory Board (CCAB), was created in 2015. Members are appointed by Cabinet, and include representatives from the public sector, private sector, academia, and NGOs. Members, through meetings and sub-committees, engage in the exchange of information and advise the Minister and CCD as appropriate (Climate Change Division, 2017).

49. Local affairs in Jamaica are administered by Municipal Corporations (MCs). These MCs have authority over a variety of areas, including many that are directly relevant to climate change mitigation and adaptation, such as public health, water supplies, building regulations, public beaches, and sanitation. At the local level it is anticipated that a community-based network of the CCFPN will be established and comprise, inter alia, the Chair of the respective Parish Development Committees, the Social Development Commission Officer of each parish and the Chair, and at least one other member of the Association of Local Government Authorities.

50. Jamaica has convened a climate finance working group, which is led by the Ministry of Finance. The purpose of this group is to build the capacity of in-country climate finance practitioners. It includes a variety of public sector entities, as well as a share of private sector and NGO representatives.

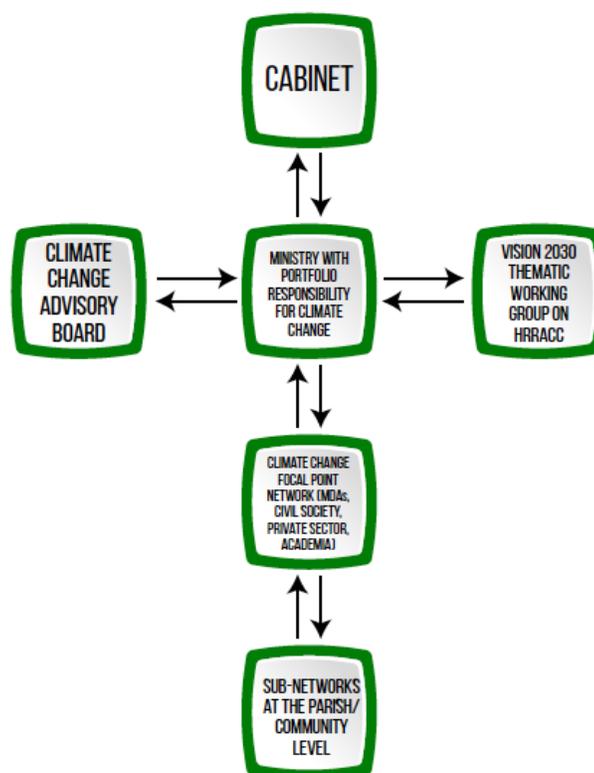


Figure 3 Institutional arrangement to implement the Climate Change Policy

Source: (Government of Jamaica, 2018)

- Monitoring Systems

51. Emissions inventory compilation in Jamaica is undertaken on a project-by-project basis. While this has in the past presented challenges to continuity and transparency, the government recognizes this and has taken steps to ensure that more recent inventories are fully transparent (Ministry of Economic Growth and Job Creation, 2016). In 2017, the CCD established its Greenhouse Gas Inventory Database to ensure that emissions data submission is fully transparent. The CCD is currently working with the Inter-American Development Bank to develop its GEF Capacity Building Initiative for Transparency (CBIT) proposal that enhances transparency in alignment with the Paris Agreement. The most recent greenhouse gas inventory can be found in the Third National Communication, which is the source from which much of the emissions and sinks information in this country programme is referenced.

52. On the climate impacts side, Jamaica and the World Bank are currently cooperating on the Jamaica Disaster Vulnerability Reduction Project, a USD 30 Million project which involves improving the generation and collection of targeted hazard and risk information and its analysis and use in monitoring systems and decision making; retrofitting or construction of key assets; development of a Contingent Emergency Response Component (CERC), supporting Jamaica's emergency preparedness and response capacity, as well as targeted post-disaster social safety net support to affected households; and project administration (The World Bank, 2018).

53. There have been several vulnerability assessments in Jamaica over the years.



- USAID - Jamaica Climate Risk Profile (2017)
- Caribsave Partnership – The Caribsave Climate Change Risk Atlas: Jamaica (2012)
- ECLAC – An Assessment of the economic impact of climate change on the Agriculture, Health, and Tourism sectors in Jamaica (2011)
- FAO – Drought Characteristics and Management in the Caribbean (2016)

#### 1.4.2 Regional and international engagement

54. Jamaica is a member of a large number of international and regional organizations. A few of the most pertinent for climate action and finance include:

- **Regional**

- The Caribbean Community (CARICOM) - a grouping of twenty countries in the region. It supports regional integration and rests on four key pillars: economic integration; foreign policy coordination; human and social development; and security (CARICOM, 2019). CARICOM is the political partner of the initiative entitled “Supporting the implementation of NDCs in the Caribbean - transforming the energy and transport sectors towards a low-carbon and climate-resilient future (NDC-CARIB)”. The lead implementing entity is Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The project includes six focus countries - Antigua & Barbuda, Belize, Grenada, Guyana, Jamaica, and Saint Lucia. Other partners include SIDS DOCK, Caribbean Centre for Renewable Energy and Energy Efficiency, Climate Analytics Inc., The University of the West Indies and the Caribbean Development Bank.
- Caribbean Community Climate Change Centre (CCCCC) – coordinates the Caribbean region’s response to climate change. The CCCCC secretariat is an Accredited Entity to the GCF. The CCCCC will be instrumental in the implementation of priority projects within Jamaica’s Country Programme. CCCCC has initiated various climate change projects as well as tools (such as the Caribbean Climate Online Risk Assessment Tool (CCORAL) to support Jamaica and the Caribbean region. It is responsible for implementing the Regional Framework for Achieving Development Resilient to Climate Change (2009-2021).
- Caribbean Regional Fisheries Mechanism (CRFM) –At the 8<sup>th</sup> Special Meeting of CRFM Ministerial Council (2018), the Fisheries Ministers approved the Protocol on Climate Change Adaptation and Disaster Risk management in Fisheries and Aquaculture of the Caribbean Community Common Fisheries Policy (CCCFP).
- SIDS DOCK – An initiative among AOSIS members to provide a collective institutional mechanism to transform energy sectors among Small Island Developing States (SIDS) (What is SIDS DOCK?, 2019).
- Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) – a regional centre designed for the promotion of renewable and energy efficiency.
- Caribbean Disaster Emergency Management Agency (CDEMA) – a regional inter-governmental agency for disaster management. CDEMA falls under the authority of CARICOM (CDEMA, 2019). Jamaica is participating State through its Office of Disaster Preparedness and Emergency Management.
- Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF – SPC) – a risk facility that offers risk management products to governments in the Caribbean and Central America (CCRIF, 2019). In June



2019, the Government of Jamaica renewed its policy with the CCRIF-SPC for a net premium of US\$7.1mn for Tropical Cyclone (TC), Earthquake (EQ) and Excess Rainfall (XSR). The CCRIF-SPC extends payouts to member governments for events in any of the covered categories resulting in estimated emergency losses exceeding a predetermined point (Ministry of Finance and the Public Service, 2019).

- Caribbean Institute for Meteorology and Hydrology –a training and research organisation aimed to improve the meteorological and hydrological services and to assist in promoting the awareness of the benefits of these services for the economic well-being of the Caribbean Meteorological Organisation countries.
- The University of the West Indies (UWI) – One of the tertiary-level educational institutions in the region leading in key climate change initiatives. The UWI is coordinating the Technology Needs Assessment for the Caribbean through the Disaster Risk Reduction Centre (DRRC) at the Mona Campus. The Mona Office for Research and Innovation (MORI) at the Mona Campus of the UWI is responsible for coordinating the Caribbean Regional Track of the Pilot Programme for Climate Resilience. This track aims to improve regional processes to acquire, store and analyse and disseminated climate relevant data, and also pilot and scale up innovative climate resilient initiatives in the region. The Climate Studies Group Mona is dedicated to examining Caribbean Climate Science and prepared the 2012 and 2015 State of the Jamaican Climate Report. An updated report is anticipated in the near future.
- Caribbean Cooperative MRV Hub (CCMRVH) – a new multi-country institution in the Caribbean that create pooled institutional arrangements. It was designed to efficiently develop GHG inventories, mitigation projections, and help with tracking Member States’ NDCs. It is a unique collaborative technical institution where countries in the region can share expertise to foster regional excellence and generate stringer policy-relevant carbon accounting. To date, the CCMRVH has conducted country assessments to determine the status of MRV systems in the region.
- Latin American Energy Organization (OLADE) – an intergovernmental public entity supporting sustainable energy development in Latin America and the Caribbean. It specifically provides support for technical studies related to mitigation and adaptation.
- Inter-American Institute for Cooperation on Agriculture (IICA) – a specialised agency of the Inter-American System for agriculture which support the efforts of Member States to achieve agricultural development and rural well-being.

- **International**

- Alliance of Small Island States (AOSIS) – a coalition of 44 small island and low-lying coastal developing states, including five observers. It is primarily focused on climate change, sustainable development and ocean conservation (AOSIS, 2019). AOSIS is a key negotiating group in the international climate change negotiations. In 2017 AOSIS partnered with the International Renewable Energy Agency (IRENA) to launch the Island Renewable Energy Initiative (IRIE). The Minister was invited to be a member of the IRIE Steering Committee.
- The Commonwealth – a voluntary association of 53 states, with a combined population of 2.4 billion people (The Commonwealth, 2019). It provides a forum for members to engage, and has a Secretariat, which helps to strengthen governance, build inclusive institutions, and promote justice and human rights (The Commonwealth, 2019). The Commonwealth has established the Commonwealth Climate Finance Access Hub



from which Jamaica was the first to receive technical support through the placement of a Climate Finance Adviser.

- Group of Latin America and the Caribbean (GRULAC) – this is one of five United Nations Regional Groups comprised of member states within Central America, South America and the Caribbean. It is a non-binding dialogue groups that discusses regional and international matters.
- G77 and China – a large coalition of developing actors which intends to represent the broad interests of developing countries in international negotiations.
- NDC Partnership – The NDC Partnership is a group of over 100 developed and developing countries, as well as major international institutions and non-state actors. It provides members with the opportunities to leverage resources and expertise to implement their NDCs and address climate change (NDC Partnership, 2019). Jamaica is benefiting from the World Bank’s NDC Support Facility with strong support from the NDC Partnership to mobilise resources to prepare an enhanced NDC and design its NDC implementation plan/partnership plan in support of identified sectoral targets and policies.
- Global Water Partnership (GWP) - an international network created to foster an integrated approach to water resources management and provide practical advice for sustainably managing water resources. There is a sub-regional network which supports the Caribbean region known as GWP-Caribbean.

### 1.4.3 Access to Climate Finance

55. Jamaica, along with international partners, is undertaking a number of readiness activities to create attractive conditions for public and private climate investment.

56. The Public Investment Management System (PIMS) is a framework for the preparation, appraisal, approval and management of all public investment in Jamaica, irrespective of the source of funding. Through this process, projects are assessed against national priorities (such as Vision 2030 – National Development Plan, Medium-term Socio-Economic Policy Framework, etc.) as well the country’s international commitments to ensure alignment with national priorities.

57. Jamaica has three Trust Funds relevant to climate change (Climate Change Division, 2017):

- The **Special Climate Change Adaptation Fund (SCCAF)** – this fund is a financing mechanism under the “Adaptation Programme and Financing Mechanism” for the PPCR in Jamaica which is administered by IDB. The SCCAF is the avenue through which civil society and public sector entities directly access funds to finance adaptation and disaster risk-reduction projects. The SCCAF operates through the Environmental Foundation of Jamaica (EFJ). As of May 2019, the EFJ disbursed J\$419,503,907.70 (US\$ 3.23 million) to grant beneficiaries (Climate Change Division, 2017).
- The **Forest Conservation Fund** – the “new” Forest Conservation Fund is the result of a merger between the Environmental Foundation of Jamaica and the Jamaica Protected Areas Trust. It is a Debt-for-Nature Swap where the Jamaican and US governments, together with the Nature Conservancy (TNC), have agreed to reduce Jamaica’s US debt by ~16 million in exchange for channelling the repayment funds into a forest conservation trust fund that is expected to run until 2024 (Climate Change Division, 2017).
- The **Nature Conservation Trust Fund of Jamaica (NCTFJ)** – established by in 2014, to be capitalized by KfW, TNC, and the GEF (Climate Change Division, 2017). In 2017, the NCTFJ met criteria to receive grant-financing support



from the Caribbean Biodiversity Fund (CBF) under a pre-financing agreement, and is expected to sign the Partnership Agreement by June 2019. The NCTFJ's first call for proposals is anticipated at the end of 2019 (Aitcheson, 2019).

58. Jamaica is eligible to access funding from various bilateral, multilateral and international funds, and has been actively engaging with a variety of bilateral and multilateral donors. In the 2010-2015 period, Jamaica received a total of USD 62.5 million for climate change, principally in grant form. The vast majority of this (87%) was for adaptation, 9% was for mitigation, and 4% supported cross-cutting efforts (Atteridge, Canales, & Savvidou, 2017). (Climate Change Division, 2017) also provides an outline of the climate finance landscape in Jamaica, as elaborated by the Climate Change Division.

- Jamaica has ongoing relationships with a variety of **bilateral donors**, and has received support from actors in both the global North and South.
- Jamaica has managed to take advantage of support through a variety of funds associated with the **GEF Trust Fund**, including the GEF Strategic Priority Action (SPA), which has invested USD 245,900 in six community-based projects; the GEF Small Grants Programme, which has facilitated the commitment of ~USD 1.4 million, over the 2008-2017 period; and the Special Climate Change Fund, which has allocated USD 2 million to Jamaica through a regional project led by UN-Environment entitled "*Building climate resilience of urban systems through Ecosystem-based Adaptation (EbA) in Latin America and the Caribbean*".
- Jamaica has also received USD 9.97 million in funding from the **Adaptation Fund** for *Enhancing Resilience of the Agriculture Sector and Coastal Areas to Protect Livelihoods and Improve Food Security*.
- Jamaica has benefited from the **Climate Investment Fund's (CIF) Pilot Programme for Climate Resilience (PPCR)**, which has committed an investment of USD ~35 million to four adaptation activities in the country (Climate Investment Funds, 2019).
- Jamaica became the 62<sup>nd</sup> partner country of the UN REDD programme in 2015, and is currently undertaking readiness activities to enhance the country's capacity to meet **REDD+** requirements to benefit from results-based payments.
- While limited regional and national funds are available, work is ongoing. Jamaica pays an insurance premium annually to the **Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio (CCRIF)** for natural disasters. Jamaica also receives support from the **Caribbean Development Bank**, which supports disaster risk reduction and management, climate change mitigation and adaptation, and renewable energy and energy efficiency in its member countries.
- Jamaica has also attracted financing Carbon offset projects under the **Clean Development Mechanism (CDM)**, through the Wigton Windfarm project (Climate Change Division, 2017).
  - Wigton Phase I (20.7 MW installed in 2004 at a cost of US\$26 Million [J\$3.38 B])– registered CDM project and received monies from sale of carbon credits
  - Wigton Phase II (18 MW installed in 2010 at a cost of US\$47.5 Million [J\$6.18 B])– register CDM project but did not benefit due to significant price decline for certified emission reductions (CERs)
  - Wigton Phase III (capacity 24 MW commissioned in 2016)



- The expansion brings Wigton Windfarm’s total capacity to 62.7MW. The Wigton Windfarm Limited is currently listed on the Jamaica Stock Exchange (JSE). The Wigton Windfarm Limited’s initial public offering (IPO) was launched in April 2019 and over 300,000 Jamaicans took up the opportunity to own J\$11 billion (US\$ 84.62 million) shares in the company. The IPO was oversubscribed generating J\$14 billion (US\$107.69 million).

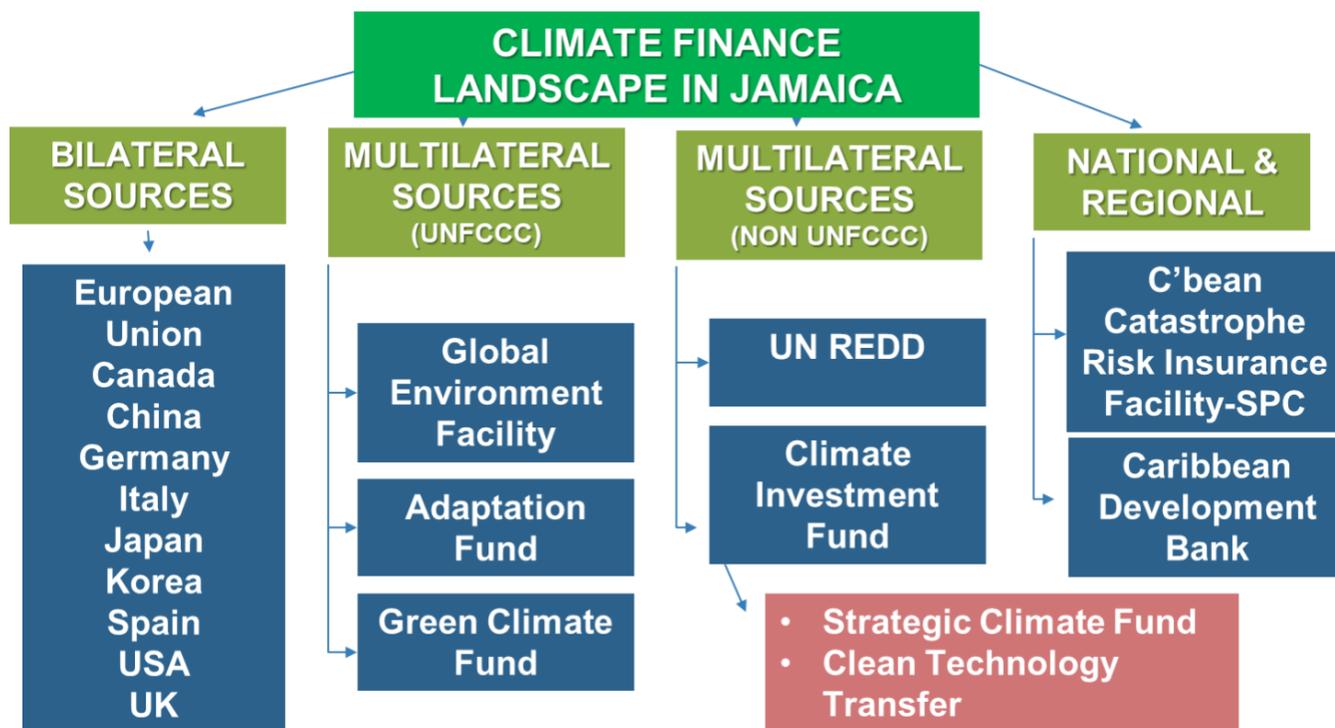


Figure 4 Snapshot of Climate Finance Sources in Jamaica

Source: (Climate Change Division, 2017)

- Engaging the Private Sector

59. There are opportunities and efforts ongoing to engage the private sector in climate change adaptation and mitigation in Jamaica.

60. In 2012, the government of Jamaica established a Public Private Partnership (PPP) policy. This policy defines PPPs as a procurement contract between the public and private sectors, in which the proficiency of each party is focused in the designing, financing, building, and operating an infrastructure project or providing a service, through the appropriate sharing of risk resources and rewards. The PPP programme is guided by the over-riding principles of optimal risk transfer, achieving value for money for the public, being fiscally responsible, and maintaining probity and transparency (Development Bank of Jamaica, 2018). While not directly related to climate change, these principles will guide any PPPs undertaken with the aim of addressing climate change.



61. The IDB is also supporting the Development Bank of Jamaica (DBJ) in the improvement of infrastructure resilience and climate risk within the current PPP Policy Framework and generate knowledge on emerging industry practices, tools, and initiatives for understanding and managing climate risk.

62. In 2019, the CCD completed a Scoping Study on “Barriers to Private Sector Investment and Capital Mobilization for Climate Change Mitigation and Adaptation in Jamaica.” The study focused on Micro, Small, and Medium Enterprises (MSMEs), and noted that most of the MSMEs surveyed had experienced some form of climate change impacts, though their understanding of climate change mitigation and adaptation is limited. The study identified a number of challenges commonly articulated by MSMEs in responding to climate change (see **Box 1**)

*Box 1 Challenges for MSMEs incorporating climate change into operations in Jamaica*

The “Scoping Study on Barriers to Private Sector Investment and Capital Mobilization for Climate Change Mitigation and Adaptation in Jamaica” identified a number of key challenges commonly articulated by MSMEs:

- Inadequate access to affordable and appropriate credit;
- Inadequate “understandable” climate data;
- Lack of knowledge and awareness of the potential impacts of climate change;
- Limited regulatory support for integrating climate change measures to build climate resilience, and mechanisms to encourage adaptation measures;
- Low levels of capacity and skills required for undertaking the investment;
- Weak knowledge management structures to share good practice;
- Weak physical planning;
- Inadequate incentives regime;
- Public and financial infrastructure;
- Underlying corruption;
- High incidence of poverty;
- Limited institutional and individual capacity;
- Security related constraints.

Source: (Climate Change Division, 2019)

63. Opportunities were identified in terms of short-term value chain finance, carbon trading, and concessional finance provided for adaptation. MSMEs have challenges accessing finance, and as such their ability to invest in resilience is limited.

64. The study further identified a series of local products and projects currently used in Jamaica to encourage private sector engagement in climate change (see **Table 5**).

*Table 5 Climate-Related Local Products and Projects*

Company name	Dedicated loan products and projects
GK Insurance (in partnership with Germany)	This scheme develops a climate adaptation insurance initiative (in the works)
Jamaica Co-operative Credit Union League and the National Union of Co-operative Societies	Credit for climate smart investments, relief subsidies and technical knowledge
World Bank and Inter-American Development Bank (IDB)	These multilateral entities offer climate smart and green loans through Development Bank of Jamaica



National Commercial Bank	Business Grow loan facility which provides financing to MSMEs
Scotiabank	SME Energy loan program
Ministry of Industry, Commerce, Agriculture and Fisheries	Climate adaptation fund to MSMEs on-going in the agricultural sector
Jamaica Business Development Corporation	Grant financing for technical assistance to MSMEs
JN Small Business Loan	The Water Project provides financing for developers to install water conservation devices and measures in the houses that they construct (Note: resources are provided by the PPCR through a private sector set-aside).

Source: (Climate Change Division, 2019)

## 1.5 Gaps and opportunities

65. **Capacity & Information Gaps:** The different sectoral agencies have varying technical capacity to identify sectoral priorities. This results in clearer pipelines for certain sectors, such as those related to energy, than for others. This may also affect the relevant ministries' ability to engage with Accredited Entities in the development of project and programme proposals.

66. **Limited Fiscal Space:** Jamaica recently concluded an IMF programme. Generally, there are fiscal constraints for the public sector as a part of this financial restructuring. Projects under loan agreement typically have to pass performance indicators to be allotted additional financial resources. However, there is still limited capacity to provide support to climate change mitigation and adaptation action in the country due to fiscal prudent measures.

67. **Opportunity – Climate Change Focal Point Network:** The Third National Communication notes that the Climate Change Focal Point Network, made up of representatives of each ministry, is in need of technical capacity enhancement. The existence of the network creates a basis for inter-agency engagement on climate change and climate finance. It also creates a mechanism for enhancing sectoral capacity through training-of-trainers, and dissemination of new developments and other information. It has been suggested (in the Third National Communication) that this network could be imbued with the authority to make decisions.

68. **Opportunity – SSAPs:** In an effort to mainstream and integrate climate change across sectors, the Climate Change Policy Framework seeks to use Sector Strategies and Action Plans (SSAPs) among other instruments. Presently, the Forestry SSAP (National Forest Management and Conservation Plan, 2016-2026) has been completed. An opportunity therefore exists for other SSAPs to be completed, including sectors identified as particularly vulnerable such as water, agriculture, human health, tourism and coastal resources and human settlements.

69. **Opportunity - Private Sector Engagement:** The Private Sector Organization of Jamaica (PSOJ) is well-informed on the opportunity presented by climate finance, and has extensive membership across a variety of sectors. Several credit unions are looking to climate-proof their portfolios. A variety of private sector actors also have existing relationships with current and potential AEs, such as the CDB, IDB, and DBJ. At the same time, as noted above, there are a number of challenges faced by the private sector in Jamaica. There are existing projects that can help to address these, as can the effective employment of public resources and capacity building. While not a substitute for ambitious public sector action, an active private sector may be able to complement this action and bring original creative project and programme ideas. A regional action plan is currently under development as part of a private sector readiness grant.



## 2 Country Agenda and GCF Engagement

Section 2 is intended to provide a summary of national plans in view of GCF operational modalities and investment criteria.

### 2.1 Institutional arrangements

- Institutional Arrangements for Climate Finance and Accessing the GCF

70. In Jamaica, the NDA is the Ministry for Economic Growth and Job Creation (MEGJC), with the functions of the NDA being assigned to the Climate Change Division (CCD). The CCD has the mandate to coordinate the implementation of the Climate Change Policy Framework of Jamaica and to facilitate the development and support the implementation of the Nationally Determined Contribution (NDC).

71. The CCD is an operational division rather than a policy division and is therefore well placed to perform the roles and responsibilities of the NDA. It not only has the familiarity with the issues but also the authority over internal processes related to the Fund and is therefore well placed within Jamaica's government.

72. The NDA is located within a ministry which "is charged with drafting the blueprint to drive economic growth and sustainable development in Jamaica" (MEGJC, 2019). It has a mandate for ensuring that climate change projects are developed and implemented within the approved national development context. The CCD, as NDA, is also the Secretariat for the Climate Change Advisory Board and a member of the Climate Finance Working Group. Further given the NDA is located within the Prime Minister's Ministry, this allows for guidance and oversight at the highest level possible.

73. The process and procedures in Jamaica to manage the review and approval of projects for inclusion in the budget is well established, falling under the purview of the Public Investment Management Secretariat (PIMSEC) through the Public Investment Management System (PIMS).

74. Jamaica is in the process of developing a robust No-Objection procedure for the Green Climate Fund. The No-Objection procedure will center around the incorporation of climate change concerns into the screening provided by PIMSEC and PIOJ as part of the PIMS and the detailed process and timelines can be found in "Jamaica's National Designated Authority for the Green Climate Fund: Operational Guidelines to Perform GCF-Related Roles and Responsibilities". This incorporation will more broadly contribute to the mainstreaming of climate resilience into public investment.

- Engagement with Accredited Entities

75. Jamaica already has engaged with a number of regional and international AEs. A list of the key partners can be seen in Table 6, below. A broader list of potentially relevant Accredited Entities for Jamaica can be found in Annex 3.



Table 6 Relationship with existing Accredited Entities and relevant partners<sup>10</sup>

Entity/Partner Name	Area/s of focus	Engagement in country	Efforts to strengthen engagement with GCF
<b>Accredited Entities</b>			
Department of Environment (DOE) of Antigua and Barbuda	Readiness & Preparatory Support	The NDA and the DOE are collaborating on strengthening regional entities response to climate change resilience.	The DOE and Jamaica's NDA are working together to build the region's capacity to engage with the GCF through knowledge sharing and information exchange.
Caribbean Community Climate Change Centre (CCCCC)	Adaptation, Climate Risk and Resilience, Coral reefs and coastal protection, Water, Carbon Neutrality	<p>Established in 2002 the CCCCC coordinates the Caribbean region's response to climate change. It works on effective solutions and projects to combat its environmental impacts and global warming. Jamaica is a member country.</p> <p>CCCCC has supported a variety of projects, including (list non-exhaustive):</p> <ul style="list-style-type: none"> <li>• 2009-2011 CARIBSAVE Climate Change Risk Atlas</li> <li>• Caribbean Regional Resilience Development Implementation Plan (IP)</li> <li>• EU-GCCA</li> <li>• Review of the Economic of Climate Change</li> <li>• Supporting risk-based decision-making in the Caribbean (CARIWIG)</li> </ul>	<p>CCCCCs is expected to build upon the results of the Jamaica regional readiness initiative for the private sector.</p> <p>CCCCC has secured financing to undertake a pre-feasibility study for the project "Water is Life" to support Jamaica's GCCF application.</p> <p>CCCCC is also channeling GCF financing for the region through two initiatives:</p> <p>(1) Mainstreaming Coral Reef Resilience and Restoration as an Ecosystem-based Adaptation Strategy to Climate Change in the Caribbean (MaCREAS)</p> <p>(2) Enhanced Direct Access: Enhancing Coastal Protection for Climate Change Resilience Project</p>

<sup>10</sup> GCF Template Table 2



<p><b>Caribbean Development Bank (CDB)</b></p>	<p>The Bank finances community-based disaster risk reduction (DRR) and climate change adaptation (CCA) initiatives at the local level across eligible borrowing member countries of the CDB.</p>	<p>Jamaica is a borrowing member of the CDB. It has supported many development initiatives. CDB has supported initiatives:</p> <ul style="list-style-type: none"> <li>• Essex Valley Irrigation Project</li> <li>• Agriculture project for communities in the parishes of St. Catherine and Clarendon</li> <li>• Strengthen disaster risk management capacity of Portmore Municipal Corporation</li> </ul> <p>More recently, CDB is expected to support the Ministry of Agriculture in the development of its Sector Strategy and Action Plan, which will take into consideration climate change.</p>	<p>CDB is supporting the GCF project concept, which seeks to protect Kingston cityscape and the nearby community of Port Royal.</p> <p>With the Sector Strategy and Action Plan for the agriculture sector, Jamaica can demonstrate how agriculture projects fit within a broader institutional and policy context related to adaptation and mitigation.</p> <p>Continue engagement in the focus areas.</p>
<p><b>FAO</b></p>	<p>Food and nutrition security, Food systems, Agriculture, Building resilience and sustainable livelihoods, fisheries, Value chain development</p>	<p>In-country presence; Jamaica has been a member of the FAO since 1963. It opened its office in Jamaica in 1979, 13 years after the country joined to support Jamaica, Belize, and Bahamas. The FAO works closely with the ministries of Agriculture, Health and Education. The FAO has supported a variety of efforts in Jamaica over the years.</p>	<p>Continue engagement in the focus areas through the Ministry of Industry, Commerce, Agriculture and Fisheries</p>
<p><b>Inter-American Development Bank (IDB)</b></p>	<p>Adaptation (Climate Investment Funds), Water, Agriculture, Private sector productivity, MSMEs, Renewable energy and energy efficiency</p>	<p>In-country presence; Jamaica is a borrowing member country of the IDB. The IDB is supporting the government's development agenda, through its Country Programme Strategy (2016-2021) with a focus on improving public sector management, increasing private sector productivity and growth, and reinforcing human capital protection and development. There are also efforts to support the promotion of e-mobility in the country. IDB is also supporting the country by channeling resources from the Climate Investment Fund through the following projects:</p> <ul style="list-style-type: none"> <li>• Financing water adaptation in Jamaica's new urban housing sector (private sector)</li> <li>• Adaptation Program and Financing Mechanism for the Pilot Program For</li> </ul>	<p>There are opportunities to scale up the initiatives under the Pilot Programme for Climate Resilience, in particular private sector investment in climate action.</p> <p>The vulnerability assessments will support the development of a National Adaptation Plan (NAP) which can be financed through the Readiness and Preparatory Support Programme.</p>



		<p>Climate Resilience Jamaica – provides technical assistance for public sector (including vulnerability assessments and sector strategies), climate financing for private sector (tourism and agriculture) as well as financing for civil society organisations.</p> <p>Through the mechanism formerly known as the Multilateral Investment Fund (MIF), IDB is supporting Red Stripe initiative - Project Grow: Accelerating the Inclusion of Small Scale Farmers and Youth into the Commercial Cassava Value Chain. It supports MSMEs through its EcoMicro initiative.</p> <p>IDB is also supporting Jamaica under the initiative entitled “Strengthening Jamaica’s Capacity to Meet Transparency Requirements under the Paris Agreement” to be funded under the GEF Capacity Building Initiative for Transparency (CBIT). The aim is to design and implement a fully functional and harmonized domestic Measuring, Reporting and Verification (MRV) system for the effective implementation of the country’s Nationally Determined Contribution (NDC) and other transparency-related activities.</p>	<p>Continue engagement in the focus areas</p>
<p><b>UNDP</b></p>	<p>Support enabling activities under GEF, Renewable Energy and Energy Efficiency, Adaptation, Sustainable land management</p>	<p>In-country presence; The UNDP Office support in Jamaica, also serves Bermuda, Bahamas, Cayman Islands, Turks and Caicos Islands.</p> <p>In 2015 the UN MSDF provides actions for the next five focusing on a sustainable and resilient Caribbean, a safe, cohesive and just Caribbean, a healthy Caribbean, an inclusive, equitable and prosperous Caribbean</p> <p>UNDP administers the GEF Small Grants Programme and has ongoing operations in the country.</p> <p>UNDP support enabling activities funded by the GEF. It has provided support for the development and completion of the Third National Communication (submitted to the</p>	<p>GCF resources can be used to implement the interventions in the Water NAMA and also to upscale the deployment of renewable energy and improvement of energy efficiency in the public sector e.g. Smart Hospitals project</p> <p>UNDP continues to strengthen Jamaica’s climate agenda through supporting enabling activities such as the National Communications to UNFCCC. These</p>



		<p>UNFCCC in January 2019) and Biennial Update Report (submitted to UNFCCC in 2016). It also has active projects in RE/EE, Chemicals, and Sustainable Land Management.</p> <p>UNDP is collaborating with MEGJC to finalise the GEF proposal for the Fourth National Communications and Second BUR.</p> <p>UNDP administered grant support under the Japan-Caribbean Climate Change Partnership (US\$600,000 of J\$ 78 million) and technical support for the Water sector NAMA.</p>	<p>activities provide the framework to which national projects should be aligned and also defines the priority sectors.</p>
<b>UN Environment</b>	Ecosystem-based adaptation, REDD+, Forestry, RE/EE	<p>In-country presence; It houses the Caribbean Regional Coordinating Unit (CAR/RCU) which serves the Caribbean.</p> <p>UN Environment has supported the GEF project “Building Climate Resilience of Urban Systems through EbA in Latin America and the Caribbean. The project targets Jamaica, Mexico and El Salvador.</p> <p>UN Environment in collaboration with UNEP DTU Partnership is facilitating the Phase 3 of the Technology Needs Assessment. Jamaica is one of the 23 countries participating. Key areas of intervention include water resources, coastal resources, agriculture and energy.</p>	<p>The TNA project will develop a Technology Action Plan and the implementation of these new technologies can be financed through GCF resources.</p> <p>There is potential for EbA interventions to be replicated and up-scaled throughout Jamaica.</p> <p>Continue engagement in the focus areas</p>
<b>World Bank</b>	Climate Change Adaptation (Climate Investment Funds), disaster resilience and disaster risk financing, Entrepreneurship and Innovation, Energy Security and Efficiency, Enabling activities (NDC support)	<p>In-country presence; The World Bank has worked closely with Jamaica since 1962 providing financial and technical assistance. The World Bank’s Country Partnership Strategy for Jamaica focuses on public sector modernization, private sector-led growth, and social and climate resilience. The World Bank and the IFC have longstanding engagements in Jamaica. Jamaica has received support from the World Bank through the Pilot Programme for Climate Resilience and the Disaster Vulnerability Reduction Project.</p> <p>The World Bank has also supported entrepreneurship and innovation through establishing the Caribbean Climate Innovation</p>	<p>There are opportunities scale up the initiatives under the Pilot Programme for Climate Resilience. The Water is Life project which supports the delivery of timely and useful climate information services as one of the tools for resiliency will support the installation of automated weather stations</p>



		<p>Center to provide assistance to start-up companies.</p> <p>The World Bank is channelling financing under the Climate Investment Fund – Pilot Programme for Climate Resilience</p> <ul style="list-style-type: none"> <li>• Improving Climate Data and Information Management</li> <li>• Promoting Community-based Climate Resilience in the Fisheries Sector in Jamaica</li> </ul> <p>Jamaica has partnered with the World Bank Group and the NDC Partnership in an effort to enhance its mitigation actions to be articulated in its updated NDC.</p>	<p>Continue engagement in the focus areas</p>
<b>Relevant partners</b>			
<p><b>European Union</b></p>	<p>Forestry, Climate Change Adaptation, Sustainable land management</p>	<p>In-country presence; The European Union has a 30-year history of development cooperation with Jamaica, with the EU being Jamaica’s largest grant partner. The Global Climate Change Alliance (GCCA) was established by the European Union (EU) in 2007 to strengthen dialogue and cooperation with developing countries, in particular, Least Developed Countries (LDCs) and Small Island Developing States (SIDS) during the period of 2008-2013. The GCCA facilitated the development of the 2015 Climate Change Policy Framework. The next phase of GCCA+ (2014-2020) focuses its technical support on three priority areas climate change mainstreaming and poverty reduction, increasing resilience to climate-related stresses and shocks and sector-based climate change adaptation and mitigation strategies. As of 2019 Jamaica began collaborating with the EU to access financing under GCCA+.</p> <p>The EU has also supported Technical Centre for Agricultural and Rural Co-operation (CTA) in the Accelerating Climate Smart Agriculture Project in Jamaica which focuses on disseminated climate information and promoting climate smart agriculture practices. They have also supported other projects in the agriculture sector.</p>	<p>Continue engagement in the focus areas</p>



<p><b>Global Affairs Canada</b></p>	<p>Disaster risk reduction and management</p>	<p>In-country presence; Global Affairs Canada manages Canada's diplomatic and consular relations, promotes the country's international trade and leads Canada's international development and humanitarian assistance. It operates the Canada Fund for Local Initiatives (CFLI) is a program designed to fund small-scale bilateral projects in Official Development Assistance (ODA) eligible countries, which align with Global Affairs Canada's thematic priority areas for engagement.</p> <p>Established a Caribbean Disaster Responsive Fund and Disaster Risk Management Programme.</p> <p>Global Affairs Canada has supported Jamaica with updating the Climate Change Policy Framework - Post-Paris Agreement.</p>	<p>The revised Climate Change Policy Framework will set the foundation for the efforts that the mitigation and adaptation projects will build upon.</p> <p>Continue engagement in the focus areas</p>
<p><b>GIZ</b></p>	<p>Climate Change Adaptation and Mitigation, Sustainable use of natural resources, Natural resource conservation, Coastal zone management</p>	<p>GIZ, acting on behalf of the German Federal Government and other clients, supports partner countries in implementing the Framework Convention on Climate Change. GIZ has supported Jamaica in Climate Finance Training.</p> <p>GIZ implemented the Renewable Energy and Energy Efficiency Technical Assistance (REETA), in collaboration with the CARICOM Secretariat.</p>	<p>Continue engagement in the focus areas</p>
<p><b>USAID</b></p>	<p>Renewable Energy and Efficiency, Agriculture, Climate Change</p>	<p>In-country presence; The USAID has worked in Jamaica for the past 50 years to address social issues. Its current priority goals have focused on promoting greater transparency and good governance practices; fostering Jamaican participation in regional security; strengthening basic education; reducing the prevalence of HIV/AIDS; promoting economic prosperity; and decreasing vulnerability to the impacts of climate change.</p> <p>USAID has supported clean energy programme, climate economic analysis, rehabilitation from extreme events, particularly Gustav, adaptation and resilience in rural areas through the JaREEACH Project I and II. USAID has also supported the Meteorological Services in development of a drought forecasting tool.</p>	<p>Through the Water is Life project and support of the CCCCC, Jamaica will build upon the drought forecasting to disseminate such climate information to farmers and other key stakeholders.</p>



## 2.2 Roles and contributions of key stakeholders

76. Stakeholder participation is an integral part of the project approval process in Jamaica and Cabinet issued guidance in January 2005 on stakeholder participation in a formal document titled 'Consultation Code of Practice for the Public Sector'. While Government remains the key decision maker, there are many other stakeholders that hold influence, and should be engaged to facilitate the decision-making process. These include non-governmental organisations (NGOs), interest groups, private sector groups, academia, community-based organisations and individual citizens. The Consultation Code has minimum rules for all consultations on projects to ensure meaningful consultations under the following guiding principles: inclusiveness and equity, local ownership, openness and accountability, collaboration and mutual respect.

77. The Climate Change Policy Framework establishes the Climate Change Focal Point Network (CCFPN) comprised of representatives from government ministries, departments and agencies. These national institutional partners are key stakeholders that are active in driving climate action in Jamaica through coordinating the development and implementation of sectoral strategies and action plans; mainstreaming climate change into policies, plans and programmes; and participating in monitoring of climate activities. The membership of the CCFPN can be found in **Box 2**.

78. Based on the mandate of the CCFPN, the identified stakeholder groups play a critical role in climate action for Jamaica, which includes activities related to the development and implementation of the CP. In particular, the groups are expected to work with the CCD in identifying and prioritizing adaptation and mitigation actions in sectors; identifying technological, financial, human and other resource needs of ministries, departments and agencies; developing a financial and resource mobilization strategy to fund the development and implementation of adaptation and mitigation plans; developing a portfolio of programmes and projects; developing a comprehensive monitoring and evaluation framework and coordinating the monitoring, development and implementation of cross-sectoral strategies.

79. To ensure engagement of identified stakeholder groups in development of the CP, a series of bilateral meetings were conducted to provide background on the GCF, convey the objectives and importance of the CP and determine the climate priorities and existing and potential climate projects and programmes of each group. These meetings allowed for

### *Box 2 Membership of the Climate Change Focal Point Network*

The membership of the Climate Change Focal Point Network, as established in the Climate Change Policy Framework (2015) is as follows:

- Development Bank of Jamaica
- Fisheries Division
- Forestry Department
- Jamaica Information Service
- Meteorological Service of Jamaica
- Mines and Geology Division (MGD)
- National Environment and Planning Agency (NEPA) National Irrigation Commission
- National Solid Waste Management Authority (NSWMA)
- National Water Commission (NWC)
- National Works Agency (NWA)
- Office of Disaster Preparedness and Emergency Management (ODPEM)
- Petroleum Corporation of Jamaica (PCJ)
- Planning Institute of Jamaica (PIOJ)
- Rural Agricultural Development Authority (RADA)
- Scientific Research Council (SRC)
- Social Development Commission



identification of specific adaptation and mitigation priorities for each stakeholder group (as detailed in Annex 1), determination of the status of existing climate projects and programmes and elaboration of potential projects or programmes to meet priorities. Table 7 7 provides details of the stakeholder group consultations that contributed to development of the CP.

80. Additionally, a national workshop was held to further develop and prioritize national priorities and the CP project pipeline. Forty-five stakeholders participated from the public sector, private sector, and civil society. A full list of participants can be found in Annex 2.

81. Stakeholder participation is further anticipated in the implementation of the country programme, development of projects, and its monitoring and updating. Actors from a variety of sectors of the economy – non-state actors, the private sector, academia – will be consulted in the further development of Jamaica’s priority projects, programmes and readiness initiatives. This may involve bilateral engagement (in person, via phone, and via email), convening of stakeholder meetings, participation in existing engagement mechanisms and fora.

Table 7 Bilateral Consultations with Stakeholder Groups<sup>11</sup>

Stakeholder	Date of Consultation	Objective	Outcomes
Investment Branch, MEGJC	17/10/2018	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Interested in Public Private Partnership (PPPs)</li> <li>- Focused on developing Jamaica as a logistics hub</li> <li>- Interested in supporting Mitigation and Adaptation in the private sector</li> </ul>
Public Investment Management Secretariat	17/10/2018	Discuss integration of climate priorities in PIMS process	<ul style="list-style-type: none"> <li>- PIMSEC procedure for climate project proposals provided</li> <li>- Community stakeholder consultation can be required by them</li> <li>- Discussed integration of No Objection Procedure and PIMSEC review</li> </ul>
Minister of Land, The Environment, Climate Change and Investment	17/10/2018	Brief on process, identify priorities	<ul style="list-style-type: none"> <li>- Coastal erosion and river training are major concerns</li> <li>- Public Works priority: roadway infrastructure being undermined by rivers</li> </ul>
Jamaica Social Investment Fund	17/10/2018	Discuss role as potential AE, identify project ideas and priorities	<ul style="list-style-type: none"> <li>- Priorities are disaster risk preparation, climate resilience and adaptation, and poverty alleviation</li> <li>- Accreditation possible by March 2019 Board Meeting</li> <li>- Projects are demand-driven</li> <li>- Interested in pre-identified risk area projects</li> </ul>

<sup>11</sup> GCF Table 3 (adjusted)



Development Bank of Jamaica	17/10/2018	Discuss role as potential AE, identify project ideas and priorities	<ul style="list-style-type: none"> <li>- Application submitted and waiting on approval</li> <li>- Priorities include water loss and wastewater management</li> <li>- Interested in waste-to-energy initiatives</li> </ul>
Planning Institute of Jamaica	18/10/2018	Discuss role as potential AE, identify project ideas and priorities	<ul style="list-style-type: none"> <li>- Interested in adaptation implications for the poor</li> <li>- Interested in regulatory environmental actions for mitigation</li> <li>- Aim to have a single national pipeline</li> </ul>
Urban Development Corporation	18/10/2018	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Airport and port royal adaptation initiative to improve resilience</li> <li>- Third city project</li> </ul>
Climate Finance Working Group (led by Ministry of Finance)	19/10/2018	Discuss potential role in project cycle, identify priorities	<ul style="list-style-type: none"> <li>- Envision themselves providing broad picture of climate financial landscape</li> <li>- Potentially establish a fiscal council after IMF programme ends in November 2019</li> <li>- Looking to fully integrate climate resilience in the budgeting process</li> </ul>
Petroleum Corporation of Jamaica	19/10/2018	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Interested in working on hydropower projects</li> <li>- Interested in microgrids for rural communities</li> </ul>
GEF Operational Focal Point	19/10/2018	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Wastewater management (CREW+);</li> <li>- Scaling up e- mobility.</li> </ul>
Energy Division	04/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Climate change adaptation plan</li> <li>- Discuss energy conservation ideas – ask for further elaborated plans for energy conservation from water commission</li> </ul>
GEF Operational Focal Point	04/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Interested in ecosystem-based adaptation for downtown</li> <li>- E-mobility and traffic are main priorities</li> </ul>
Meteorological Service	04/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Interested in developing an updated “Climate of Jamaica” report</li> <li>- Prioritizing creating network of 200 meteorological stations for data measurement</li> <li>- Potential to assess using renewable energy to power Doppler radar replacement</li> </ul>



Rural Agricultural Development Authority	04/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- land management for aquifer restoration/protection,</li> <li>- rain water harvesting;</li> <li>- gravity-fed irrigation for farmers</li> </ul>
Fisheries Division	05/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Alternative sources of income for fisherfolk</li> <li>- mariculture and aquaculture,</li> <li>- coastal protection,</li> <li>- reef restoration,</li> <li>- developing markets for underexploited fisheries</li> </ul>
Investment Branch, MEGJC	05/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Interested in exploring the idea of special green economic zones</li> <li>- Deeply interested in development of Port Royal, with addition of retractable pier and ecosystem-based adaptation</li> </ul>
Ministry of Transport	05/02/2019	Identify and review priorities, potential project ideas	Scaling up e-mobility in collaboration with GEF Focal Point
Water Resources Authority	06/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Undertaking pilot for aquifer recharge using excess from rivers, canals and irrigation. This can be expanded to a larger programme. Water Watch. WRA would like continuous and complete stream flow coverage; interest in increasing capacity for remote sensing and GIS analysis</li> </ul>
Mines and Geology Division	06/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Interested in promoting regulation and protected areas in mineral extraction</li> <li>- Need to move from data collection to analysis and planning for solutions, risk management and development</li> </ul>
Ministry of Industry, Commerce, Agriculture and Fisheries	06/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Upscale response projects with FAO and IICA focusing on addressing high incidences of pests and diseases due to climatic changes;</li> <li>- drafted a concept for GCF focusing on landscape and productivity;</li> <li>- resilience of farmers;</li> <li>- climate resilience in the food production system;</li> <li>- governance and sustainability;</li> <li>- establish a national laboratory for indigenous climate tolerant seeds.</li> </ul>



National Irrigation Commission	06/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Scaling up of 3-3.5 MW pilot for solar energy systems for irrigation</li> <li>- water efficiency campaign, reduced use of fertilizers and other chemicals</li> </ul>
Petroleum Corporation of Jamaica	06/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Scaling up pilot for off grid RE homes; energy efficiency and RE in hospitals;</li> <li>- energy conservation programme</li> <li>- expanding the current programme which focuses on schools and small offices;</li> <li>- scaling up the pilot of intelligent transport system;</li> <li>- construction of hydropower facilities for which feasibility studies have been completed</li> </ul>
Forestry Department	07/02/2019	Identify and review priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Received support for Phase 1 of REDD+ and hopes to access financing for Phase 2;</li> <li>- enhance tree cover in urban areas;</li> <li>- payment for ecosystem services in collaboration with WRA and NEPA;</li> <li>- promote alternative livelihoods in forest communities (e.g. ecotourism, honey production, farming using sustainable land management practices on private land)</li> </ul>
Planning Institute of Jamaica	07/02/2019	Discuss accreditation, project pipeline	<ul style="list-style-type: none"> <li>- Prioritizing water and coastal erosion adaptation, as well as climate smart agriculture and forestry for mitigation</li> <li>- Drafted accreditation application, but yet to complete and submit it</li> </ul>
Office of Disaster Preparedness and Emergency Management	07/02/2019	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Prioritizing creation of comprehensive risk assessment plans to inform disaster plans</li> <li>- Interested in conducting risk assessments in coastal areas</li> <li>- Interested in the idea of an ecosystem-based disaster risk reduction project</li> </ul>
National Water Commission	08/02/2019	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Reforestation and improved farming practices to reduce soil erosion leading the increased water availability</li> </ul>
National Environment and Planning Agency	08/02/2019	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Two initiatives identified: mangrove rehabilitation and critically eroded areas.</li> </ul>
Ministry of Health	08/02/2019	Identify priorities, potential project ideas	<ul style="list-style-type: none"> <li>- Scaling up of SMART hospitals project across the health system based on the</li> </ul>



			work with PAHO. 150 facilities were assessed and five facilities are being retrofitted
Private Sector of Jamaica	08/02/2019	Discuss role of private sector in engagement with GCF	<ul style="list-style-type: none"> <li>- Interested in targeted sensitization of climate change impacts on businesses</li> <li>- Explore improving climate finance and investment access, particularly for MSMEs</li> <li>- Engage in business continuity and insurance in response to extreme events</li> </ul>

### 2.3 Identification of country priorities for the GCF

82. In development of this Country Programme, Jamaica conducted a stocktake of funding priorities identified in the national and sectoral policy documents. Additionally, a series of bilateral meetings were held with key stakeholders from the public and private sectors, as well as civil society, to further elaborate these priorities (Table 8). Priority areas identified in individual meetings can be found in Annex 1.

*Table 8 Jamaica's National Climate Change Priorities by Source and Focus*

Source	Adaptation	Mitigation	Cross-Cutting
National Policy Documents	<ul style="list-style-type: none"> <li>• Ecosystem-based Adaptation: Enhancing Coral Reef Resilience and Restoration</li> <li>• Enhancing Coastal Resilience</li> <li>• Implementing a central national database for climate data</li> <li>• Enhancing hydro-meteorological network: Installation and maintenance of automatic weather stations</li> <li>• Sectoral priorities: water, agriculture, tourism, human settlement, coastal resources</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Renewable Energy Sources, including adoption of Net Billing</li> <li>• Energy Efficiency &amp; Conservation</li> <li>• Develop a National REDD+ strategy &amp; set up REDD+ national management arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Utility-scale solar</li> <li>• Reduced water distribution losses</li> <li>• 20% of primary energy from renewable sources by 2030</li> </ul>



<p>Additional Priorities Identified through Stakeholder Engagement</p>	<ul style="list-style-type: none"> <li>• Enhancing farmers’ access to weather data &amp; early warning systems</li> <li>• Seed management, preservation, and resilient crops</li> <li>• Alternative livelihoods for fisherfolk</li> <li>• Enhanced utilization of hazard data, particularly as regards landslides and storm surge, for risk management and development planning</li> <li>• Improved drainage infrastructure</li> <li>• Enhancing mangroves</li> <li>• Effective watershed management to protect existing water supply</li> </ul>	<ul style="list-style-type: none"> <li>• Electric mobility and low-Carbon transportation</li> </ul>	<ul style="list-style-type: none"> <li>• Climate-smart Agriculture</li> <li>• Renewable-powered irrigation (15% in next four years, 30% within 8 years)</li> </ul>
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83. The gaps identified in section 1.4 provide a guide for many of the types of support to be requested under the GCF.
- a. Capacity and information gaps have proved a challenge. There are further limitations related to engaging with the GCF. Initial readiness activities have involved climate finance training for a variety of stakeholders, including trainings on building a strong climate rationale and developing a project with a strong theory of change. This work can be furthered through future readiness proposals.
  - b. Jamaica’s limits to taking on additional debt, while not absolute, will mostly have implications for the types of instruments employed for projects for which the Accredited Entities are national Direct Access Entities, once these are accredited to the GCF. These may be more involved in projects that involve non-debt instruments.
  - c. The mandate to create Sector Strategies and Action Plans (SSAPs) may be seen as an opportunity to collaborate with the GCF through readiness support. Intended for both adaptation and mitigation, at least some of the activities in their development should be eligible for NAP readiness support.

84. Country priorities were identified through review of national documents, including the Climate Change Policy Framework, the Nationally Determined Contribution, the National Energy Policy, the Medium-term Socio-economic



Framework, Vision 2030 (national development plan) and other relevant sources. On this basis, a “funding priorities stocktake” was constructed, considering GCF priorities and relevance of identified priorities to GCF funding (Table 5).

85. This work complemented through bilateral engagement with a variety of country stakeholders. During bilateral meetings an initial list of project ideas was constructed, and an extended list was considered by the NDA in the first draft of the country programme.

86. The project list was in turn considered on the basis of a check on the level of completeness, as well as a review of the current status. A shortened list was produced for a stakeholder consultation. During this consultation, a multi-criteria assessment was conducted to identify the highest priority project ideas.

87. Following further consideration by the NDA, the top five projects were selected for inclusion in the country programme. Two of these – the water supply efficiency and water supply resilience projects – were combined into one cross-cutting water supply programme.

88. A further explanation of this process can be found in Annex 4.

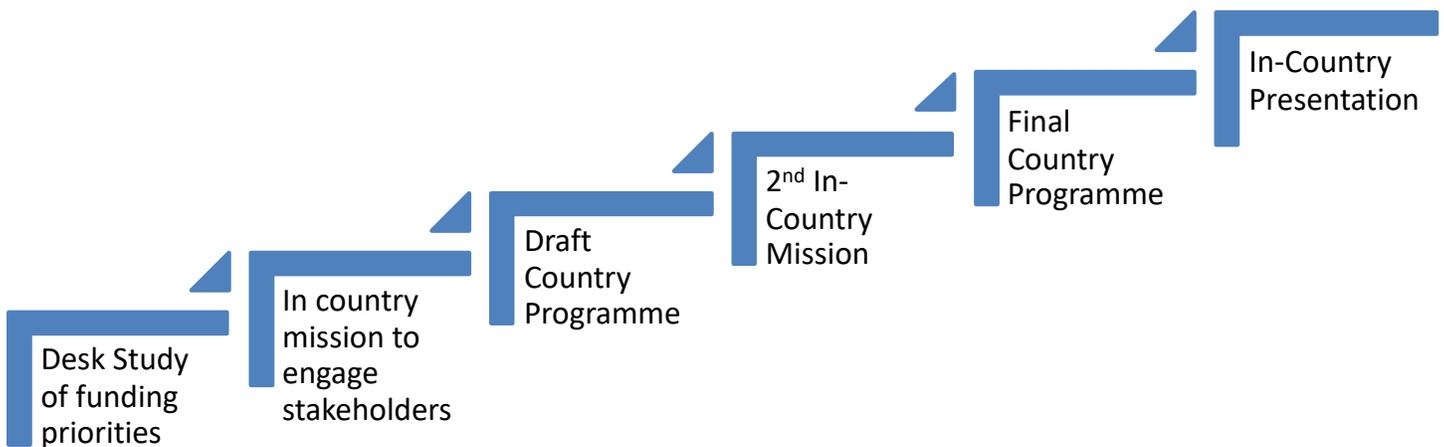


Figure 5 Process for Country Programme prioritization



## 2.4 Country Portfolio

### 2.4.1 Country Projects/Programmes Pipeline

89. The below project pipeline represents Jamaica's top intended projects and programmes for submission to the GCF in the next years. A full ranked list of the priority project concepts that emerged from the national stakeholder consultation workshop can be found in Annex 5. These projects have been identified as key priorities, but most have not gone through the PIMS process yet.

Project #1				
Project Title	Description	Accredited Entity		Submission timeframe
<b>Energy Efficiency in Hospitals and Smart Hospitals</b>	<p>This project represents an aggregation and scaling up of two projects:</p> <ol style="list-style-type: none"> <li>1) An ongoing project led by the Petroleum Corporation of Jamaica in which 6 hospitals are being equipped with modern appliances, efficient air conditioning, rooftop solar PV, and solar water heaters. The project is funded through the Global Environment Facility.</li> <li>2) The Ministry of Health has been working with the Pan American Health Organization (PAHO) on the creation of SMART hospitals. 150 facilities have been assessed thus far, and 5 small facilities are currently being retrofitted. The pilot initiative was funded by UK's Department of International Development Fund (DFID).</li> </ol> <p>GCF support would allow for the scaling up of these projects to more and larger institutions within the health sector, reducing emissions as well as enhancing the resilience of health care provision to the impacts of climate change.</p>	TBD		Concept submission - 2020
<b>Fund level strategic impacts:</b>		<b>Total financing:</b>	<b>Status</b>	
1,3,6		TBD	<u>GCF:</u> ~US\$ 30 million	<u>Other:</u>
Action	Lead	Timeline		
Develop draft concept note & identify Accredited Entity	CCD	September 2019		
PIMS review and approval	PIMSEC	Late 2019/early 2020		
Request project preparation support	Accredited Entity	Early 2020		
Develop full proposal	Accredited Entity	Mid-late 2020		
PIMS review and approval	PIMSEC	Late 2020		
Submit full proposal	Accredited Entity	Late 2020/ Early 2021		



Project #2				
Project Title	Description	Accredited Entity		Submission timeframe
<b>Water is Life: Actions and Tools for Enhancing Resilience in upper Watershed-Communities in Jamaica (WATERsheds)</b>  <b>Fund level strategic impacts:</b>  5, 6	<p>The proposed project has three main components:</p> <ul style="list-style-type: none"> <li>Component 1 aims at improving the dissemination of hydro-meteorological and agro-meteorological information to watershed communities and response and monitoring of climate and climate change impacts;</li> <li>Component 2 should reduce the impact of climate change hazard on vulnerable watershed communities through policy and adaptation actions;</li> <li>Component 3 will empower farmers, community-based organizations and government through capacity building, data and knowledge for coping with climate change hazards; and</li> <li>Component 4 sets out the project management approach and resources needed to effectively and efficiently manage the proposed project.</li> </ul> <p>Water is Life seeks to scale-up work under the PPCR – IDCPC and also the USAID initiative with Met Services to disseminate weather information to farmers. It is also scaling up from the CTA project.</p>	Caribbean Community Climate Change Centre (CCCCC)		Late 2019/Early 2020
		<b>Total financing:</b> USD 9.879 Million		<b>Status</b>
		<u>GCF:</u> US\$ 9.659 Million	<u>Other:</u> USD 0.22 Million	SAP Concept Note developed, under GCF review
Action	Lead	Timeline		
Review SAP Concept Note	GCF	August 2019		
PIMS review and approval	PIMSEC	August 2019		
Update GCF concept Note	CCCCC	December 2019/January 2020		
Undertake pre-feasibility study	CCCCC with support from CCD and agencies	January 2020 – March 2020		
Develop Full SAP Project Proposal	CCCCC	March 2020		
PIMS review and approval	PIMSEC	March 2020		
Submit Full SAP Project Proposal	CCCCC	TBD		



Project #3				
Project Title	Description	Accredited Entity		Submission timeframe
<b>Building climate resilience of Jamaica's water infrastructure (Water supply Improvement Programme)</b>  <b>Fund level strategic impacts:</b>  6,7	This project aims to improve resilience in Jamaica's water supply infrastructure. It will enhance the water supply infrastructure through a variety of initiatives including expansion of capacity at water treatment plants, watershed management, explore options for increasing water availability given current and projected drought conditions, and development of a master plan for the capital city region.	TBD		Late 2020/Early 2021
		<b>Total financing:</b> ~US\$41M		<b>Status</b>
		<u>GCF</u> TBD	<u>Other:</u> TBD	Concept under development
Action	Lead	Timeline		
Develop draft concept note & identify Accredited Entity	CCD	September 2019 – January 2020		
PIMS review and approval	PIMSEC	January – February 2020		
Request project preparation support	Accredited Entity	TBD		
Develop full proposal	Accredited Entity	TBD		
PIMS review and approval	PIMSEC	TBD		
Submit full proposal	Accredited Entity	TBD		



Photo by Christopher Serju



Project #4				
Project Title	Description	Accredited Entity		Submission timeframe
Water Sector NAMA	This project aims to improve efficiency and increase renewable energy use. The water utility is the largest consumer of electricity in the country. There are two key goals of the project: <ol style="list-style-type: none"> <li>1) Reduction of GHG emissions in the range of 20-25% by 2030</li> <li>2) Increasing the share of renewable energy generation to 10% by 2030</li> </ol>	TBD		Late 2020/Early 2021
Fund level		<b>Total financing:</b> ~USD 60.8M		<b>Status</b>
strategic impacts: 1, 3		<u>GCF</u> TBD	<u>Other:</u> TBD	NAMA Concept Developed; Multi-entity task force established, GCF Concept Note in development
Action	Lead	Timeline		
Develop draft concept note & identify Accredited Entity	CCD	September 2019 – January 2020		
PIMS review and approval	PIMSEC	TBD		
Request project preparation support	Accredited Entity	TBD		
Develop full proposal	Accredited Entity	TBD		
PIMS review and approval	PIMSEC	TBD		
Submit full proposal	Accredited Entity	TBD		



Photo by Science in HD



Project #5				
Project Title	Description	Accredited Entity		Submission timeframe
Addressing Critically Eroded Coastal Areas	The National Emergency Planning Agency (NEPA) has conducted studies at six locations that identify hard and soft measures for addressing critically eroded coastal areas. These studies were supported as part of the Disaster Vulnerability Reduction Program (DVRP) of the World Bank. There is currently no funding for their implementation	Caribbean Community Climate Change Centre*		TBD
		<b>Total financing:</b>		<b>Status</b>
		<u>GCF:</u> TBD	<u>Other:</u> TBD	Studies completed Draft project concept to be prepared
Fund level				
5, 6, 8				
<b>Action</b>		<b>Lead</b>		<b>Timeline</b>
Engage with NEPA		CCD		September – December 2019
Engage Accredited Entity		NEPA		September – December 2019
Develop PIMS & GCF concept note		NEPA and Accredited Entity		TBD
PIMS review and approval		PIMSEC		TBD
Submit Full Concept Note		Accredited Entity		TBD
Review Concept Note		GCF		TBD
Develop Full Proposal		Accredited Entity		TBD



Photo by Lakeisha Bennett



Project #6				
Project Title	Description	Accredited Entity		Submission timeframe
<b>Mainstreaming Coral Reef Resilience and Restoration as an Ecosystem-based Adaptation Strategy to Climate Change in the Caribbean Region (MaCREAS)</b>	<b>(Multiple countries)</b> MaCREAS will build on existing successes and progress being made in active reef restoration and scale them up in Barbados, Belize, Jamaica, Dominican Republic, St Vincent and the Grenadines, St Lucia. The overall objective of the programme is to strengthen the resilience of Caribbean coral reefs to ensure that their associated ecosystem services are sustained, augmented and strengthened to counter pending, progressive and potentially irreversible changes in the temperature, chemistry and storm intensity of the Caribbean Sea. MaCREAS will also increase the resilience of livelihoods in coastal communities by ensuring that both men and women benefit from more diverse, sustainable and climate-resilient livelihood options.	Caribbean Community Climate Change Centre		Stakeholder consultation convened in Jamaica, Draft project concept note developed, pre-feasibility study conducted for participating countries, including Jamaica
		<b>Total financing:</b>		<b>Status</b>
<b>Fund level strategic impacts:</b> 5,7		<u>GCF:</u> US\$ 30-38M	<u>Other:</u> TBD	Pre-feasibility study undertaken. A Project Preparation Grant may be required.
Action		Lead	Timeline	
Submit Full Concept Note		CCCCC	December 2017	
Issue No-Objection Letter		CCD	October 2019 (for PPF)	
Develop Full Proposal for submission to GCF		CCCCC	TBD	



Photo by Olga Tsai



Project #7			
Project Title	Description	Accredited Entity	Submission timeframe
<b>Enhancing Coastal Resilience Against Climate Change</b>  <b>Fund level</b> <b>strategic impacts:</b> 1,3,4, 5,6,7,8	<b>(Multiple countries)</b> This project will be an Enhance Direct Access (EDA) project that will seek to address coastal protection and related issues in eight (8) Caribbean Community (CARICOM) Member States (Antigua and Barbuda, Barbados, Belize, Grenada, Guyana, Jamaica, Saint Lucia, and St. Vincent and the Grenadines) over the next four (4) years. The project will use a grants on-lending framework and will concentrate on the following sectors: (i) coastal protection, inclusive of mangrove rehabilitation, rehabilitation of marine protected areas, coral restoration, etc, (ii) food and water security, (iii) health, (iv) renewable energy and energy efficiency, and (v) tourism. It covers mangrove rehabilitation which is one of the priority projects emerging from the Country Programming Exercise. NGOs/CSOs have submitted demonstrative project ideas that can be funded under the EDA.	Caribbean Community Climate Change Centre	~Oct/Nov 2019
		<b>Total financing:</b>	
		<u>GCF:</u> ~US\$ 20M	<u>Other:</u> TBD
			Draft Full Proposal is being prepared
Action		Lead	Timeline
Submit Full Concept Note		CCCCC	August 2016
Issue No-Objection Letter		GCF	2016
Develop Full Proposal for submission to GCF		CCCCC	TBD (Draft to be completed Oct/Nov 2019)



Photo by Jamaica Observer



## 2.4.2 Project Preparation Pipeline

Country Project Preparation pipeline			
Project Title	Description	Accredited Entity	Submission timeframe
Energy Efficiency in Hospitals and Smart Hospitals	Support the scaling up of the project from a GCF Concept Note to a full proposal. The PPF will support additional studies to inform the full proposal such as gender assessment, environmental and social risk assessment, stakeholder engagement plan, and economic and financial analysis.	TBD	TBD
<b>Fund level strategic impacts</b>		<b>Total financing:</b>	
1, 3, 6		<u>GCF:</u> ~US\$ 1.5 million	<u>Other:</u> TBD
Action		Lead	Timeline
Draft GCF Concept Note & identify Accredited Entity		CCD (with Ministry of Health)	September 2019 – December 2019
Develop GCF Concept Note for GCF submission		CCD (with Ministry of Health)	2020
Apply for PPF support		TBD	TBD

Country Project Preparation pipeline			
Project Title	Description	Accredited Entity	Submission timeframe
Building climate resilience of Jamaica's water infrastructure (Water supply Improvement Programme)	Support the scaling up of the project from a GCF Concept Note to a full proposal. The PPF will support additional studies to inform the full proposal such as gender assessment, environmental and social risk assessment, stakeholder engagement plan, options analysis, and economic and financial analysis.	IDB	TBD
<b>Fund level strategic impacts</b>		<b>Total financing:</b>	
1, 3, 6		<u>GCF:</u> ~US\$ 1.5 million	<u>Other:</u>
Action		Lead	Timeline
Draft GCF Concept Note & identify Accredited Entity		CCD/NWC	September 2019 – December 2019
Develop GCF Concept Note for GCF submission		CCD/NWC/Accredited Entity	2020
Apply for PPF support		Accredited entity	2020



Country Project Preparation pipeline				
Project Title	Description	Accredited Entity		Submission timeframe
Electrification of Marginalized Off-Grid communities using Solar PV Home System Kits	The Petroleum Corporation of Jamaica has a pilot project which is currently funded to provide renewable energy systems to off-grid households. This pilot has funding for 50 homes, but could be scaled up to 14,000 homes with GCF financing. Where feasible and indicated by the size of the community the establishment of a micro grid (rather than individual Solar PV Home System Kits) will be considered.	TBD		TBD
		<b>Total financing:</b>		<b>Status</b>
Fund level strategic impacts	While the pilot project provides a baseline from which the project will scale up, the PPF will support additional studies to inform the full proposal such as gender assessment, environmental and social risk assessment, stakeholder engagement plan, and economic and financial analysis (inclusive of the most appropriate financing model for communities)	<u>GCF:</u> ~US\$ 1.5 million	<u>Other:</u> TBD	Pilot projects completed, Concept Note under development
1, 3, 6				
Action		Lead	Timeline	
Develop Draft GCF Concept Note		PCJ/Ministry of Energy/CCD	October 2019 – January 2020	
Identify Accredited Entity		PCJ/Ministry of Energy/CCD	October 2019 – January 2020	
Apply for PPF support		PCJ/Ministry of Energy/CCD	TBD	

### 2.4.3 Readiness Portfolio (ongoing readiness projects)

Country Readiness programme portfolio			
Title	Description	Delivery Partner	Submission timeframe
NDA Strengthening and Country Programming	<b>(National Project)</b> This proposal presents a request for readiness support to allow for strengthening of the NDA and development of a country programme for the GCF.	NDA - Ministry of Economic Growth & Job Creation (MEGJC)	Approved (January 2016)
		<b>Total financing:</b> US\$ 300,000.00	<b>Status</b> Grant Agreement signed (October 2017); Disbursed and under implementation
Action	Lead	Timeline	
Under implementation	Climate Change Division - MEGJC	18 months	



Country Readiness programme portfolio			
Title	Description	Delivery Partner	Submission timeframe
<b>Mobilizing Private Sector to Support Low Carbon and Colimate Resilient Development in Jamaica and other CARICOM States</b>	<b>(National and Regional initiative)</b> This Readiness Grant is the foundation for supporting a regional accredited Private Sector entity that will allow for Jamaica and CARICOM states to take advantage of the GCF Private Sector Facility (PSF) Private Sector Mobilization for the development of projects and programmes which translate into regional benefits. The Grant will be utilized for examining barriers to private sector entities iin the region, inform the best strategy for investment of the regional and country level and promote collective cooperation among CARICOM States. Using its annual country allocation, Jamaica will support this initiative for the CARICOM region.	NDA - Ministry of Economic Growth & Job Creation (MEGJC)	Submitted July 2017 and approved (September 2017)
		Total financing:	Status
		US\$ 582,000.00	Grant Agreement signed (February 2018); Disbursed and under implementation
<b>Action</b>	<b>Lead</b>	<b>Timeline</b>	
Disbursed and under implementation	<i>Climate Change Division - MEGJC</i>	18 Months	

Country Readiness programme portfolio			
Title	Description	Delivery Partner	Submission timeframe
<b>Building Capacity for a Regional Approach to Climate Action in the Caribbean: Caribbean Community Climate Change Centre</b>	<b>(Multiple countries-14)</b> The objective of this proposal 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	December 2018
		Total financing:	Status
		~ US\$ 1.2 million	Grant Agreement signed; Disbursed and under implementation
<b>Action</b>	<b>Lead</b>	<b>Timeline</b>	
Disbursed and under implementation	CCCCC	36 months	



Country Readiness programme portfolio			
Title	Description	Delivery Partner	Submission timeframe
Entity Support with PwC	<b>(National)</b> Support for accreditation gap assessment and action plan for Jamaica Social Investment Fund (JSIF)	NDA - Ministry of Economic Growth & Job Creation	Submitted and approved (December 2017)
		Total financing:	Status
		US\$ 33,915.00	Disbursed and closed
Action	Lead	Timeline	
Closed	PwC, <i>Climate Change Division</i> - MEGJC	~6 months	

Country Readiness programme portfolio			
Title	Description	Delivery Partner	Submission timeframe
<i>Support for REDD+ Readiness Preparation in Jamaica</i>	The Government of Jamaica has committed to maintaining a 'no-net-loss' forest cover as described in its 2017 Forest Policy and its most recent National Forest Management and Conservation Plan [NFMCP] (2016-2026). REDD+ is a national strategic priority. This Grant will serve to assist with the capacity building and putting in place planning mechanism to guide the country in becoming REDD+ ready, including the development of a REDD+ Strategy. This will better enable the Government of Jamaica, to leverage the necessary financial resources and/or incentives for REDD+ in the future (e.g. GCF's Pilot Programme REDD+ Results-Based Payment). The submission of this REDD+ Readiness Proposal demonstrates Jamaica's commitment to UNFCCC and other international policies towards reducing emissions from deforestation and land degradation while enhancing carbon stocks.	NDA - Ministry of Economic Growth & Job Creation (MEGJC)	Submitted and approved (May 2018)
		Total financing:	Status
		US\$ 613,000.00	Grant Agreement signed (October 2018); Disbursed and under implementation
Action	Lead	Timeline	
Disbursed and under implementation	<i>Climate Change Division - MEGJC &amp; Forestry Department</i>	28 Months	



#### 2.4.4 Readiness Pipeline

Country Readiness programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
<b>Enhancing Caribbean Civil Society's Access and Readiness for Climate Finance</b>	<p><b>(Multiple countries)</b></p> <p>The Project aims to enhance civil society's capacity, including knowledge, skills and organisational structures, and the enabling external institutions to improve access to climate financing and delivery of climate change adaptation and mitigation in the Caribbean.</p> <p>Project level outcomes:</p> <ol style="list-style-type: none"> <li>1. Mechanisms for CSO engagement and consultation developed and/or enhanced at the national and regional levels in the Caribbean;</li> <li>2. Increased uptake for scaling up of appropriate community-based and ecosystem-based climate change solutions among Caribbean CSOs and their public and private sector partners;</li> <li>3. The technical and organisational capacity of Caribbean CSOs strengthened to directly access climate finance and effectively deliver climate change adaptation and mitigation; and</li> <li>4. Enhanced awareness and actions among civil society and the public and private sector to develop climate change projects led/co-implemented by Caribbean CSOs and strengthen the GCF pipeline of projects nationally and regionally.</li> </ol> <p>Potential participating countries include Antigua &amp; Barbuda, Belize, Grenada, Jamaica, St. Lucia, Trinidad and Tobago</p>	CANARI	August 2019
		Total financing:	Status
		~US\$ 1.2 million (US\$ 200,000 allocation from Jamaica)	Submitted (June 2019); Received NoLs from Antigua & Barbuda, Belize, Grenada, Jamaica, St. Lucia, St. Kitts, Suriname and a support letter from CCCCC; Awaiting final approval from GCF.
<b>Action</b>	<b>Lead</b>	<b>Timeline</b>	
Awaiting final approval from GCF	<i>Climate Change Division - MEGJC as lead NDA and CANARI</i>	24 Months	



Country Readiness programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
<b>Creating a Caribbean Green Bond Listing with the Jamaica Stock Exchange (JSE)</b>	<b>(National)</b> The objective of this request for readiness support is to undertake a self-assessment/market analysis of the current debt capital market structure for bonds and the readiness level for green bond market, develop a roadmap for the development of green bond listing and surrounding ecosystem, create the bond listing dedicated to Caribbean region green bonds with appropriate international standards and regional guidelines. The grant will also build the surrounding Green Bond Market Ecosystem through capacity building interventions, promotional campaigns, and the issuance and submission of GCF Concept or Full Project Proposal.	NDA - Ministry of Economic Growth & Job Creation (MEGJC)	August 2019
		<b>Total financing:</b>	<b>Status</b>
		US\$ 582, 749	To be submitted
Action	Lead	Timeline	
Readiness proposal to be developed	<i>Climate Change Division - MEGJC, Jamaica Stock Exchange</i>	18 months	



Photo by Ministry of Economic Growth and Job Creation



Country Readiness programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
<i>Facilitating a Gender Responsive Approach to Climate Change Adaptation and Mitigation in Jamaica</i>	<b>(National)</b>  The objectives of the readiness request are to strengthen the nation's institutional coordination which will be achieved through conducting capacity and institutional assessments, facilitating an enhanced dialogue platform for Gender and Climate Change Focal Points, establishing a Vision 2030 Gender Thematic Working Group, increasing data availability, integrating gender in selected Sector Strategies and Action Plan, educating and engaging key stakeholders to better integrate gender in climate finance programming and lastly, by guiding gender sensitive GCF project concept notes	NDA - Ministry of Economic Growth & Job Creation (MEGJC)	2018
		Total financing:	Status
		~US\$ 272,797.00	Submitted and received notification of approval in September 2019
Action	Lead	Timeline	
Submitted and Awaiting Approval	<i>Climate Change Division - MEGJC, Bureau of Gender Affairs</i>	15 Months	

Country Readiness programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
<b>Regional Readiness Proposal to improve climate change risk management and resilience in the Caribbean Region</b>	<b>(Multiple countries-14)</b>  This regional readiness aims to contribute to an improved enabling environment for climate risk resilience and early warning services in the Caribbean Region by 2020, by assisting regional and national institutions with this mandate. The intended impact of this programme is to strengthen climate change resilience and early warning efforts in the Caribbean Region, by addressing gaps and identifying additional areas for intervention.	TBD	2018
		Total financing:	Status
		TBD	NDA's identified CDEMA as the most suitable Delivery Partner. The Financial Management capacity Assessment submitted is under review
Action	Lead	Timeline	
Readiness proposal to be developed	NDA - Antigua & Barbuda	TBD	



Country Readiness programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
National Adaptation Plan	Jamaica will seek readiness financing to conduct comprehensive medium and long term adaptation planning. It will build on the country's existing adaptation activities, which will be informed by a national stocktake exercise for adaptation. Sector specific plans and local level plans will also be developed. Adaptation planning will adopt a phased approach including (i) Development of the NAP, (ii) Preparation of a Monitoring and Evaluation Framework, and (iii) Preparation of an Adaptation Investment Plan.	Planning Institute of Jamaica	2020
		Total financing:	Status
		US\$1.5 million	A national stocktake exercise is being planned to inform the process.
Action	Lead	Timeline	
Readiness proposal to be developed	Climate Change Division – Ministry of Economic Growth and Job Creation in collaboration with the Planning Institute of Jamaica	2020	



Photo by Frances Fuller



Country Readiness programme pipeline			
Title	Description	Delivery Partner	Submission timeframe
Country readiness assessment and country specific plan	<p>Jamaica will undertake a rapid multi-stakeholder assessment of readiness needs to identify the gaps in its capacity to access climate finance, institutional mechanisms and technical skills as outlined in the new Programme of Work for the GCF Readiness and Preparatory Support Programme. The assessment will cover all sectors – public, private and civil society. The country-specific readiness plan will cover the country’s approach over the next 3-5 years. To date, some capacity gaps have been identified:</p> <ul style="list-style-type: none"> <li>• Enhanced stakeholder Consultation throughout the project cycle</li> <li>• Project Preparation Training including on the development of the theory of change, application of the investment criteria and building of the climate rationale for proposals.</li> <li>• Sectoral Technical Training e.g. sector-specific planning and project preparation clinics</li> <li>• Engaging the banking/financial sector in the climate change agenda</li> <li>• Coherency and complementarity of initiatives</li> <li>• Deployment of priority technology needs identified during the TNA</li> </ul>	TBD	2020
		Total financing:	Status
		TBD	To be submitted
Action	Lead	Timeline	
Readiness proposal(s) to be developed	Climate Change Division – MEGJC	2019/2020	



Country Readiness programme portfolio			
Title	Description	Delivery Partner	Submission timeframe
Update of the Country Programming	<b>(National Project)</b> This proposal presents a request for updating the Country Programme that will take into consideration priority projects under the new MTF, as well as new policies and programmes	NDA - Ministry of Economic Growth & Job Creation (MEGJC)	2021
		Total financing:	Status
		~US\$ 100,000.00	To be developed
Action	Lead	Timeline	
Under implementation	<i>Climate Change Division - MEGJC</i>	18 months	



Photo by Jamaican Information Service



- Accreditation

90. Jamaica is currently planning to seek accreditation for three identified entities: the Planning Institute of Jamaica, the Development Bank of Jamaica, and the Jamaica Social Investment Fund. Additionally, Jamaica seeks to identify a suitable entity from the private sector for accreditation to the fund. More detail can be found in Table 9.

Table 9 Accreditation Pipeline<sup>12</sup>

Entity Name	Type	Profile	Action	Lead	Timeline*
Planning Institute of Jamaica (PIOJ)	Public	<p>PIOJ is the foremost planning agency of the government with functions such as collaborating with external funding agencies in the identification and implementation of development projects. It has the responsibility of coordinating development planning to facilitate the consistent and efficient implementation of projects and programs; determine the economic, financial and technical feasibility of new development projects, and coordinating the implementation of ongoing projects; and help to conceptualize investment projects for national development.</p> <p>PIOJ was accredited for the Adaptation Fund in 2012, securing USD 9.96 million for the project “Enhancing the Resilience of the Agricultural Sector and Coastal Areas to Protect Livelihoods and Improve Food Security.”</p>	<ul style="list-style-type: none"> <li>• Nominated for GCF accreditation in 2018</li> <li>• Fast Tracked due to Adaptation Fund Accreditation; Re-accredited in 2016</li> <li>• GCF Accreditation Application Preparation Ongoing – Stage 0</li> </ul>	Ms. Claire Bernard	<i>To be completed in 2019/2020</i>

<sup>12</sup> GCF Template Table 7



		<p>In 2016 PIOJ was recommended for re-accreditation as a National Implementing Entity to the Adaptation Fund. The agency is therefore eligible for the fast-track process under GCF accreditation. Given its record of accomplishment, the entity will focus on project management.</p> <p>PIOJ is currently reviewing the criteria under the GCF fit for purpose approach to accreditation.</p>			
<p><b>Development Bank of Jamaica Limited (DBJ)</b></p>	<p>Public</p>	<p>DBJ is a wholly owned Government institution and its only shareholder is the Accountant-General. While the DBJ provides funding and technical assistance to large projects, it has expanded and improved its assistance to micro, small and medium-sized enterprises (MSME) which are widely recognised as the engine of economic growth and development, especially in small economies.</p> <p>The DBJ has been involved in climate change mitigation by providing grants and loans to micro, small, medium-sized and large enterprises for renewable energy and energy efficiency investments since 2009.</p> <p>Since April 2009, the DBJ has provided over 200 energy loans valued at J\$2.77B (US\$ 21.3 million) supporting an investment value of over J\$5B (US\$38.5 million). The projects</p>	<ul style="list-style-type: none"> <li>• Nominated in 2017</li> <li>• CCD supported preliminary accreditation gap assessment</li> <li>• GCF Accreditation Application Preparation Ongoing – Stage I (Completeness check)</li> </ul>	<p>Mr. Milverton Reynold Mrs. Candice Williams</p>	<p><i>Received GCF feedback</i></p> <p><i>To be completed in 2019/2020</i></p>



		<p>supported mainly involve the installation of solar PV systems, bio-digesters and energy efficiency solutions in the agriculture, manufacturing, tourism and services sectors.</p> <p>The DBJ, as the Government of Jamaica’s secretariat for Public-Private Partnership &amp; Privatization (PPP&amp;P) programme has been involved in the development of a Solar energy in Schools PPP in which 30 schools are expected to benefit from energy savings from projects to be executed by the private sector.</p> <p>DBJ will apply for the following criteria under the GCF fit for purpose approach to accreditation:</p> <ul style="list-style-type: none"> <li>• Project size: medium to large scale projects</li> <li>• Fiduciary functions: basic, project management, grant awarding and on-lending or blending</li> <li>• Environmental and social risk level of intended activities: category B/Intermediation 2</li> </ul>			
<p><b>Jamaica Social Investment Fund (JSIF)</b></p>	<p>Public</p>	<p>JSIF is a limited liability company incorporated under the Company’s Act of Jamaica. It has been responsible for channeling resources for small-scale community-based projects.</p>	<ul style="list-style-type: none"> <li>• Nominated in 2017</li> <li>• PwC has completed accreditation gap assessment</li> <li>• GCF Accreditation Application Preparation</li> </ul>	<p>Mr. Omar Sweeney</p>	<p><i>Received GCF feedback. To be completed in 2019/2020</i></p>



		<p>JSIF has implemented several climate change mitigation and adaptation projects across the country through funding from the Government of Jamaica and International Development Partners costing USD 4 million. Based on its experience and due diligence, the National Designated Authority (NDA) nominated for accreditation as a National Implementation Entity (NIE) to the GCF in September 2017.</p> <p>JSIF will apply for the following criteria under the GCF fit for purpose approach to accreditation:</p> <ul style="list-style-type: none"> <li>• Project size: small</li> <li>• Fiduciary functions: basic, project management and grant awarding</li> </ul> <p>Environmental and social risk level of intended activities: category B/Intermediation 2</p>	Ongoing – Stage I (Completeness check)		
<p><b>Suitable Entity from Private Sector</b></p>		<p>Under the regional private sector readiness grant, at least two private sector entities will be identified for consideration for GCF accreditation</p>	Two entities to be identified	NDA	<p><i>Not yet available. It is dependent on the entity selected and submission of nomination letter.</i></p>



### 3 Monitoring and evaluation of Country Programme implementation

Section 3 outlines key steps in the updating, monitoring and evaluation of the country programme and its related activities.

#### 3.1 Context and Institutional Arrangements for M&E in Jamaica

91. The NDA, situated within the Climate Change Division, is an operational division and has responsibility for coordinating the implementation of the Climate Change Policy Framework. It is the designated UNFCCC Focal Point and also has responsibility for the development of Jamaica's NDC under the Paris Agreement, in collaboration with the Ministry of Science, Energy and Technology. The Climate Change Division is also currently undertaking a project to be able to track and monitor national climate action in a comprehensive manner and is therefore the central focal point for all national, regional and international climate change related reporting requirements.

92. The Climate Change Division is required to report on an annual basis to Cabinet on all of the CCD's Government expenditure and projects and programmes that are being implemented by the CCD in line with the Medium-Term Socio-Economic Policy Framework (MTF). In addition, through the Public Investment Management System (PIMS), the Public Investment Management Secretariat (PIMSEC) manages the preparation, review, approval, budget allocation, management, monitoring and evaluation of all public investments in Jamaica, irrespective of the source of funding or procurement and implementation modalities.

93. There are therefore several existing national processes and structures in place that have oversight of the preparation and implementation of projects and programmes as it relates to climate change and finance. In this context, the M&E for the country programme implementation is in accordance with current capacities and existing procedures, regulations and institutions to ensure a meaningful yet efficient procedure while avoiding duplicity and additional burden for the already capacity-constrained NDA.

#### 3.2 M&E of Implementation of the Projects/Programmes in the Country Programme

94. Delivery Partners (DPs) and AEs have the responsibility to track the implementation of project/programmes as agreed in Funded Activity Agreements (FAA) signed with the GCF and outlined in individual project/programme implementation arrangements, timetables and monitoring and evaluation plans. They will be responsible for reporting on the implementation of these projects/programmes to the GCF.

95. The NDA will be responsible for having oversight of the DPs and AEs engagement in country on all projects/programmes funded by the GCF. In addition to the NDA's role in managing the DPs and AEs engagement in country, the NDA will liaise with and draw from the PIMSEC through the PIMS in their management and review of projects/programmes. The PIMS will have a crucial role to play in monitoring and evaluating all GCF-funded activity.

#### 3.3 Timeline and Content of Updates to the Country Programme

96. Table 10 outlines a schedule of periodic reviews/evaluations to support the effective monitoring of progress and to allow the NDA to adjust the country programme as necessary to fit national circumstances.

Table 10 Timeline and Updates to the Country Programme

Ongoing Updates	
Lead	NDA
Type of Update	Minor updates to the pipeline such as updates to status of projects, project costing, identification of AEs and EEs and progress of Readiness Proposals will be updated on an ongoing basis.



<b>Process</b>	Changes will be included in the country programme by the NDA as updates become available through regular dialogue with stakeholders and existing national processes including, inter alia, meetings of the Climate Change Advisory Board. The living updated document will be hosted and managed by the NDA.
<b>When</b>	Ongoing
<b>Annual Review and Updates</b>	
<b>Lead</b>	NDA
<b>Type of Update</b>	Updates to the country programme with any major national policy changes and substantive review of the progress of the Country Portfolio including, the pipeline for projects and programmes, Project Preparation Facility requests, Readiness and Accreditation
<b>Process</b>	<ol style="list-style-type: none"> <li>1. The NDA will review the most up to date version of the country programme and make updates based on consultation with the Climate Change Advisory Board.</li> <li>2. The NDA will issue an electronic request through the Climate Change Focal Point Network for updates to projects/programmes under preparation. This request will be submitted through a template in the GCF tabular format for the Country Portfolio section of the country programme.</li> <li>3. The NDA will also meet with the nominated accredited entities to review their progress towards accreditation and determine what support they may require.</li> <li>4. The NDA will compile all of the updates.</li> </ol>
<b>When</b>	All updates should be complete two (2) weeks prior to the annual GCF Regional Dialogue.
<b>Biennial Review and Updates</b>	
<b>Lead</b>	The NDA will lead the review of the content including the convening of stakeholders for input and oversight over the process. The approval of final content and pipeline of the country programme will be undertaken at the discretion of the NDA.
<b>Type of Update</b>	On a biennial basis, the NDA will lead a comprehensive review of all of the sections within the country programme based on the template provided by the GCF.
<b>Process</b>	<ol style="list-style-type: none"> <li>1. In the same vein as the first country programme, the NDA will lead a participatory multi-stakeholder engagement process.</li> <li>2. The NDA will review the most up to date version of the country programme and make initial updates to the entire country programme based on consultation with the Climate Change Advisory Board and in accordance with any revisions or updates to the MTF, Vision 2030 and Jamaica's NDC.</li> <li>3. The NDA will issue an electronic request through the Climate Change Focal Point Network for updates to climate change related Ministry priorities, new project/programmes and new targets. This request will be submitted to the Network through a template.</li> <li>4. The NDA will host a workshop to assist in prioritizing the pipeline of projects/programmes and to validate the updated content of the country programme.</li> <li>5. The NDA will compile all of the updates.</li> <li>6. The NDA may request support from the GCF Readiness Programme for performing this in-depth review and may hire consultants for additional capacity and specific expertise</li> </ol>
<b>When</b>	All review of progress and updates to the country programme will be completed in time for inclusion and compilation into Jamaica's submission to the UNFCCC for the Global Stocktake <sup>13</sup> .

<sup>13</sup> The UNFCCC Global Stocktake will begin in 2023 and occur every 5 years.



## 4 Annexes

### Annex 1 – Priorities Identified through in-person stakeholder engagement, week of February 4 2019

Table 11 Priorities identified during stakeholder engagement

Sector/Institution	Adaptation	Mitigation	Cross-cutting
Meteorological Office	Expansion of weather station network to improve information on Jamaican climate		
GEF Focal Point	Minimizing erosion Coastal Protection: Airport & Port Royal Water:		
Agriculture	Enhancing farmers' access to weather data		
Transportation	E-mobility promotion Update for national transport policy, including petroleum reduction strategy		
Forestry	Urban forests, REDD+ Readiness, Forest services valuation, Mangrove Conservation	Carbon & Land Use Change Assessment	Sustainable Community-level forest management
Mines & Geology	Enhanced use of data, particularly on landslides and storm surge, for risk management and development planning		
Fisheries	Alternative Livelihoods for Fisherfolk		
Agriculture	Livelihood preservation, water management in response to drought, pests and disease management, early warning systems, seed preservation, resilient crops		
Irrigation	Improved drainage data and infrastructure, sufficient data to inform water availability, water quality,	15% RE in next 4 years, 30% RE by next 8 years, low cost irrigation for farmers	
Water	Water quality assessment, expanding data collection		
Petroleum Corporation of Jamaica		Energy efficiency & conservation	Developing indigenous energy sources
Planning Institute of Jamaica	Water Adaptation, Coastal Erosion	Forestry, including reforestation	Climate-smart Agriculture



		Energy sector, particularly transport	
Office of Disaster Preparedness and Emergency Management	Improving Climate Data, enhancing early warning system, development of comprehensive set of risk assessments and profiles, disaster risk reduction		
Health	All health facilities climate resilient by 2030		Energy efficiency & renewable energy in hospitals
National Water Commission	Reduced water loss, water quality, new options for water in light of saline intrusion and drought		
NEPA	Coastal resilience; enhancing mangroves, wetlands, and coral reefs; effective watershed management		
Private Sector Organization of Jamaica	Vector-borne illnesses; Engagement of credit unions		Private Sector Sensitization



## Annex 2 – Stakeholder Consultation Workshop Participants, June 6, 2019

Table 12 outlines the participants of the national multi-stakeholder workshop that was held on 6 June 2019 in Kingston Jamaica to assist in developing and prioritising national priorities for the country programme project pipeline. There was a total of 47 participants from 31 government agencies, civil society organisations and the private sector.

*Table 12 Participants of National Workshop to develop and prioritize the Country Programme Project Pipeline*

<b>Belle Tropicals</b>
<b>Bureau of Gender Affairs</b>
<b>Caribbean Climate Innovation Centre</b>
<b>Caribbean Coastal Area Management Foundation</b>
<b>Caribbean Youth Environment Network</b>
<b>Cuso International</b>
<b>Development Bank of Jamaica (DBJ)</b>
<b>Environmental Solutions Ltd.</b>
<b>Jamaica Agricultural Society</b>
<b>Jamaica Environment Trust (JET)</b>
<b>Jamaica Social Investment Fund</b>
<b>Kingston and St. Andrew Corporation</b>
<b>Meteorological Office of Jamaica</b>
<b>Ministry of Culture, Gender, Entertainment &amp; Sport</b>
<b>Ministry of Economic Growth and Job Creation (MEGJC)</b> MEGJC - Climate Change Division MEGJC - Water Policy and Monitoring Branch
<b>Ministry of Health (MOH)</b>
<b>Ministry of Industry, Commerce, Agriculture &amp; Fisheries (MICAF)</b> Fisheries Division MSME Division
<b>Ministry of Science, Energy and Technology (MSET)</b>
<b>Ministry of Transport and Mining</b>
<b>National Environment and Planning Agency (NEPA)</b> Environmental Management & Conservation Division
<b>National Irrigation Commission</b>
<b>National Solid Waste Manager Authority (NSWMA)</b>
<b>Petroleum Cooperation of Jamaica (PCJ)</b>
<b>Planning Institute of Jamaica (PIOJ)</b>
<b>Rural Agricultural Development Authority (RADA)</b>
<b>Urban Development Corporation (UDC)</b>
<b>Water Resources Authority (WRA)</b>
<b>Women's Resource and Outreach Centre (WROC)</b>
<b>Youth Climate Change Council</b>



### Annex 3 – Potentially relevant Accredited Entities for Jamaica

Table 13 Fiduciary standards for Accredited Entities

Accredited Entities Relevant for Jamaica	Entity Type		Size					Fiduciary Standards							E&S Risk Category			
	National	Regional	Int.	Micro	Small	Medium	Large	Basic	Project Management	Grant Award	On-Lending/ Blending	Loans	Equity	Guarantees	Blending	Category A	Category B	Category C
Agence Française de Développement (AFD)			✓				✓	✓	✓	✓	✓	✓		✓				✓
Caribbean Community Climate Change Centre (CCCCC)		✓			✓			✓	✓	✓								✓
Caribbean Development Bank (CDB)		✓			✓			✓	✓	✓	✓	✓	✓					✓
Conservation International Foundation (CI)			✓			✓		✓	✓	✓								✓
Deutsche Bank Aktiengesellschaft (DB)			✓			✓		✓	✓	✓								✓
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)			✓			✓		✓	✓	✓								✓
Food and Agriculture Organization (FAO)			✓			✓		✓	✓	✓								✓
Inter-American Development Bank (IDB)			✓				✓	✓	✓	✓	✓	✓	✓	✓				✓
International Bank for Reconstruction and Development and International Development Association (World Bank)			✓				✓	✓	✓	✓	✓	✓		✓				✓
International Finance Corporation (IFC)			✓				✓	✓	✓	✓	✓	✓	✓	✓				✓
International Fund for Agricultural Development (IFAD)			✓			✓		✓	✓	✓	✓	✓						✓
International Union for Conservation of Nature (IUCN)			✓			✓		✓	✓	✓	✓	✓	✓					✓
Japan International Cooperation Agency (JICA)			✓				✓	✓	✓	✓	✓			✓				✓
Kreditanstalt für Wiederaufbau (KfW)			✓				✓	✓	✓	✓	✓	✓		✓				✓
United Nations Development Programme (UNDP)			✓			✓		✓	✓	✓								✓
United Nations Environment Programme (UNEP)			✓		✓			✓	✓	✓								✓
World Food Programme (WFP)			✓	✓				✓	✓	✓								✓
World Meteorological Organization (WMO)			✓		✓			✓	✓	✓								✓
World Wildlife Fund, Inc. (WWF)			✓			✓		✓	✓	✓								✓



#### Annex 4 – Process for Identification of Priority Projects

To ensure that the projects and programmes highlighted in Jamaica’s Country Programme have secured country ownership prior to inclusion and reflect priorities across sectors and impact areas, a multi-step approach was used to gather relevant information on priorities and projects, validate and update project profiles, and narrow and select projects in consultation with stakeholders.

The first step in identifying Jamaica’s climate priorities was a review of national policy documents. This review included the following:

- Vision 2030 (2009)
- Climate Change Policy Framework (2015)
- ECOSOC Voluntary National Review (2018)
- Nationally Determined Contribution (2015)
- Forestry Policy for Jamaica (2016)
- Biennial Update Report (2016)
- National Energy Policy 2009-2030
- Third National Communication (2018)
- Medium-Term Socio-economic Policy Framework 2018-2021

The outcomes of this stocktake of funding priorities were primarily high-level country priorities, many of which can be found in Table 8 above.

Following this review, a series of bilateral meetings were held with a variety of Ministries, Departments, and Agencies (MDAs), as well as private sector actors. The goals of these interactions was the identification of concrete project ideas, aligned with national priorities that could be considered for inclusion in the GCF country programme pipeline. Based on this process, an initial universe of **41 project and programme concepts** was developed.

Information on the identified projects, based on bilateral meetings, was incomplete. As a result, sectoral groups of stakeholders were then engaged electronically, invited to provide their input on a group of projects that were categorized by sector (Agriculture, Forestry & Fisheries; Energy & Transport; Water & Health; and Coastal Resource & Tourism), and assessed in the form of questionnaires. These questionnaires asked respondents to:

- provide their assessment of the projects concepts identified in terms of alignment with sectoral priorities;
- fill in gaps in understanding and provide updates on the projects previously identified; and
- provide information on additional projects that had not previously been identified through research and bilateral engagement.

The response rate to the questionnaires was insufficient to provide a sufficient sample to determine a ranking of sectoral projects based on their alignment with sector priorities. However, several respondents provided information on additional project concepts that had been omitted from the sectoral questionnaire. This led to a total universe of **46** project concepts for consideration.

These project concepts were then narrowed in preparation for a stakeholder consultation workshop. Projects were assessed first on the basis of their appropriateness for submission to the GCF – considering predominantly whether they were concrete investment projects of sufficient scale, with a clear climate rationale. Those project concepts that



remained after this screening were assessed on the basis of their completeness, considering the inclusion of cost information, a description of the activities, the anticipated outcomes, implementation arrangements, and timing. The 18 most complete projects were selected for consideration.

The NDA then reviewed this list of projects, and identified several that had either been funded by other sources or had been combined with other projects. This left a universe of 11 projects for consideration at the stakeholder consultation workshop.

At the stakeholder workshop, a wide range of participants across various sectors assess the 11 project concepts, and individually ranked each project against 5 criteria (See Tble 13). These criteria were developed in consultation with the NDA, and assigned a weight (Table 1514) to determine ranking of project priority based on weighted mean. Data were analyzed in real-time.

The prioritized list of projects (found in Annex 5) were then considered by the NDA, who elected to include the five top scoring projects in this first iteration of the country programme.

*Table 14 Stakeholder Consultation Multi-Criteria Assessment Framework*

	1	2	3	4	5
<b>Sustainability of project (economic, envi, social)</b>	Extremely unsustainable	Somewhat unsustainable	Neutral/don't know	Somewhat sustainable	Very sustainable
<b>Ease of Implementation</b>	Extremely difficult	Somewhat difficult	Neutral/don't know	Somewhat easy	Very easy
<b>Synergy with other strategic objectives</b>	No synergies with other strategic objectives	Few/Weak synergies with other strategic objectives	Neutral/don't know	Somewhat synergistic with other strategic objectives	Many/ Strong synergies with other strategic objectives
<b>Co-benefits across gender and vulnerable groups</b>	No co-benefits across gender and vulnerable groups	Few/Weak co-benefits across gender and vulnerable groups	Neutral/don't know	Some co-benefits across gender and vulnerable groups	Many/Strong co-benefits across gender and vulnerable groups
<b>Potential to leverage additional resources</b>	Unlikely to attract additional resources	Somewhat unlikely to attract additional resources	Neutral/don't know	Likely to attract additional resources	Certain to attract additional resources



Table 15 Weighting of MCA criteria

Criterion	Value	Justification	%
Difficulty/Ease of Implementation	3	Potentially 3 - want to access low-hanging fruit first	27%
Sustainability	2	Important, but potentially has overlaps	18%
Co-benefits/ synergies with other strategic mitigation and adaptation objectives	1	Important, but somewhat served by early screening. Good to know stakeholder inputs	9%
Potential to reduce gender inequities and improve the lives of vulnerable groups i.e. disabled and youth	3	Priority in vision 2030	27%
Potential to leverage additional resources	2	Important, particularly given fiscal constraints	18%



Annex 5 – Prioritized list of Projects from Multi-Criteria Assessment

Table 16 List of priority projects

Rank	Project	Focus
1	Energy Efficiency in Hospitals & Smart Hospitals	Cross-cutting
2	Water Is Life: Promoting Climate Resilient Watershed communities in Jamaica using Integrated Watershed Management and Early Warning Systems	Adaptation
3	Jamaica Water Supply Improvement Programme	Adaptation
4	Water NAMA	Cross-cutting
5	Addressing critically eroded coastal areas	Adaptation
6	Mangrove rehabilitation project	Adaptation
7	Scaling up Off Grid RE homes	Mitigation
8	Hydropower	Mitigation
9	Providing 100% Renewable Electricity and Clean Water Sources from Desalination	Cross-cutting
10	Scaling up e-mobility	Mitigation
11	Enhancing Carbon Sequestration and Resilience through Palisadoes Shoreline Protection in Jamaica: Revetment and Dune Rehabilitation	Adaptation



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