

Learning-by-doing preparation of the Fourth National Communication and Second Biennial Update Report to the UNFCCC

Part I: Project Information
GEF ID
Project Type EA
Type of Trust Fund GET
CBIT CBIT
Project Title Learning-by-doing preparation of the Fourth National Communication and Second Biennial Update Report to the UNFCCC
Countries Jamaica
Agency(ies) UNDP
Other Executing Partner(s): Ministry of Economic Growth and Job Creation: Climate Change Division

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Enabling Activities, Capacity, Knowledge and Research, Focal Areas, Climate Change, Climate Change Mitigation, United Nations Framework Convention on Climate Change, Stakeholders, Type of Engagement, Partnership, Civil Society, Non-Governmental Organization, Private Sector, Gender Equality

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 2

Climate Change Adaptation

Climate Change Adaptation 1

Type of Reports	Submission Date	Expected Implementation Start	Expected Completion Date	Expected Report Submission to Convention
UNFCCC National Communications (NC)	11/29/2019	2/1/2020	1/31/2024	12/31/2022
UNFCCC Biennial Update Report (BUR)	11/29/2019	2/1/2020	1/31/2024	1/31/2021

Duration

48In Months

Agency Fee(\$)

80,940

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-EA	GET	852,000	296,000
		Total Project Cost(\$) 852,000	296,000

B. Project description summary

Project Objective

To assist Jamaica in the preparation and submission of its Fourth National Communication and Second Biennial Update Report for the fulfillment of the obligations under the United Nations Framework Convention on Climate Change (UNFCCC)

Project Expected Outcomes Expected Outputs
Component

GEF Project Financing(\$) Confirmed Co-Financing(\$)

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Development of the Fourth National Communication on Climate Change (4NC)	the Fourth endorsed by tional Government, and submitted in accordance Climate with the guidelines	1.1 Assessment of Jamaica's National Circumstances pertaining to Climate Change, with a view to collecting and managing gender disaggregated data and implications for gender equality and women's empowerment where available, including a SWOT and gap analysis of technical capacities to prepare national communications for submission to the UNFCCC.	349,550	75,000
		1.2 National GHG Inventory is updated to year 2019 for the following sectors: energy, agriculture, forestry and other land use, industrial processes and product use, waste in line with the 2006 IPCC guidelines, and introduction of the 2019 Refinement to the extent possible. The quality of the existing time series data and data collection system improved, with QA/QC plan in place and applied on continuous basis.		
		1.3 Revised, updated, and validated assessment of Jamaica's mitigation potential by 2070 for the following sectors: energy, forestry, transportation, waste, and water resources, with particular attention to an in-depth assessment of challenges, barriers, and gaps to implement mitigation options.		
		1.4 Updated information on the impacts, risks, and vulnerability to the adverse effects of climate change, as well as adaptation measures, complemented with an estimation of their financial and economic costs, including nature-based solutions using the latest climate change scenarios. These estimations will be reconciled with the environmental and social costs of climate change. These will focus on the priority adaptation sectors of agriculture, coastal resources, human health and human settlements, tourism, and water resources.		

1.5 Learning-by-doing workshops to facilitate the

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Development of the Second en Biennial Gupdate Report on Climate when Change (BUR)	Second BUR developed, endorsed by Government, and submitted in accordance with the guidelines contained in FCCC/CP/2011/9/Add.1 (Decision 2/CP. 17)	 2.1 Updated SWOT analysis of institutional arrangements and technical capacities needed to prepare the BUR and the future Biennial Transparency Report (BTR) on a continuous basis and in a sustainable manner. 2.2 National GHG Inventory updated for 2013- 2017 for the following sectors: agriculture, forestry and other land use, energy, waste, and industrial processes and product use, in line with the 2006 IPCC guidelines, and introduction of the 2019 Refinement to the extent possible. The quality of the existing time series data improved, with QA/QC plan in place and applied on continuous basis. 	325,000	75,000
		2.3 Alternative mitigation projection scenarios are developed and reconciled with the 2009-2030 National Energy Policy, relevant projects, and associated programmes.		
		2.4 The technology, financial and capacity needs for mitigation are outlined and recommendations with government priorities identified.		
		2.5 A report is produced on the establishment of the domestic MRV system in coordination with the Capacity Building Initiative for Transparency Project		

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Knowledge management, monitoring, and evaluation	Improved awareness and understanding of climate change threats and options to mitigate and adapt to impacts is realized through the preparation of various knowledge management products, including monitoring, and evaluation	 3.1 Awareness-raising materials prepared to promote greater sensitization among decision- and policy-makers, private sector, journalists, and civil society, including inner-city, rural and other affected communities. 3.2 Policy dialogues and workshops are carried out to promote greater sensitization among decision- and policy-makers, private sector, journalists, and civil society, including inner-city, rural and other affected communities. 3.3 Monitoring and evaluation of the project outcomes and outputs executed in line with the M&E plan: Inception workshop held; gender analysis and action plan completed; project financial and progress reports on quarterly and annual basis prepared; end of project report; gaps and lessons learned compiled 	100,000	30,000
Project Managen	nent Cost (PMC)	Sub Total (\$)	774,550	180,000
Toject Managen	ment oost (i mo)		77,450	116,000
		Sub Total(\$)	77,450	116,000
		Total Project Cost(\$)	852,000	296,000

C. Source of Co-Financing for the Project by Name and by Type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Government	Ministry of Economic Growth and Job Creation	In-kind	Recurrent expenditures	246,000
GEF Agency	UNDP	Grant	Recurrent expenditures	50,000
			Total Co-Financing(\$)	296,000

Describe how any "Investment Mobilized" was identified

Not Applicable

D. GEF Financing Resources Requested by Agency, Country and Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
UNDP	GET	Jamaica	Climate Change	CC Set-Aside	852,000	80,940
				Total Gef Resourc	es(\$) 852,000	80,940

Part II. Enabling Activity Justification

A. ENABLING ACTIVITY BACKGROUND AND CONTEXT

Provide brief information about projects implemented since a country became party to the convention and results achieved

Jamaica was one of the signatories to the United Nations Framework Convention on Climate Change at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil in June 1992. Jamaica became a Party to the Convention on the 6th April, 1995 and to the Kyoto Protocol on the 16th February 1999. Jamaica became the 143rd country to ratify the Paris Agreement following submission of its instrument of ratification on the 11th April, 2017. The Ministry of Economic Growth and Job Creation, Climate Change Division (CCD) is the national focal point to the Convention and Protocol.

Jamaica has implemented several projects relating to mitigation of and adaptation to climate change since becoming a Party to the Convention. These include the GOJ/EU/UNEP Climate Change Adaptation and Disaster Risk Reduction Project that was financed by the European Union in collaboration with the Government of Jamaica and the United Nations Environment Programme and implemented over the period October 2010 to December 2013. Activities for two of its components focused on activities to rehabilitate selected watersheds across the island through reforestation activities and the protection of several vulnerable coastal communities by planting mangroves and sea-grass as well as restoring coral reefs. The third component helped to build capacities for addressing climate change in selected agencies; improve public awareness of climate change; and develop a coastal policy and a national climate change policy.

Jamaica is one of the countries benefiting from the Pilot Programme for Climate Resilience (PPCR) in the Caribbean. The PPCR is funded by the Climate Investment Funds (CIF) through the Inter-American Development Bank and the World Bank. The PPCR aims to pilot and demonstrate ways in which climate risks and resilience building may be integrated into core development policies, plans and programme/project implementation. This programme seeks to provide incentives for the scaling up of climate resilient actions, building on other on-going initiatives and for the promoting of transformational change. Further, it is facilitating the upgrading of climate data for decision-making and financing for climate action by private sector and civil society in the agriculture and tourism sectors.

National Communications have been prepared not only as obligations to the UNFCCC but also as decision support reports. Jamaica's First National Communication was submitted to the UNFCCC in 2000. It included a GHG Inventory for 1994 and Vulnerability and Adaptation (V&A) assessments for the five sectors that were identified through national consultations as most vulnerable to the adverse effects of climate change.

Jamaica is implementing a programme under the Adaptation Fund to the tune of US\$ 9.95 million targeting the agriculture and coastal resources sectors, including activities which will protect selected shorelines from erosion and facilitate sustainable land and water management agricultural practices including the establishment of water harvesting systems in several communities. The executing entities are the National Environment and Planning Agency (NEPA), National Works Agency (NWA), Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF), and the Ministry of Tourism (MoT), with the Planning Institute of Jamaica (PIOJ) as the National Implementing Entity (NIE).

The Second National Communication (SNC) of Jamaica, with funding from GEF and UNDP, with UNDP as the Executing Agency, was submitted to the UNFCCC in December 2011. The SNC includes GHG inventories for 2000-2005, V&A assessments for five vulnerable sectors including the socio-economic impact on tourism and case studies of vulnerable coastal communities and abatement options up to 2030. The SNC informed the preparation of Vision 2030 Jamaica - National Development Plan.

The Third National Communication (TNC) of Jamaica, with funding from GEF and UNDP, with UNDP as the Executing Agency, was submitted to the UNFCCC on the 14th January, 2019. The TNC includes more robust GHG inventories for 2006-2012 and the results of five climate change vulnerability assessments for the priority sectors of coastal resources, tourism, agriculture, human health, and water. Jamaica's first Biennial Update Report was submitted to the UNFCCC on the 18th November, 2016, with the GHG Inventory updated to the year 2012. However, GHG inventory data for years prior to 2006 were incomplete, limiting a detailed comparison with inventory data of later years.

The preparation of the Third National Communication and Second Biennial Update Report resulted in important technical capacities, in particular the collation of a significant amount of updated information to better inform planners and decision-makers. The TNC also includes the results of five assessments for determining the island's vulnerability to the impacts of climate change. They were done for the priority sectors of coastal resources (including human settlements), tourism, agriculture, human health, and water. A series of technical training workshops allowed for a large number of national stakeholders to better understand the complexities of collecting GHG inventory activity data and using emission estimation methodologies. The TNC identified a number of technology needs, including more training on impact modelling and real-time weather stations to collect longitudinal data, and other more localized technologies to adapt to the impacts of climate change, e.g., solar and wind energy powered hydraulic pumps.

Having ratified the Paris Agreement in 2017, Jamaica is seeking to align current and planned initiatives with its First Nationally Determined Contribution (NDC) which seeks to "mitigate the equivalent of 1.1 million metric tons of carbon dioxide per year by 2030 versus the business-as -usual scenario". This is a reduction of 7.8% of emissions versus business-as-usual (2005 baseline). This target is predicated on the current level of implementation of the National Energy Policy and the existing pipeline of renewable energy projects. The process of updating the NDC by 2020 has begun, and will be brought to bear on the development and finalization of the 4NC and second BUR.

This project will build upon the findings and recommendations from the Third National Communication and BUR, as well as recommendations resulting from the international consultation and analysis (ICA) process for the BUR. These findings will include a need for additional climate proofing and climate readiness training beyond technocrat stakeholders; updating the GHG inventory with the latest IPCC guidelines; developing improved climate scenarios; climate-proofing Jamaica's relevant national policies;

catalyzing decision-making and action based on improved scientific information and knowledge; increasing opportunities for youth engagement; pursuing more climate-resilient infrastructure; and on-going capacity building.

The specific capacity building needs to prepare the Fourth National Communication and Second Biennial Update Report are effectively the knowledge and skillsets of government staffs and other national stakeholders to collect, analyze, and report on the information contained in these two aforementioned reports. Rather than rely on consultants to compile the reports, the project will use learning-by-doing workshops to build capacities of staffs in various agencies and organizations. The individual products that will be included in these reports are, but not limited to:

- Institutional arrangements relevant to the preparation of the national communications and biennial update reports on a continuous basis described;
- Mechanisms for gender-responsive stakeholder involvement and participation, enabling the preparation of biennial update reports defined;
- Implementation of the recommendation from the BUR, key conclusions of the ICA process and Sustainable Development Goals agenda;
- Gender-disaggregated data as per the gender analysis and action plan;
- Stock-take of all awareness-raising, education, and research on climate change that has been carried out within different programmes and projects, including donor-funded interventions, which will be made available on the national platform;
- Update of country-specific emission factors;
- Governmental policies, activities, programs and progress on mitigation actions updated and institutional arrangements related to mitigation context described; and
- Information and support on domestic measurement, reporting, and verification (MRV) and national registry system.

B. ENABLING ACTIVITY GOALS, OBJECTIVES, AND ACTIVITIES

The proposal should briefly justify and describe the project framework. Identify also key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable. Describe also how the gender equality and women's empowerment are considered in project design and implementation

This project is prepared in line with the GEF 7 climate change mitigation objective CCM 3: Foster Enabling Conditions to Mainstream Mitigation Concerns into Sustainable Development Strategies.

The key outcomes of the enabling activities are to:

a) Prepare Jamaica's Fourth National Communication according to revised guidelines (decision 17/CP.8);

- b) Prepare the Second Biennial Update Report according to the guidelines for the preparation of BURs from non-Annex I Parties contained in annex III of decision 2/CP.17; and
- c) Improve awareness and understanding of climate change threats and options to mitigate and adapt to impacts is realized through the preparation of various knowledge management products, including monitoring, and evaluation.

A long-term goal of the project is to strengthen technical and institutional capacities in order that Jamaica will be better able to fulfill on-going and future reporting requirements under UNFCCC with respect to national communications from Non-Annex One Parties and COP decisions for the preparation of BURs as well as transparency reports under the Paris Agreement such as the Adaptation Communication. This project will also contribute to a set of continuous improvements towards the integration of climate change considerations into national and sectoral development priorities, with particular attention to gender equality and women's empowerment.

Stakeholder Involvement

Stakeholder involvement and consultation processes are critical to the success of the project. An effective engagement of key stakeholders is envisaged during project preparation, implementation, monitoring and evaluation to enhance ownership of the NC and BUR processes and makes these reports more responsive to national needs. Key stakeholders include but not limited to the following:

- Ministry of Economic Growth and Job Creation, including the Climate Change Division (Project Executing Agency and overall coordination)
- United Nations Development Programme (Project Implementing Agency)
- Planning Institute of Jamaica
- Statistical Institute of Jamaica
- Meteorological Service of Jamaica
- Ministry of Finance and the Public Service

- Ministry of Science, Energy and Technology
- Academic Institutions (e.g., Climate Change Studies Group UWI and Institute of Gender and Development Studies, UWI)
- Private Sector Organizations (e.g., Private Sector Organization of Jamaica and Environmental Solutions Ltd.)
- Non-Governmental Organizations/ Community-Based Organizations (e.g., Jamaica Environment Trust, Women's Centre of Jamaica Foundation)
- Media / Journalists

The roles of these stakeholders are for each representative to better understand their differentiated vulnerability and comparative advantage in addressing the risks associated with the impacts of climate change. A key role of stakeholders is to contribute vital information that will inform the assessments and help calculate relevant greenhouse gas indicators. Each stakeholder organization will be invited to relevant project activities for their active engagement, which will include the learning-by-doing workshops organized to strengthen skillsets to update the GHG inventory, estimate financial and economic costs associated with the impacts of climate change and opportunities to implement mitigation and adaptation measures. A particular goal of the project through stakeholder engagement is to build champions, i.e., stakeholder representatives that can report back to their relevant constituencies and promote improve awareness, value, and attitudes to addressing the anthropogenic causes of climate change as well as opportunities to reduce their exposure to the risks of climate change.

The project proposal intends to strengthen stakeholder's participation to collectively participate in addressing climate change issues and to overcome challenges in the high incidence of poverty, limited financial resources, limited legislative and regulatory support for integrating climate change considerations into policies and plans, limited institutional and individual capacity, historically weak planning systems, limited research capacity and technological development, limited integration of environmental considerations into socio-economic policies and strategies, and low labour productivity and human security. The stakeholders of the project are expected to come from a wide range of backgrounds, including line ministries and agencies, local communities, local authorities and NGOs, mass-media, research institutions, private sector and international organizations, with particular emphasis on related sectors.

There is need for greater coordination among sectors in the development and implementation of climate change related activities. Efforts to coordinate a multi-sectoral approach to responding to climate change include various initiatives by the Planning Institute of Jamaica, namely, mainstreaming of climate change considerations into national development planning, and the facilitation of collaboration with international development partners, among others. Other approaches include the creation of the Thematic

Working Group on Hazard Risk Reduction and Adaptation to Climate Change (HRRACC) under Vision 2030 Jamaica - National Development Plan; and the appointment of the Climate Change Advisory Board, and establishment of the Climate Change Focal Point Network (CCFPN) under the Climate Change Policy Framework.

A CCFPN is already constituted and operationally active, which, in addition to the Ministry of Economic Growth and Job Creation, includes the ministries of Health and Wellness, Tourism, and Transport and Mining. However, the selected departments and agencies of Government would be re-engaged for improved participation and new entities included alongside the focal points from the ministries and the Cabinet Office. The secretariat of Vision 2030 would be engaged as a new member of the CCFPN. The following tentative members of the CCFPN are intended to become focal points of the CCFPN:

- Development Bank of Jamaica (BDJ)
- National Fisheries Authority (formerly the Fisheries Division) (NFA)
- Forestry Department (FD)
- Jamaica Information Service (JIS)
- Meteorological Service of Jamaica (MSJ)
- Mines and Geology Division (MGD)
- National Environment and Planning Agency (NEPA)
- National Irrigation Commission (NIC)
- 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 (SDC)
- Urban Development Corporation (UDC)
- Water Resources Authority (WRA)

A preliminary stakeholder engagement plan envisages the following meetings and roles of CCFPN Focal Points:

- Inception workshop to discuss conceptual framework and design for each chapter; and to highlight any prevailing challenges to data acquisition and sharing, monitoring assessment and reporting;
- Facilitate and catalyze data and information collection and management;
- Individual meetings with sector representatives;
- Group discussions to solicit ideas, create synergies and opportunities for networking, knowledge sharing and joint actions;
- Validation workshops to discuss results and validate accuracy of the analyses; and
- Final dissemination workshop to discuss findings, raise awareness and reinforce collaboration and networking

Gender dimension

The update of the national circumstances will disaggregate relevant data by sex with the objective to better understand how the social and economic differences between men and women affect the capability of dealing with mitigating and adapting to climate change. Fortunately, women are increasingly being acknowledged internationally as agents of change who make important contributions to climate change adaptation and mitigation. However, it is equally as important that men are acknowledged as such. A gender perspective will be incorporated in the V&A assessment and preparation of mitigation actions. That is, the extent to which women and men's vulnerability to the impacts of climate change in the various sectors will be differentiated.

The project will encourage the active participation of women and men in decision-making processes. Gender balance will be considered in project management structures and capacity building actions (e.g., trainings, workshops). The guidance on gender integration through the NCs and BURs developed by the Global Support Programme (GSP) through UNDP and in collaboration with UNEP and GEF will be applied. In line with the GEF SEC's policy on gender equality[1]¹ and guidance to advance gender equality in GEF projects and programmes[2]², the project will also prepare and finalize a Gender analysis and Gender action plan[3]³ during its inception phase[4]⁴.

An initial stocktaking and gender analysis across all areas – and inclusion of stakeholders who understand gender issues in relation to their sectors like the Bureau of Women's Affairs – will be conducted to assess and understand where deeper analysis and action is required. The areas where data and information on gender and climate change is not available will be identified with priorities and steps to fill gaps where possible. The Gender analysis will follow the structure of five priority areas of UNFCCC Gender Action:

- Capacity building, knowledge sharing and communications
- Gender balance, participation and women's leadership
- Coherence
- Gender responsive implementation and means of implementation
- Monitoring and reporting.

The Project will provide capacity-building in relation to NC purpose and content, gender issues in environment and their role in the NC/BUR processes if necessary.

For all analysis included in the project (national circumstances, mitigation actions and vulnerability assessment), gender-disaggregated data from national statistical agency and international approved sources for the following topics: education level, employment by economy sectors and other sectors identified as GHG emitters, gender pay gap (general and by sectors), economic empowerment, and health among others will be included.

- [1] http://www.thegef.org/sites/default/files/council-meeting-documents/EN GEF.C.53.04 Gender Policy.pdf
- [2] http://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.54.Inf_.05_Guidance_Gender_0.pdf
- [3] Guide to Conducting a Participatory Gender Analysis and Developing a Gender Action Plan for projects supported by UNDP with GEF financing:

 $https://intranet.undp.org/unit/bpps/sdev/gef/_layouts/15/WopiFrame.aspx?sourcedoc=/unit/bpps/sdev/gef/Gender\%20Library/UNDP\%20GEF\%20Guidance.\%20How\%20to\%20conduct\%20gender\%20analysis\%20and\%20gender\%20action\%20plan.pdf\&action=default$

- [4] Enabling Activity projects provide financing for the preparation of a plan, strategy, or national program to fulfill the commitments under the Conventions that the GEF serves, including national communication or reports to the Conventions. Similarly, many GEF-financed medium- and full-size projects include activities that focus on developing and preparing national policies or strategies and, as such, do not work directly with beneficiaries on the ground. These plans and strategies provide an essential opportunity to recognize, build capacity, and to develop actions to advance GEWE. Some possible actions to include in these national documents include the following:
- request that gender experts review draft plans and strategies;
- ensure that any background and stocktaking exercises associated with development of the plans and strategies adequately account for the different roles for women and men;
- ensure that women are effectively engaged as members of stakeholder groups consulted during development of the strategies and plans;
- consider including gender-disaggregated data collection and/or gender-specific indicators; and
- consider how national gender policies can be incorporated into sectoral strategies and action plans.

C. DESCRIBE THE ENABLING ACTIVITY AND INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION

Discuss the work intended to be undertaken and the output expected from each activity as outlined in Table A

The project will be implemented under the National Implementation Modality (NIM), with the Ministry of Economic Growth and Job Creation, Climate Change Division as the implementing entity/responsible partner. UNDP, as the Senior Supplier, will support the implementation of the project through monitoring, evaluation, and other organizational support activities in accordance with the Standard Basic Agreement of Assistance.

In keeping with previously established practice, a Project Board will be constituted comprising senior representatives of government, academia, the private sector and an NGO or CBO. The Project Board will be co-chaired by the Planning Institute of Jamaica and the Ministry of Economic Growth and Job Creation. Among the entities to be considered are the National Water Commission, Office of Disaster Preparedness and Emergency Management, Water Resources Authority, Meteorological Service, National Environment and Planning Agency, Forestry Department, the Private Sector Organization of Jamaica, and University of the West Indies. UNDP will also be an *ex officio* member of the Project Board. The board, once constituted, will determine whether other entities are coopted or if changes are necessary; it will also adopt terms of reference to guide how it operates.

A Project Management Unit (PMU) that will be embedded in the Climate Change Division of the Ministry of Economic Growth and Job Creation. The PMU will be the executing and operational unit that will coordinate and implement the project activities for the preparation of the 4NC and 2BUR.

The Government will provide support to the project through the use of equipment and premises for conference and meetings. The in-kind contribution from the government is estimated at US\$ 246,000, of which an estimated US\$ 150,000 will support technical capacity building activities and US\$ 96,000 will support project management over the four years of project implementation. In-kind contribution from the government is estimated on the basis of the active engagement of stakeholders in the various learning-by-doing workshops as well as other related project activities. UNDP will provide a cash contribution of US\$ 50,000 to support implementation of the technical components from TRAC.

The institutional structure of the project will be based on the existing institutional arrangements. Preparation processes of 4NC and 2BUR will be closely coordinated by the UNFCCC National Focal Point in Jamaica. Day-to-day management of the project will be assured by the project manager, who will be responsible for setting up the project team, while the national focal point will monitor and verify the project results.

Three project working groups will be created, one for each of the three project components, i.e., National Communications; Biennial Update Report; and Knowledge Management, Monitoring, and Evaluation. Thematic working groups will be organized according the technical nature of the work to be carried out, each of which will report back to the relevant project working group. The creation of these working groups will be reconciled with the CBIT National Transparency Working Group to reduce unnecessary overlap while fostering synergies and improved coordination between the two projects. Thematic working groups include, but are not limited to the GHG Inventory, mitigation actions

and domestic MRV, vulnerability and assessment, gender mainstreaming, financial costing of mitigation and adaptation measures, and national circumstances. The compilation of the NC and BUR will be carried in their respective component and with technical oversight by the respective working group. Each thematic working group will comprise a number of experts drawing both from public and private sectors, communities, and NGOs, as appropriate. These working groups will provide technical oversight and inputs into the project outputs.

The Project Board will be the highest policy-level body, which will provide support and guidance to the implementation of the project and ensure that the project findings are disseminated to, and validated by, all relevant stakeholders in Jamaica.

Narrative description of the planned outputs and activities:

1. Development of the Fourth National Communication on Climate Change (4NC)

Outcome: Fourth NC developed, endorsed by Government, and submitted in accordance with the guidelines contained in FCCC/CP/2002/7/Add.2

The various outputs and associated activities under this component will serve to improve and institutionalize, to the extent possible, the in-country capacities to prepare the technical information required of National Communications, national adaptation plans, and also the Paris Agreement's national adaptation communications. The outputs of Component 1 are organized as relatively discrete outputs, e.g., national circumstances report, financial valuation report, and climate change vulnerability assessments. These will be prepared through learning-by-doing workshops so as to build and institutionalize a critical mass of accessible expertise, to the extent possible. Whereas each of the following outputs are organized as discrete sets of capacity building exercises, the products of each will be organized into the Fourth National Communication.

Outputs

1.1 Assessment of Jamaica's National Circumstances pertaining to Climate Change, with a view of collecting and managing gender disaggregated data and implications for gender equality and women's empowerment, where available.

This output will outline Jamaica's national circumstances concerning the physical and socio-economic (economy, education, population, health, and livelihoods) characteristics of the country and how these might affect the way in which Jamaica addresses climate change and sustainable development issues in the long term. This will include outlining the management information systems for collecting and managing gender disaggregated data as well as describing the institutional arrangements relevant to the on-going preparation of the National Communication and National Adaptation Plan, such as roles and responsibilities among government agencies and departments, academic and research institutions, and other non-state organizations as applicable. The report will include an overview of the progress made, priorities and strategies, support needed and cooperation at the national, regional and international levels on adaptation. Further it will explore barriers, challenges and gaps with respect to adaptation action, while also taking greater cognizance of the efforts to avert, minimize and address loss and damage across selected sectors where possible.

1.2 <u>National GHG Inventory is updated to year 2019</u> for the following sectors: agriculture, forestry and other land use, energy, and waste, and industrial processes and product use, in line with the 2006 IPCC guidelines, and introduction of the 2019 Refinement to the extent possible. The quality of the existing time series data improved, with QA/QC plan in place and applied on continuous basis.

As outlined in the TNC, the gaps as they relate to the preparation of the GHG Inventory per IPCC sectors as are follows:

- Insufficient capacity to collect data for the GHG Inventory and to calculate emission metrics per the latest IPCC guidelines. For example, the biological oxygen demand for one-third of the sewage treatment was not available and the agencies responsible for providing data on sludge removal and the amount of methane recovery were not able to provide this data.
- Insufficient understanding and interpretation of the GHG Inventory to inform cross-sectoral decision- and policy-making, including estimating costs of damage and loss related to climate change.
- Insufficient financing for the continuous collection, management, and calculation of GHG Inventory-relevant data. For example, due to incomplete data, interpolation and extrapolation was necessary in order to extend available data over multiple years.
- Inadequate technology to collect and manage data to calculate impact modelling, in particular long time series of data. For example, the uncertainty assessment in the waste sector results in relatively high emission factors for methane from landfills. Additional data will help reduce the uncertainty of the emission factors, and thus improve the modelling of methane generation.

The TNC covered emission estimation for 2006-2012 period. Methodologies were following the 2006 IPCC Guidelines, and the 2006 GPG-LULUCF. The Lessons Learned from the implementation of the Third National Communication and Biennial Update report identified a number of capacity building needs relevant to the GHG Inventory. These include, but not limited to:

- •Strengthening the skillsets of national sectoral experts from relevant institutions and the Climate Change Division to prepare the GHG inventory on a continuous basis;
- •Training on the use of the 2006 IPCC guidelines for calculating estimates of GHG emissions and removals on a sector-by-sector basis;
- •Enhancing the capacity of national experts to compile the independent datasets to improve emission calculation, using both the reference and sectoral approaches; and
- •Training on data compilation, management and maintenance of databases with good practices in knowledge management on GHG data.

To the extent possible, the existing time series will be upgraded through the introduction of country-specific Tier II methodologies and higher order Tier III methods, such as models. The latest set of emissions inventory data are for the years 2006-2012 using the IPCC 2006 Guidelines. However, the 2000-2005 emission estimates were incomplete and used 1996 IPCC Guidelines. Building on the assessment results of 2.1, activities under the GHG outputs of 4NC and BUR2 will include improving mechanisms for the continued collection of GHG relevant data. Learning-by-doing workshops will be convened to critically examine new analytic methodologies on the measurement and formulation of GHG relevant data. The purpose of these workshops is to engage as many relevant public sector staffs and other stakeholders as possible to learn a key set of technical skills and other tools to create and analyze the necessary data and information.

Based on the lessons learned from the Third National Communication, there is an important need to establish a robust database for all climate change related data. Some gaps in achieving successful implementation of this database include: inadequate information technology skillsets within CCD to manage a climate change clearinghouse and a lack of coordination between users and producers of these data. To overcome such challenges, CCD will explore partnerships with other agencies including the National Spatial Data Management Branch and the Caribbean Climate Innovation Centre and also seek to capitalize on the outputs of projects and initiatives such as the Climate Risk Information Platform under Pilot Programme for Climate Resilience (PPCR), Jamaica Disaster Vulnerability Reduction Project (DVRP), or the Met Office climate database CLIDATA. Additionally, technical consultation on how to structure a database is necessary. These partnerships are important to create synergies and economies of scale among the various agencies carrying out related work.

1.3 Revised, updated, and validated assessment of Jamaica's mitigation potential by 2070 for the following sectors: agriculture forestry and other land use, energy (waste, transport, industry, residential and commercial).

Learning-by-doing workshops will revolve around identifying and assessing the contribution of mitigation actions since the ratification of the First National Determined Contributions in 2017. Particular attention will be paid to an in-depth assessment of challenges, barriers, and gaps to implement mitigation options. This will be complemented by new and updated information on mitigation potentials and aligned with relevant national strategic and development priorities, in particular the Vision 2030 Jamaica: National Development Plan and the 2018-2021 Medium-Term Socio-Economic Policy Framework (MTF) that serves is the implementation framework of Vision 2030. The mitigation potential for each sector will be reflected, as appropriate, in key national policy statements and reports to the extent that they can be measured as part of Jamaica's second Nationally Determined Contribution (NDC), the preparation of which is to be agreed at a later date. The main gaps and capacity building needs identified include policy makers' insufficient of understanding of the causes of climate change and thus are inadequately equipped to facilitate the implementation of a climate proof national policy. Prior to the adoption of the Paris Agreement in 2015, most internationally funded interventions emphasized adaptation, with mitigation being considered the purview of the larger and more polluting GHG emitting countries.

1.4 Updated information on the impacts, risks, and vulnerability (i.e., vulnerability assessments) to the adverse effects of climate change, as a well as adaptation measures. Based on best practices from recently completed efforts, the vulnerability assessments will be disaggregated by sector, with particular reference to gender. The vulnerability assessments will focus on the priority sectors of agriculture, coastal resources including human settlements, tourism, human health, and water.

Learning-by-doing workshops will be undertaken in order to strengthen the critical thinking of government staffs and other national stakeholders that may be involved in similar future exercises. The assessments will offer strategic and realistic approaches for Jamaica to adapt to the impacts of climate change over the near-, medium-, and long-term. The assessments will also include climate change impact and risks using the best available data and scientific studies. With respect to adaptation, the information will provide a synopsis of progress made and current priorities that will include lessons learned and good practices along with barriers, challenges and gaps relating to action (e.g., activities on the ground) and support (e.g., capacity, finance, and technology). Where possible, there will also be a look at efforts to avert, minimize and address loss and damage associated with climate change.

These will be complemented with an estimation of their financial and economic costs, including nature-based solutions using the latest climate change scenarios. These estimations will be reconciled with the environmental and social costs of climate change. This costing exercise will be carried out in order to help prioritize and mobilize the necessary financial resources, as well as leverage economic drivers to minimize losses and damages as a result of climate change to the extent possible. The assessment will also differentiate vulnerability according to socio-economic class, sector, and gender.

1.5 Learning-by-doing workshops to facilitate the mainstreaming of climate change into relevant social, economic and environmental policies and actions in accordance with Article 4, paragraph 1(f) of the Convention, Article 7 of the Paris Agreement, as well as any other relevant international agreements. These workshops will target each sector using best applicable practices, with particular consideration in each to be more inclusive of traditionally marginalized social actors. Special consideration will be given to a more in-depth analysis of the intersection between gender and climate change as per the Gender Action Plan adopted at COP 23 and in alignment with Jamaica's National Policy for Gender Equality. The project will provide support to build capacities to broadening an understanding of the purpose of the national communications, their content, consideration and integration of gender issues and the environment, and the role of gender in the national communication/biennial update report process.

2. Development of the Second Biennial Update Report on Climate Change (2BUR)

Outcome: Second BUR developed, endorsed by Government, and submitted in accordance with the guidelines contained in Annex III of Dec.2/CP. 17

Discrete project outputs, e.g., SWOT analysis report and mitigation scenarios report, will be prepared through learning-by-doing workshops and not by recruiting experts to prepare them. The process of preparing these outputs will serve to impart new and improved skills and related capacities to create and manage high quality data and information. Among the key information to be contained in the BUR is a national inventory on anthropogenic GHG emissions identified their sources and their removal identified by their sinks (excluding those covered by the Montreal Protocol). The BUR will also contain information on mitigation actions, their effects, the associated methodologies and assumptions, as well as an analysis of the constraints, gaps, and related financial, technical, and capacity needs that have been supported and that which remain.

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The outputs and associated activities under this component will need to be strategically organized and implemented in close partnership with the Inter-American Development Bank's implementation of the GEF-funded Capacity Building Initiative for Transparency (CBIT) project. The latter project includes a significant GEF contribution (US\$ 560,000) to establish a robust system of MRV, as well as to strengthen the associated technical capacities[1]. The products of the activities under this component will be organized into the Second Biennial Update Report. As a result, other than the workshops to update/upgrade emissions data and mitigation scenarios, the 4NC/2BUR project will not carry out any MRV capacity building. Notwithstanding, the 2BUR will be prepared in such a way that the timing of its preparation builds upon and creates important synergies with the CBIT project, and the 2BUR's completion and submission is not dependent on the delivery of outputs from the CBIT project.

Outputs

- 2.1 Updated SWOT analysis of institutional arrangements and technical capacities needed to prepare updated Biennial Update Reports on a continuous basis and in a sustainable manner. Particular attention will be given to improving gender disaggregated data as well as linking results with the achievement of Sustainable Development Goals. This analysis will be carried by a set of learning-by-doing workshops whereby technical staffs from key agencies contribute to identifying and developing a consensus on the on-going institutional challenges and technical capacities opportunities related to the preparation of the biennial update reports.
- 2.2 National GHG Inventory is updated to years 2013-2019 in accordance to the 2006 IPCC guidelines, taking into considerations its 2019 Refinement to the extent possible. This will be applied to the following sectors: Energy, Agriculture, Forestry, and Other Land Use, Industrial Processes and Product Use, and Waste. Similar to output 1.2, the preparation of the GHG Inventory, to be reported under the Second BUR, will give continuity to previous work and will address the GHG related needs identified in the ICA process. Quality improvement works will be focused on the capacity-building and institutional strengthening, the methods and approaches for data collection process, filling data gaps and supporting establishment of a sustainable system for developing GHGI.
- 2.3 Alternative mitigation scenarios are developed and reconciled with the 2009-2030 National Energy Policy, relevant projects, and associated programmes. Learning-by-doing workshops will be organized so as to increase the critical mass of in-country expertise available to prepare the relevant scenarios as well as to reconcile these with broader development priorities as outlined in key national development strategies. Key partners in these workshops include the private sector to help identify and calculate realistic mitigation potentials. These scenarios will also be supplemented by socio-economic research to make some assessment as to the social impacts of alternative mitigation scenarios. The specific mitigation scenarios to be developed will be negotiated and selected closer to the time that relevant activities will be carried out. A major gap and capacity building need is impact modelling a way to test what the future would look like without costly physical experimentation. For example, crop modelling allows one to see what success transplanting a variety from another location would have without having to invest in cultivating the plant itself. Additionally, the Meteorological Service needs more real-time weather stations, but further work must be done to determine optimum weather station distribution by looking at topography and other factors affecting microclimate. In the same vein, security for weather stations is needed so that they can be securely placed at the sites at which they will be more useful. The Meteorological Service also needs to acquire long time series data for analysis. An additional set of trainings will be to enhance national capacity to report on individual mitigation actions, consistent with the relevant reporting provisions outlined in the UNFCCC reporting guidelines on BURs, in particular paragraph 12(a–d).

2.4 Technology Needs Assessment and workshops: The technology, financial and capacity needs (including data collection) for mitigation are outlined and recommendations with government priorities identified. Building on the training workshops and results of output 2.3, this output comprises a set of additional learning-by-doing workshops to take selected mitigation scenarios to identify their particular resource needs. The purpose of these workshops is to facilitate critical thinking about how to strategically and cost-effectively pursue alternative development that capitalizes on opportunities to reduce greenhouse gas emissions. The activities under this output will be implemented in collaboration with UNEP and the Denmark Technical University.

2.5 Reporting on measurement, reporting, and verification:

Under the first BUR, Jamaica reported its MRV system is in an embryonic stage being designed to focus on exploring how the establishment of the domestic MRV system can be best achieved within the Climate Change Division of the Ministry of Economic Growth and Job Creation. Further during the ICA process a capacity-building need was identified to "Enhancing national capacity to establish a comprehensive, fully developed and continuous MRV system, covering all aspects of the BUR reporting requirements, including domestic MRV of mitigation actions, including of NAMAs, the GHG inventory system, technology and financial support, and linking MRV of support to the national budgetary process."

The Inter-American Development Bank will be implementing a GEF funded CBIT project to strengthen Jamaica's transparency framework through the design and implementation of a fully functional and harmonized domestic Measuring, Reporting and Verification system for the effective implementation of the country's Nationally Determined Contribution (NDC) and other transparency-related activities. The CBIT project was approved for implementation and is due to begin in late 2019. The Second BUR and CBIT projects will coordinate the timelines through the Climate Change Division - Ministry of Economic Growth and Job Creation to align the work plans of each project to enhance synergies and applicability of capacity-built/tools. The progress on the establishment of the domestic MRV will be reported under the Second BUR.

3. Knowledge management

Outcome: Improved awareness, understanding, and critical thinking is realized through the preparation of various knowledge management products, monitoring, financial management, and evaluation

This component comprises a set of activities that serves to improve a critical understanding of what climate change means for everyday living. In particular, activities are intended to highlight the broader linkages between climate change and socio-economic development and a visualization of a holistic approach to sustainable development from a climate change perspective. Products include developing key awareness-raising materials that are targeted to the appropriate audiences to ensure absorption of the material. Other activities are intended to create and capitalize on opportunities to engage the private sector in pursuing new approaches and technologies to mitigate and adapt to the impacts of climate change.

The political directorate has a significant role to play in climate change action, and the 4NC will try to facilitate their enhanced understanding and information on climate change issues. Sensitization activities will be carried out with the aim of increasing their capacity for climate-based decision making. Journalists will also be invited to workshops targeted to improving how climate change issues are more effectively communicated in the popular press (radio, television, and/or print media).

This component also includes the preparation of standard UNDP M&E reports, which include reports on the project inception workshop, financial management, and project progress. This component will also develop a more comprehensive analysis of gender and an action plan to address capacities relevant to national communications and biennial update reports/biennial transparency frameworks.

Outputs

- 3.1 Awareness-raising materials prepared to promote greater sensitization among decision- and policy-makers, private sector, journalists, and civil society, including inner-city, rural and other affected communities. A targeted set of awareness-raising materials will be produced highlighting successes and examples of good practices for Jamaica to adopt alternative approaches that help reduce greenhouse gas emissions as well as adapt to the impacts of climate change. Particular attention will be given to practices that are readily accessible and relevant to the Jamaican context, as well as for rural and inner-city communities that are particularly vulnerable.
- 3.2 Policy dialogues and workshops are carried out to promote greater sensitization among decision- and policy-makers, private sector, journalists, and civil society, including inner-city, rural and other affected communities. The project will organize five targeted types of awareness-raising sessions or engagements:
- a) decision- and policy-makers, including parliamentarians;

- b) private sector;
- c) journalists active in the radio, television, and print media;
- d) civil society; and
- e) annual climate change youth engagement workshops.

Each session will be organized to suit the particularities of their audiences. Possible training solutions could be a course to increase the content of climate change issues in tertiary education institutions; learning-by-doing training done through workshops undertaken at regular intervals to maximize the number of participants and to minimize loss of institutional memory; training done through the Caribbean Community Climate Change Centre on the Caribbean Climate Online Risk Assessment Tool (C-Coral), among other possible organizations. Another major gap is the lack of cross sector communication, thus lack of knowledge transfers between organizations.

3.3 Monitoring and evaluation of the project outcomes and outputs executed in line with the M&E plan: Inception workshop held: gender analysis and action plan completed; project financial and progress reports on quarterly and annual basis prepared; end of project report; gaps and lessons learned compiled. In addition to following the standard UNDP M&E requirements, these assessments will include various forms to measure the extent to which new methodologies, procedures, and skillsets learned through the project have been institutionalized. This includes ensuring that these periodic assessments inform the appropriate modifications to the design of the learning-by-doing workshops and other technical capacity building activity. To the extent possible, they should inform how technical capacity building will be organized in other projects. These will be collated and analyzed at the end of the project to make some inference as to the capacities (systemic, institutional, and individual) that were strengthened during the course of project implementation. Care will be taken not to attribute these improved capacities to the activities carried out under this project. The end-of-project study will make recommendations on the kinds of future capacity building activities that are deemed necessary to increase institutional absorption.

D. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT

^[1] Jamaica currently has a Beta version of a GHG Inventory Database Management System, which intends to store activity data, emissions factors and calculations used to estimate GHG emissions.

Project will identify synergies with other on-going projects to increase cost-effectiveness and enhance consistencies with various national development priorities and programmes undertaken at national and local levels. This will include the IDB/CBIT project that will be carrying out MRV capacity building activities that are complementary to the 4NC/2BUR project. The expected CBIT outcomes are:

- Enhanced institutional arrangements developed for long-term planning and timely reporting of transparency-related activities.
- A fully functional domestic MRV system designed and established to monitor and evaluate adaptation, mitigation, climate financing and capacity building
- Improvement of National GHG Inventory that effectively tracks towards achieving national targets
- · Improved capacity, enhanced inter-agency coordination and knowledge management established

The activities of the Smalls Grants Programme, Pilot Programme for Climate Resilience, and the Climate Change Adaptation and Disaster Risk Reduction Project are among key initiatives that will inform the early stages of 4NC/2BUR implementation by the CCD. The cost-effectiveness lies primarily in how activities under each of the respective projects will be implemented. For example, workshops planned under parallel projects would be organized together if workshop participants are by and large the same individuals. This will help reduce workshop costs as well as foster greater inter-agency collaboration.

The cost-effectiveness of this project is also exemplified by the in-kind contribution of the government partners to organize and host select meetings and workshops. This serves to make more efficient use of sunk administrative and overhead costs, thereby reducing the need for cash outlays by the project.

E. DESCRIBE, DESCRIBE THE BUDGETED M & E PLAN

The project monitoring and evaluation will be carried out according to UNDP and GEF programming policies and procedures.

Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;

- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the audit; and
- g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be prepared in one of the official UN languages, duly signed by designated persons, cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

Annual progress:

Status Survey Questionnaires to indicate progress and identify bottlenecks as well as technical support needs will be carried out once a year, in line with GEF and UNFCCC reporting requirements for NCs and BURs.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyze and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

End of Project:

During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results. The Project Terminal Report shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

F. EXPLAIN THE DEVIATIONS FROM TYPICAL COST RANGES (WHERE APPLICABLE)

N/A

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Focal Point Name	Focal Point Title	Ministry	Signed Date
Ms. Gillian Guthrie	Acting Chief Technical Director	Ministry of Economic Growth and Job Creation	9/5/2019

B. Convention Participation

Convention	Date of Ratification/Accession	National Focal Point
UNCBD	1/6/1995	Dr. Suzanne Davis
UNFCCC	1/6/1995	Ms. Una May Gordon
UNCCD	12/11/1997	Ms. Marsha Henry Martin
Stockholm Convention	1/6/2007	Ms. Tyesha Turner



Submitted to GEF Secretariat Review

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