



Strengthening capacity in the Energy, Agriculture, Forestry, and other Land-use Sectors for Enhanced Transparency in the Implementation and Monitoring of Vanuatu's Nationally Determined Contribution

Part I: Project Information

GEF ID

10761

Project Type

MSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **Yes**

NGI **No**

Project Title

Strengthening capacity in the Energy, Agriculture, Forestry, and other Land-use Sectors for Enhanced Transparency in the Implementation and Monitoring of Vanuatu's Nationally Determined Contribution

Countries

Vanuatu

Agency(ies)

FAO

Other Executing Partner(s)

Department of Environment Protection and Conservation (DEPC) of Vanuatu MOCC

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Focal Areas, Climate Change, Climate Change Adaptation, Climate information, Small Island Developing States, United Nations Framework Convention on Climate Change, Nationally Determined Contribution, Capacity Building Initiative for Transparency, Enabling Activities, Paris Agreement, Climate Change

Mitigation, Financing, Influencing models, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Stakeholders, Civil Society, Non-Governmental Organization, Academia, Communications, Awareness Raising, Type of Engagement, Consultation, Participation, Information Dissemination, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Gender results areas, Knowledge Generation and Exchange, Capacity Development, Capacity, Knowledge and Research, Learning, Indicators to measure change, Knowledge Generation

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 2

Climate Change Adaptation

Climate Change Adaptation 1

Duration

36 In Months

Agency Fee(\$)

108,035.00

Submission Date

2/8/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-3-8	GET	1,137,215.00	2,994,500.00
Total Project Cost (\$)		1,137,215.00	2,994,500.00

B. Indicative Project description summary

Project Objective

To develop Vanuatu's institutional and human capacities for complying with Enhanced Transparency Framework (ETF) reporting requirements of the Paris Agreement, and implementation and monitoring of Vanuatu's Nationally Determined Contribution focusing on Energy, Agriculture, Forestry and other Land-use Sectors.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Strengthening Vanuatu's institutional arrangements for a robust MRV system for NDC climate change mitigation and adaptation actions.	Technical Assistance	1.1.NDC transparency system in place following the UNFCCC modalities, procedures, and guidelines	<p>1.1.1 Institutional arrangements strengthened.</p> <p><i>Activity 1.1.1.1 Conducting gaps assessment focusing on institutional, regulatory, human, technology, finance, and capacity building support needed, and stakeholder mapping to meet the transparency framework of NDC and enhanced NDC actions.</i></p> <p><i>Activity 1.1.1.2 Working groups with institutional focal persons are identified and formalized through ministerial decree for data collection and processing focusing on mitigation, adaptation and loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset events; and activities to avert, minimize and address them).</i></p>	GET	323,494.00	635,835.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Strengthening Vanuatu's institutional arrangements for a robust MRV system for NDC climate change mitigation and adaptation actions.	Technical Assistance	Outcome 1.2 Key Ministries, Agencies, Departments, and other stakeholder's capacity strengthened to track the NDC actions	1.2.1 Strengthened guidelines on monitoring and reporting of climate financing focusing on domestic and international sources, and both public and private sector. <i>Activity 1.2.1.1 Assessment of needs, constraints, and stakeholders on tracking climate finance on NDC and enhanced NDC actions.</i> <i>Activity 1.2.1.2 Developing methodologies, guidelines, and protocols to collect, archive, and disseminate climate finance data.</i> <i>Activity 1.2.1.3 Establishment of National Climate Finance Reporting and Monitoring (NCFRM) cell linked with the proposed National ETF body to track climate finance of NDC and enhanced NDC actions under</i>	GET	223,619.00	548,004.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Provision of an online platform, tools, and training for a robust MRV system focusing on Energy, Agriculture, Forestry, and other Land-use Sectors.	Technical Assistance	2.1 Operational digital data integration and sharing system for a robust MRV system hosted by DEPC.	<p>2.1.1 Upgraded Information Technology (IT) system for a robust MRV system hosted by DEPC based on the existing system.</p> <p><i>Activity 2.1.1.1 Procurement of hardware and software to develop an online-based integrated MRV system.</i></p> <p><i>Activity 2.1.1.2 Historical activity data are archived and new data are collected.</i></p> <p><i>Activity 2.1.1.3 National specific emission factors are collected and archived.</i></p> <p><i>Activity 2.1.1.4 Centralized database development with archived historical data for NDC actions hosted by DEPC.</i></p> <p><i>Activity 2.1.1.5 Operational integrated MRV system with online visualization</i></p>	GET	487,981.00	1,220,661.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
				Sub Total (\$)	1,035,094.00	2,404,500.00
Project Management Cost (PMC)						
GET			102,121.00		590,000.00	
Sub Total(\$)			102,121.00		590,000.00	
Total Project Cost(\$)			1,137,215.00		2,994,500.00	

C. Indicative sources 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(\$)
Donor Agency	Forest Carbon Partnership Facility - World Bank	In-kind	Recurrent expenditures	2,100,000.00
Donor Agency	Climate Action Enhancement Package - UNDP Trac	In-kind	Recurrent expenditures	304,500.00
Recipient Country Government	Ministry of Climate Change, Government of Vanuatu	In-kind	Recurrent expenditures	295,000.00
Recipient Country Government	Department of Forest, Government of Vanuatu	In-kind	Recurrent expenditures	295,000.00
Total Project Cost(\$)				2,994,500.00

Describe how any "Investment Mobilized" was identified

The Government of Vanuatu will provide support to the project by way of planning, implementation and supervision, rental, etc by the government staff from the treasury that is replenished annually. The initiatives under the ongoing Forest Carbon Partnership Facility (FCPF) and Climate Action Enhancement Package (CAEP) are aligned with, and will add value to, the proposed CBIT project and contribute to the national effort in reducing GHG emissions under its Nationally Determined Contribution. The in-kind contribution (Forest Carbon Partnership and Climate Action Enhancement Package) will be materialized through the use of facilities, and staff time (Ministry of Climate Change and Department of Forest), and National Forest Inventory (Department of Forest, Staff Time) will help to understand emission reduction, REDD+, National Forest Monitoring Systems, Forest monitoring systems including measurement, reporting and verification (MRV) functions. This will help to produce high-quality, reliable data on forests, including forest-carbon estimates, that are critical is addressing impacts of climate change caused by, among others, deforestation and degradation of forests.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
FAO	GET	Vanuatu	Climate Change	CBIT Set-Aside	1,137,215	108,035	1,245,250.00
Total GEF Resources(\$)					1,137,215.00	108,035.00	1,245,250.00

E. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

50,000

PPG Agency Fee (\$)

4,750

Agency	Trust Fund	Country	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
FAO	GET	Vanuatu	Climat e Change	CBIT Set-Aside	50,000	4,750	54,750.00
Total Project Costs(\$)					50,000.00	4,750.00	54,750.00

Core Indicators

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	124			
Male	261			
Total	385	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

* Indicator 11: The number of beneficiaries is estimated based on the number of staffs in different ministries and national agencies in the Vanuatu Government such as MOCC, Department of Environment Protection and Conservation (DEPC), Department of Climate Change, Department of Forest, Department of Energy (DoE), Department of Agriculture and Rural Development, Department of Industry (DoI), National Disaster Management Office (NDMO), Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity, Ministry of Finance and Economic Management, Ministry of Land and Natural Resources, Ministry of Infrastructure and Public Utilities, and Ministry of Foreign Affairs and External Trade, Vanuatu Meteorology and Geo-Hazard Department, and National Advisory Board (NAB). These staff will be directly involved in the project implementation and the country will ultimately benefit through technical capacity building of these staff. The number of direct beneficiaries will also include those from the Private Sector Organizations, such as Union Electrique du Vanuatu Limited (UNELCO), Vanuatu Utility Infrastructure (VUI) Ltd, Vanuatu Renewable Energy and Power Association (VANREPA), Vanuatu Primary Producers Authority (VPPA) and Vanuatu Chamber of Commerce (Agriculture, Livestock and Food Cluster).

Part II. Project Justification

1a. Project Description

(1) GLOBAL ENVIRONMENTAL PROBLEMS

1.1 Global transparency commitment in climate change mitigation and adaptation

1. The Paris Agreement (PA) was adopted in December 2015 to show the global commitment for avoiding dangerous impacts from climate change by keeping global temperature increase well below 2°C. The PA calls for Nationally Determined Contributions (NDC) submissions by each country to reduce emissions of greenhouse gases (GHGs). So, NDC is the core component of the PA, and the achievement of the global commitment towards limiting the global warming target of well below 2°C. As per PA, all the signatory country stated their national target and activity plan to reduce national GHG emissions, and adaptation planning for climate change impacts^[1].

2. The PA also calls for enhanced transparency framework (ETF), and Article 13 of it explicitly mentioned enhanced transparency framework for action and support, with built-in flexibility considering capacities of different Parties, and global collective experience. The key goal of the ETF is to ensure transparency and clarity in relation to individual Parties climate change mitigation and adaptation, as well as support provided and received to have a clear overview of aggregate financial support provided, and disseminate the information to the global stocktake under Article 14. In fact, Article 4, Article 5, Article 6, Article 11, Article 12, Article 13, and Article 14 is somewhat related to ensure global transparency in climate change mitigation and adaptation actions. For example, Article 6 mention about the requirement of transparency framework under the PA, and potential use of market and non-market-based approaches^[2].

1.2 National commitment of Vanuatu towards climate change mitigation and adaptation

3. The Government of Vanuatu (GoV) is working with to combat global climate change along with the global community since 1992. Vanuatu signed the UNFCCC convention on 9 June 1992, and deposited its instrument of ratification on 25 March 1993^[3]. Vanuatu is classified as a non-Annex I country highlighting the country's vulnerability to the adverse impacts of climate change, thus requiring special needs and concerns. Vanuatu ratified the Kyoto Protocol in July 2001 and the Paris Agreement in September 2016 ^[4]. Vanuatu will graduate from the least developed country (LDC) category on 4 December 2020^[5].

4. Since, 2012 the country has strong participation towards transparency in decision-making. For the 19th Conference of the Parties (COP19), Vanuatu sent a gender-balanced delegation consisting of government, civil society, and academic resulting in unprecedented success at the negotiations^[6]. Such participation continued in COP20, COP21, and COP22 to ensure the country's top priorities on climate

finance, and loss and damage. Vanuatu is also member of the UNFCCC's Climate Technology Center and Network (CTCN)^[7].

5. The country submitted Initial National Communication (INC) to the UNFCCC in October 1999, and Second National Communication (SNC) has submitted in 2014. The National Adaptation Plan of Action (NAPA) was submitted in December 2007. Vanuatu is the only Pacific Island Country to have completed both a National Adaptation Program of Action (NAPA) and a National Action Plan (NAP) for Disaster Risk Reduction^[8]. The country has already prepared Nationally Appropriate Mitigation Action (NAMA) focused on rural electrification in 2015. The overall target of the NAMA is to support Vanuatu in achieving the goal defined in the National Energy Road Map (NERM), namely to provide access to electricity to all households in Vanuatu. The NAMA will reduce GHG emissions through the replacement of fossil fuels with renewable energies ^[9]. Intended Nationally Determined Contribution (INDC) of Vanuatu was submitted in September 2015, and an enhanced Nationally Determined Contribution (NDC) document is forthcoming. The Third National Communication (TNC) is under preparation, and the Biennial Update Report (BUR) is not submitted yet. The country has also developed National Climate Change Adaptation Strategy for Land-Based Resources in 2011^[10].

1.3 Root causes and barriers to be addressed

6. Based on the gaps and barriers identified in the two national communications, NDC, and Vanuatu Risk Governance Assessment (2013) the root causes and barriers are:

? Lack of integrated, systematic, continuous coordination and institutional mechanism focusing on data and information sharing related to climate change mitigation, adaptation, loss and damages. This is the biggest barrier to consolidate the outcome. A lot of work is happening at national, provincial, area, village level, which need to be captured. There is need to have a good system to materialize the capacity planning and channeling the finance.

? Lack of technical expertise and knowledge of measuring, reporting, and verification (MRV) of GHG emission, monitoring of adaptation actions, and loss and damages.

? Lack of centralized data storage, archiving, and information management system focusing on mitigation and adaptation activity data, and as well as loss and damages data.

These root causes and barriers are further elaborated in section 2.9.

[1] https://nab.vu/sites/default/files/nab/documents/03/04/2014%20-%2012%3A42/final_rga_report_26_february_14.pdf

(2) BASELINE SCENARIO

2.1 Country Context

7. Vanuatu is an archipelagic country located in the South Pacific. The country is located between latitude 12° to 23° South, and longitude 166° to 173° East (Figure 1). It is mostly mountainous, with narrow coastal plains. The highest peak of the country is Mount Tabwemasana located in Espiritu Santo island, which is 1877m above mean sea level. Vanuatu has several active mountainous and underwater volcanoes, such as-Lopevi, Mount Yasur, and hence volcanic activity is common with danger of major eruption . Vanuatu is recognized as a distinct terrestrial ecoregion with its rain forests, and part of the Australasian realm. The country consisting of 86 islands (65 of which are inhabited) covering 12,000 km² of land area. The total coastline of the country is about 2,528 km long. The

largest island is Espiritu Santo, and Efate island is the home to the capital, Port Vila and the Vanuatu Government. Espiritu Santo and Malekula islands comprised nearly 50% of the total land mass.

8. Vanuatu is situated in a tropical maritime climate having uniform temperature, high humidity and variable rainfall. From May to October tropical climate is moderated by southeast trade winds. Hot and wet season of the country is from November to April, and cool and dry is from May to October. Vanuatu has a long rainy season, with significant rainfall occurring nearly every month. The rainfall of the country is strongly influenced by the position and strength of the South Pacific Convergence Zone. As a result, during summer, the South Pacific Convergence Zone intensifies and moves further south, bringing the higher rainfall of the wet season. Rainfall is abundant in northernmost islands, with 4,000 millimeters of annual rain fall. The rainfall gradually decreases to the south of the country with 2,200 to 2,500 mm of annual rainfall.

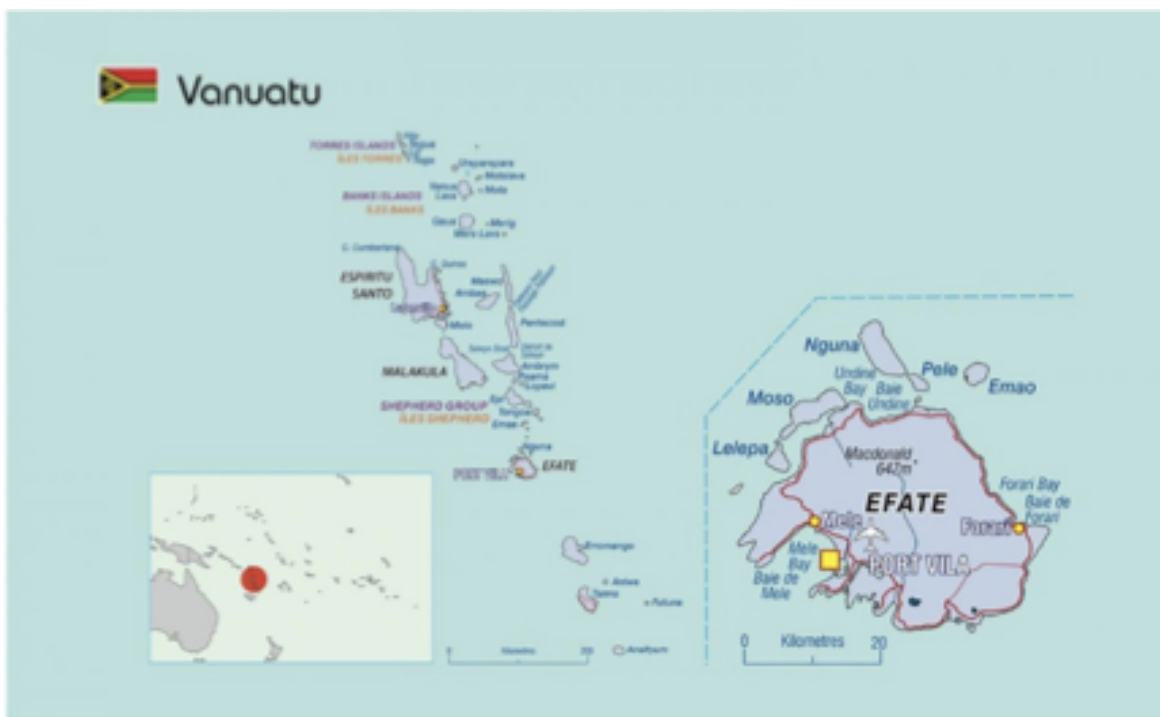


Figure 1: Map of Vanuatu. (Source: Vanuatu's Enhanced Nationally Determined Contributions 2020-2030, Forthcoming).

9. Vanuatu is a developing economy and graduated from the least developed country (LDC) category on 4 December 2020 . The 2018 gross domestic product (GDP) of Vanuatu is 914.3 million USD (current prices), and the GDP growth is 3.2% (2018) . According to the UN estimates, the population of the country as of July 1, 2020 was 307,145 (51% Male and 49% Female). The annual growth rate of the population is 2.42% and the population density is 25 people/sq. Km . The population distribution of Vanuatu considering the major population centre is presented in the Figure 2. According to the World Bank development indicators the urban population in Vanuatu is around 26% of total population in 2019 . The urban and rural population is increasing with an average rate of 3.5% and 1.9% per year since 1999 . Vanuatu's people depend on dual economic system, i.e., the subsistence and the cash

economy. Most of the people is dependent on natural resources, and around 80% people relies on subsistence agriculture, contributing around 10% the country's GDP. Copra is the prominent cash crop, and constitute 35% of Vanuatu's exports, followed by timber, beef, and cocoa . The industry, service, and agriculture sector contributed around 12%, 61%, 27% of the current GDP, respectively . Agriculture, fishing and forestry are the key primary industries; mining and quarrying, manufacturing, electricity and water, and construction are the secondary industries, while retail, hospitality-hotels and restaurants, transport, communication, finance and business services are the tertiary sectors . The status of Vanuatu concerning the first six Sustainable Development Goals (SDGs) is presented in Table 1, and the trend of life expectancy, education, gross national income (GNI) per capita as a component of HDI is presented in Table 2.

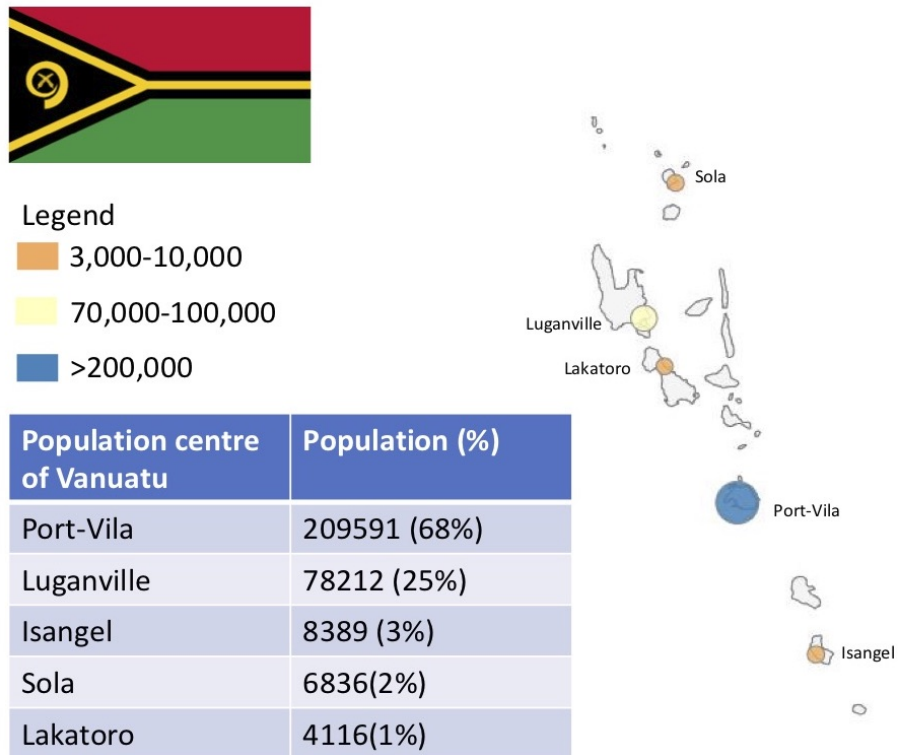


Figure 2: The population distribution of Vanuatu. (Source: Population data is based on UN 2020 estimates^[16])

Table 1: Selected indicators of Vanuatu related to the first six Sustainable Development Goals (SDGs).

Indicators description	Sustainable Development Goals (SDGs)	Year	Indicators value
Unemployment rate	SDG 1	2019	4.4%

Indicators description	Sustainable Development Goals (SDGs)	Year	Indicators value
Prevalence of Undernourishment	SDG 2	2016-18	7.2%
Prevalence of Stunting among Children under 5 Years of Age		2013	28.9%
Maternal Mortality Ratio (Per 100,000 lives birth)	✘ SDG 3	2017	72
Under-5 Mortality Rate (Per 100,000 lives birth)		2018	26
Neonatal Mortality Rate		2018	12
Tuberculosis incidence (per 100,000 population)		2018	46
	SDG 4		
The proportion of Teachers Who Have Received at Least the Minimum Organized Teacher Training		2015	21.5%
The proportion of Seats Held by Women in National Parliaments	SDG 5	2016	3.8%
The proportion of Population Using Safely Managed Drinking Water Services	SDG 6	2015	91%
The proportion of Population Using Safely Managed Sanitation		2015	53%

Source: (1) Basic Statistics, Asia, and the Pacific. Asian Development Bank^[22]. (2) World Bank development indicators^[23]. (3) WHO country profile^[24].

Table 2: The trend of life expectancy, education, gross national income (GNI) per capita as a component of HDI between 1990 and 2018

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1990	64.7			2,619	
1995	66.2			2,421	
2000	67.4	10.1		2,690	
2005	68.4	10.6	6.5	2,441	0.569
2010	69.1	10.8	6.7	2,846	0.585
2015	69.9	11.4	6.8	2,680	0.592
2016	70.0	11.4	6.7	2,751	0.592
2017	70.2	11.4	6.8	2,799	0.595
2018	70.3	11.4	6.8	2,808	0.597

Source: Vanuatu Human Development Report 2019 ^[30].

10. Life and culture of Vanuatu are strongly connected to land, ocean and environment. As a result, any change in climate parameters will have adverse impacts on biodiversity, ecosystems, livelihood and economy. Around 76% of the population covering 81% of the landmass is exposed to natural

hazards, such as volcanic eruptions, cyclones, earthquakes, droughts, tsunamis, storm surge, coastal and river flooding and landslides. The country experiences 2-3 cyclones in a cyclone season with high frequency in January and February. On average, the country experiences some 20 to 30 cyclones with 3 to 5 causing severe damage^[31]. The United Nations World Risk Report (2012) marked Vanuatu as the most vulnerable country in the world to natural hazards and climate change^[32]. Cyclone Pam, which hit the country in 2015, once again showed the vulnerability of this country to climate risks^[33]. Over 21st century, surface air and sea surface temperature are projected to increase. The sea-level rise measured by satellite altimeters showed 6 mm rise per year near Vanuatu since 1993, which is higher than the global annual average of 3.2 ± 0.4 mm. Most of the future climate projections indicated growing climate and disaster risks for Vanuatu. Hence, climate change is likely to have profound impact on all economic sectors, and sustainable development of the country.

2.2 Greenhouse gas emission reported in National Communications

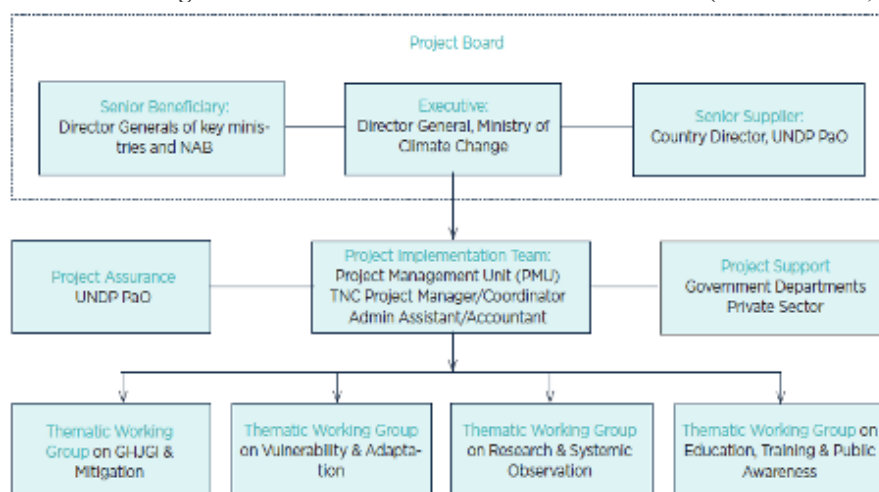
11. Vanuatu submitted the INC to the UNFCCC in October 1999, the SNC in 2014 and the TNC on 22 Mar 2021^[1], and BUR is not submitted yet. The country is in the process of preparing National Forest Reference Emission Level (FREL) through the Vanuatu REDD+ Project under the Department of Forestry^[34] ^[1] Third National Communication (SNC) of Vanuatu. <https://unfccc.int/documents/271162>

12. 1996 IPCC Guidelines were followed to prepare the INC, and in all cases default emission factors and conversion coefficients are used. The inventory focused on energy, agriculture, land-use and forestry sectors, and waste generation sector was not included^[35]. The SNC was prepared using methodology developed in the revised 1996 IPCC Guidelines or National Greenhouse Gas Inventories. The UNFCCC software "Non-Annex 1 National Greenhouse Gas Inventory Software, Version 1.3.3" was used for the estimation of GHG. The GHG inventory preparation was coordinated by the Department of Energy, and supported by the relevant departments such as Bureau of Statistics, Customs Department, Utility Regulatory Authority (URA), Department of Environment, Department of Forestry, Department of Agriculture, Department of Livestock and electricity utility companies UNELCO and Vanuatu Utility Infrastructure (VUI) through data compilation and reporting. The key steps were: (i) team formation to work on inventory, (ii) team capacity building/training, (iii) data collection for sectors covered under the inventory, (iv) identification of gaps, (v) documents/data review for quality assurance, and (vi) report (inventory) writing. Sectoral data for GHG estimation was compiled from various sources primarily using national data collected from annual reports, statistical reports, studies and brochures of related department/ institutions. Where actual data was not available judgment of sector experts was relied on. The sectors assessed was Energy, Industrial Processes and Product Use (IPPU), Agriculture, Forestry and Other Land Use, (AFOLU), and Waste^[36].

13. TNC preparation was based on 2006 IPCC Guidelines for Greenhouse Gas Inventories, and IPCC Good Practice Guidance (GPG), and IPCC Inventory Software (Version 2.54- June 2017) was used. It used both Tier1 and Tier2 methodologies (as appropriate) of 2006 IPCC guidelines. The national GHG Inventory for each year from 2007-2015 is prepared for all anthropogenic GHGs (excluding the precursor gases and gases covered under Montreal protocol). The key steps for the

preparation of TNC and national GHG inventory for the years 2007-2015 were: (a) Project Organization Structuring, (b) Thematic Working Group (TWGs) formation, (c) Training and Capacity building Programme, (d) Data collection, Identification of data gaps and uncertainty assessment. The TNC is being managed by the Project Board, mainly responsible for making by consensus, management decisions, and approval of project plans and revisions. The institutional arrangement of the TNC and composition of Thematic Working Groups (TWGs) are mentioned below.

The institutional arrangement of the Third National Communication (Source: TNC, Vanuatu)



The composition of TWGs of the Third National Communication (Source: TNC, Vanuatu)

TWGs	Member
TWG - National Circumstances	Department of Strategic Policy Planning and Aid Coordination (DESPAC)
	Department of Environmental Protection and Conservation (DEPC)
	Department of Finance and. Treasury (DFT)
	Department of Foreign Affairs and External Trade (DFET)
	National Advisory Board on Climate Change (NAB Sec)
	Department of Women Affairs (DWA)
	Department of Agriculture (DARD)
	Fisheries Department
TWG GHG-Green House Gas (GHGI)	Department of Energy (DOE)
	Department of Forests (DoF)
	Department of Agriculture (DARD)
	Livestock Department
	Port Vila Municipality Council (PVMC)
	Utilities Regulatory Authority (URA)
	Vanuatu National Statistics Office (NSO)
	Department of Environmental Protection and Conservation (DEPC)
	Department of Biosecurity
TWG - Vulnerability Assessment and Adaptation	Department of Environmental Protection and Conservation (DEPC)
	National Disaster Management Office (NDMO)
	Vanuatu Meteorology & Geohazards Division (VMGD)
	Department of Geology, Mines & Water Resources (DGMWR)

TWGs	Member
(V&A)	Department of Forests (DoF)
	Fisheries Department
	Ministry of Health (MoH)
	Public Works Department (PWD)
	Department of Local Authorities (DLA)
	Lands Survey
	Vanuatu Meteorology & Geohazards Division (VMGD)
TWG - Mitigation	Vanuatu Meteorology & Geohazards Division (VMGD)
	Ministry of Agriculture
	Ministry of Climate Change (MoCC)
	Ministry of Education and Training (MoET)
	National Disaster Management Office (NDMO)
	Vanuatu Meteorology & Geohazards Division (VMGD)
	Department of Environmental Protection and Conservation (DEPC)
	Department of Forests (DoF)
	Lands Survey
TWG - Research & Systematic Observation	Vanuatu Meteorology & Geohazards Division (VMGD)
	National Disaster Management Office (NDMO)
	Vanuatu Meteorology & Geohazards Division (VMGD)
	Department of Agriculture (DARD)
	Fisheries Department
	Department of Geology, Mines & Water Resources (DGMWR)
	Ministry of Health (MoH)

14 According to the TNC, the total national GHG emissions excluding removals in 2015 was 610.20 Gg CO₂e in comparison with 299.387 Gg CO₂e in 1994 (INC) and 585.387 Gg CO₂e in 2000 (SNC). The emission data as shown in Figure 3 from TNC, three major sectors contributing national GHG emissions i.e. Agriculture-Livestock and Land Use (73%), Energy (21%), and Waste Sector (6%). The sub-sectoral level analysis presented in Figure 4. The INC reported 1.1534 Gg CO₂e removal by forestry sector in 1994^[1]. The SNC reported 7,913.16 Gg CO₂e removal by forestry sector in 2000. Hence, the net removals in 2000 was 7,327.77 Gg CO₂e in 2000^[2]. The TNC reported 6973.7 Gg CO₂e removals, and hence, net removals in 2015 was 6363.5 Gg CO₂e^[3].

Categories	Total CO ₂ Emissions, (CO ₂ Equivalents Gg)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	
1 - Energy	60.42	92.31	95.10	119.66	127.53	114.87	121.54	128.55	129.55	
2 - Industrial Processes and Product Use										
3 - Agriculture, Forestry, and Other Land Use	427.45	433.32	309.22	414.91	427.07	432.11	388.60	439.51	443.38	
4 - Waste	29.55	30.43	31.33	32.24	33.18	34.15	35.16	36.20	37.28	
Total GHG Emissions, excl. Removals	517.41	556.06	435.65	566.82	587.79	581.13	545.30	604.26	610.20	

Figure 3: Vanuatu's National GHG Inventory (excl. removals) for the year 2007 to 2015. Source: TNC.

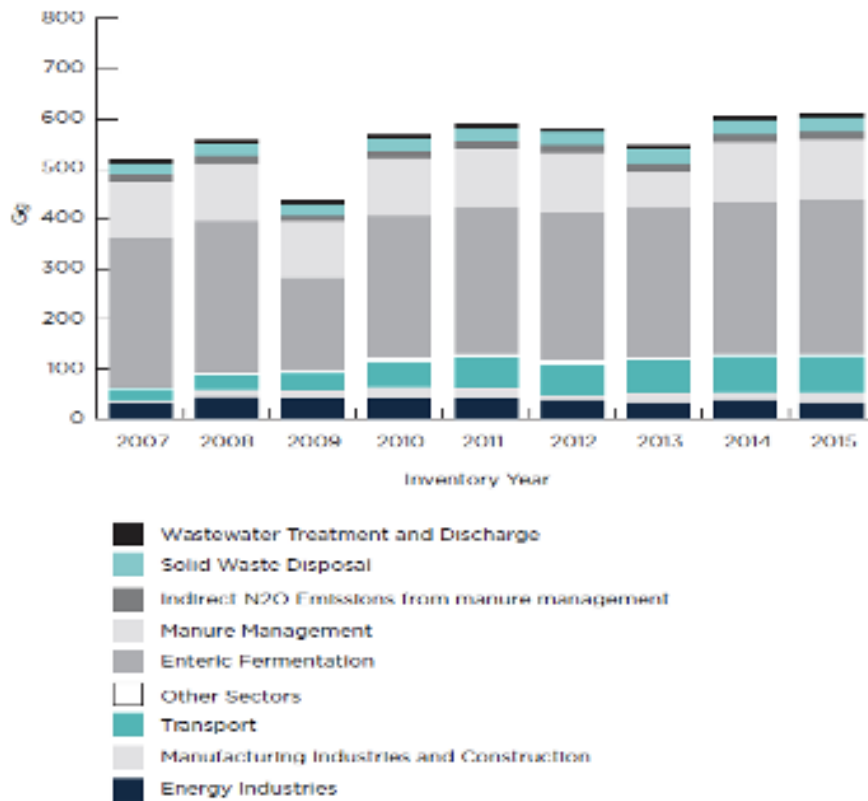


Figure 4: Sub-sectoral analysis of Vanuatu's National GHG emission (excluding removals) for the year 2007 to 2015. Source: TNC.

[1] Initial National Communication (INC) of Vanuatu. <https://www.nab.vu/document/vanuatus-initial-national-communication-unfccc>

[2] Second National Communication (SNC) of Vanuatu. https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf

[3] Third National Communication (SNC) of Vanuatu. <https://unfccc.int/documents/271162>

2.3 Climate Change vulnerability of Vanuatu

15. Major climate change impacts and geo-hazards for Vanuatu is presented in the report 'Profile of Risks from Climate Change and Geo-hazards in Vanuatu'[39]. According to this report, Agriculture (crops, cattle and sustenance), Fisheries (freshwater, coastal, deep sea, aquaculture), Forestry (including mangroves and production forest), Tourism (cruise-ships, hotels), Transport (road, ferries, and air), utilities (energy, water, and sanitation) and Health are most vulnerable for climate change. Around 80% of the population dependent on the subsistence agriculture for their livelihood. So, changes in rainfall distribution, temperature and distribution can have severe impacts on agricultural production. The numerous effects of climate change induced natural hazards cyclones, flash floods, high rainfall, high temperature and long dry periods will adversely affect the agricultural production^[40].

The commercial and subsistence agriculture in Vanuatu are based on rain-fed agricultural production systems. Rainfall decline, a greater proportion of rainfall falling due to storm events, increased evaporation and more pronounced dry seasons, could have severe impacts on agricultural production. Intense rainfall during planting seasons could damage seedlings, reduce growth and provide conditions that promote plant pests and diseases. More pronounced dry seasons, warmer temperatures and greater evaporation could cause plant stress reducing productivity and harvests^[41].

16. Most of Vanuatu's urban centres and outer islands are dependent on ground water for drinking, given the limited availability of surface water. So, changes in precipitation in this island country will adversely affect, and increased temperatures are likely to increase the demand for potable water. The Fisheries sector is vulnerable to the climate change impacts because of coastal erosion, sedimentation and inundation. Increased surface water temperature and ocean acidification will directly affect the oceanic fish habitat (coral reefs, mangroves, sea grasses and intertidal flats), marine ecosystem, and food webs [42].

17. The forests of Vanuatu play vital role in country's cultural heritage and contribute to the welfare and economic development of the people through tourism. Changes in rainfall distribution, temperature and other climate stresses will negatively affect many tree species and forest biodiversity, in particular flowering and fruiting patterns of certain forestry crops are already changed. Increase in the incidence of pest and diseases in forest tree species are already reported^[43]. Tourism is one of the key foreign exchange earners of Vanuatu. Most of the infrastructure, utility services, and attractive tourists' features are located in the coastal areas. Such infrastructures are highly vulnerable to increased sea level rise, coastal degradation, cyclone and storm surges^[44].

18. The projected climatic changes will likely to affect the health sector of the country. Malaria is already endemic in certain location of the country, and other tropical and vector borne diseases such as dengue and water related diseases such as dysentery and diarrhea are likely to be increase. In association with these diseases, other problems associated with increased temperature, including contamination of food and heat stress are likely to increase^[45].

19. Climate change adaptation is a serious and urgent need for Vanuatu. The country prepared the National Adaptation Programme of Action (NAPA) in 2007, and it outlined actions needed for several priority sectors focusing on (i) Agriculture/Food Security, (ii) Development of resilient crop species, (iii) Land use planning and management, (iv) Sustainable forest management, (v) Climate change and infrastructure, (vi) Sustainable livestock farming and management, (vii) Sustainable tourism development, (viii) Coastal Zones and Marine Ecosystems, (ix) Integrated coastal zone management, (x) Vector and water borne disease management, and (xi) Water Resources and Public Health^[46]. The National Climate Change and Disaster Risk Reduction Policy^[47] identifies five key adaptation priorities and associated actions to accelerate the national adaptation efforts and building resilience including (i) Climate Change vulnerability and multi sector impact assessments; (ii) Integrated climate change and disaster risk reduction; (iii) Community based adaptation; (iv) Loss and damage and (v) Ecosystem based approaches.

2.4 Nationally Determined Contribution (NDC)

20. The NDC of Vanuatu (2016) identified electricity generation sub-sector as main mitigation contributor and set a conditional target of transitioning to close to 100% renewable energy in the electricity sector by 2030. This contribution would reduce emissions in the energy sector by 72 Gg CO₂e by 2030. To fulfill this ambitious target nearly all fossil fuel requirements for electricity generation should be replaced, and also need to maintain consistency with the National Energy Road Map (NERM) target of 65% renewable energy by 2020. Ancillary mitigation activities also mention as possibilities related to forestry, agriculture, transport and energy efficiency sector wide.

21. The key planned mitigation interventions as per NDC include:

- ? Doubling of the wind installed capacity to 5.5 MW by 2025.
- ? Installing 10 MW grid connected solar PV by 2025.
- ? Commissioning the proposed first stage 4 MW Geothermal plant by 2025.
- ? Adding 10 MW grid connected solar PV by 2030.
- ? Commissioning the second stage 4 MW Geothermal plant by 2030.
- ? Substituting and/or replacement of fossil fuels with coconut oil-based electricity generation.

22. Additional planned mitigation interventions include:

- ? National Energy Road Map.
- ? Rural Electrification Nationally Appropriate Mitigation Action (NAMA)
- ? Off grid renewable energy projects under Scaling Up Renewable Energy in Low Income Countries Program
- ? Energy efficiency measures to be pursued across the board to enable 15% savings in the energy sector.
- ? Forestry sector measures to reduce deforestation and promote good land care to accepted mitigation practices according to REDD+
- ? Planned cooperation with New Zealand and other nations interested in mitigating methane (CH₄) and associated emissions for ruminant, and pasture management

23. The country has also developed Enhanced Nationally Determined Contributions (NDC) 2020-2030^[1]. Similar to the conditional targets under the current NDC, all recommended additional measures/targets under the enhanced NDC submission would be conditional on receiving sufficient funding from external sources to implement the transition. The BAU national emission reported in the Enhanced Nationally Determined Contributions (NDC) as 624.258 Gg CO₂e by 2030, which under the NDC (existing) scenario estimated to reduce to 552.824 Gg CO₂e by 2030. Under the Enhanced Nationally Determined Contributions (NDC), this BAU emission is expected to reduce to 467.245 Gg CO₂e by 2030. The additional measures mentioned under the Enhanced Nationally Determined Contributions (NDC) are as follows:

Additional measures	GHG mitigation (Gg CO ₂ e per year)
Transport	
Electric vehicles (e-mobility)	2.61
Electric vehicles (e-buses) for public transportation (10% of total public buses)	1.84
Electric cars (e-cars) in Vanuatu (10% of government fleet)	0.08
1,000 electric two (e-bikes)/three-wheelers (e-rickshaw)	0.68
20% biodiesel (biofuel) blending in diesel	18.50

Vehicle mileage and emissions standards	0.29
Other sectors	
Biogas plants for commercial and residential use (1,000 plants)	3.50
Energy efficiency in commercial and residential sector	0.35
Increase energy efficiency in commercial and residential sector by 5%	0.35
10 energy-efficient buildings (green buildings)	Not estimated
Ecotourism supported by local communities	Not estimated
Livestock	
Training and capacity-building for livestock farming and pasture management	Not estimated
Converting pastures to silvopastoral livestock systems	30.98
International collaboration to improve livestock efficiency	Not estimated
Solid waste	
WTE plant for MSW	14.85
WTE plant for Port Vila	14.27
WTE plant for Luganville	0.50
WTE plant for Lenakel	0.08
Compost municipal organic waste to produce soil enhancer	10.94
Collect, sort and export recyclable materials (indicative) for first phase for Port Vila	Not estimated
National plastics strategy	Not estimated
Wastewater	
Wastewater management system in Vanuatu	3.57
Centralized wastewater collection and treatment system in municipal areas, including awareness and capacity-building	1.07
Improvements to public and communal toilet facilities including bio-toilets	2.50

^[1] Vanuatu's Enhanced Nationally Determined Contributions (NDC) 2020-2030.

<https://www.nab.vu/node/27079>

24. Adaptation Priorities and Goals in NDC are in line with the National Adaptation Programme of Action (NAPA). 11 top adaptation priorities of NAPA were refined to include 5 top priorities for support and implementation. The 5 NAPA priorities are:

- ? Agriculture and food security
- ? Sustainable tourism development
- ? Community based marine resource management
- ? Sustainable forest management
- ? Integrated water resource management

25. The NDC of Vanuatu also highlighted core issues of the NAPA relevant to all priorities, and mentioned that they should be an integral part of proposed activities. Those core issues are:

- ? Awareness raising at all levels.
- ? Capacity building including institutional capacity.
- ? Research and development.
- ? Promotion of appropriate traditional knowledge and practices.
- ? Technology Transfer.
- ? Education and training.
- ? Mainstreaming of climate change and disaster risk reduction.
- ? Consideration of marine and terrestrial Biodiversity issues.

26. The NDC of Vanuatu also in agreement with the National Climate Change and Disaster Risk Reduction Policy identifies 5 key adaptation strategic priorities and associated actions. These actions are:

- ? Climate Change vulnerability and multi sector impact assessments.
- ? Integrated climate change and disaster risk reduction.
- ? Community based adaptation.
- ? Loss and damage.
- ? Ecosystem based approaches.

27. Vanuatu is also in the process of updating the NDC focusing on mitigation actions. In this forthcoming national document, additional NDC measure include:

- ? Electric Vehicles (e-Mobility)
- ? 20 % Bio-diesel (bio-fuel) Blending in Diesel
- ? Milage and Emission Standards for Vehicles
- ? Biogas Plants for Commercial and Residential Use
- ? Energy Efficiency in Commercial and Residential Sector
- ? Waste to Energy Plant for Municipal Solid Waste (MSW)
- ? Waste Water Management System in Vanuatu

2.5 Existing institutional arrangements related to climate change mitigation and adaptation

28. The Ministry of Climate Change Adaptation (MoCC), Meteorology & Geo-Hazards, Energy, Environment and National Disaster Management is the nodal agency as part of the Government's efforts to streamline Vanuatu's climate change response, natural disasters and sustainable development of the environment. This Ministry is created in 2014 for response to natural disasters and sustainable development of the environment; with a vision to "Promote a resilient, sustainable, safe and informed Vanuatu" and mission to "Develop sound policies & legislative framework and provide timely, reliable, scientific information for service delivery to enable resilient communities, a sustainable environment and economic development".

29. The MOCC includes the Vanuatu Meteorological and Geo-hazards Department (VMGD), the National Disaster Management Office (NDMO), the Department of Energy (DoE), the Department of Environment and the Project Management Unit (PMU). Vanuatu recognizes the importance of effective institutions and fruitful inter-relationships to ensure proper response to growing climate and disaster risks. For this reason, the Government has undertaken a major reform of national climate and disaster risk governance by establishing the Ministry of Climate Change and the National Advisory Board on Climate Change & Disaster Risk Reduction (NAB). The NAB is tasked to provide the strategic direction required for the country to navigate the complex current and future climate and disaster risks^[48].

30. The Department of Climate Change (DoCC) has been established to look after the ongoing efforts of increasing climate change resiliency of the country. The department has been formed and mandated as per the "Meteorology, Geological Hazards and Climate Change Act No.25 of 2016 (Climate Change Act)". DoCC is responsible for coordinating all Vanuatu's climate change related programmes and

projects. The DoCC is also responsible for ensuring that climate change programmes and projects are carried out within their specified timeframes and for ensuring activities meet the necessary public participation and stakeholder requirements. The DoCC has the authority to act as a Financial Management Agent for externally funded programmes and projects. DoCC on behalf of the NAB and the Ministry, is responsible for project financial management and administration.

31. The Department of Energy (DoE) is responsible for the coordination of the climate change mitigation activities of the energy sector covering electricity grids, the petroleum, and energy efficiency. The DoE works closely with DoCC in developing project proposals and managing donor funds related to energy sector. Other Government Ministries involved in the electricity sector include the Ministry of Infrastructure and Public Utilities (MIPU), responsible for all the public infrastructure of the government, and the Ministries of Education and Health, which are involved in a program of solar energy packages for social institutions.

32. The NAB is consist of government and non-government members with the primary purpose of acting as Vanuatu's supreme policy making and advisory body for all disaster risk reduction and climate change programmes, projects, initiatives and activities?. So, it is the main governmental stakeholder for NAMA. The NAB is co-chaired by the Director of the Vanuatu Meteorology and Geo-Hazards Department (VMGD), and the Director of the National Disaster Management Office (NDMO). Members are selected from senior-level official of relevant government agencies, and NGOs including Vanuatu Humanitarian Team (VHT) Network, the Vanuatu Climate Adaptation Network, and the Vanuatu Association of Non-Governmental Associations (VANGO). Members are nominated in the first instance by the Directors of the VMGD and the NDMO at an official NAB meeting.

33. The NAB with its project management unit (NAB-PMU) acts as a coordinating body and works on three key areas:

- (i) Strategic Governance and Policy - including implementation of national obligations, development of positions for international summits, identification of priorities, and development of a national policy on climate change and disaster risk reduction;
- (ii) Technical Advice, Project Monitoring and Coordination- Including providing technical advice to government departments and NGOs, acting as the coordination point for climate change and disaster risk reduction matters, starting a project endorsement process? and information materials endorsement process? and working to support standardized approaches; and
- (iii) Project Management ? Financing, Procurement & Administration including secretariat duties for the NAB, investigating funding mechanisms for Vanuatu, providing support and advice on procurement for climate change and disaster risk reduction, and also implementing projects.

The organizational structure of NAB is presented in Figure 5.

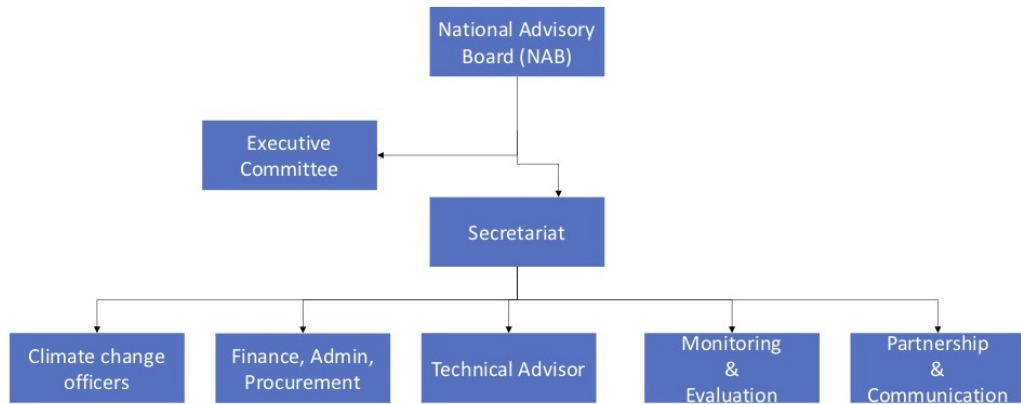


Figure 5: Organizational structure of National Advisory Board (NAB).

34. The ?Meteorology, Geological Hazards and Climate Change Act (2016)[49] provides provisions (governance and administrative provisions), transparency and roles and responsibility for meteorology, geological hazards and climate change and for related purposes. The ?Meteorology, Geological Hazards and Climate Change Act (2016) played a key role for the establishment of climate related services and institutions, such as (i) the National Advisory Board on Climate Change and Disaster Risk Reduction (NAB), (ii) Department of Climate Change (DoCC), (iii) Department of Meteorology (DoM), and (iv) Department of Geological Hazards; Enforcement provisions. The institutional structure under the ?Meteorology, Geological Hazards and Climate Change Act (2016)? is presented in the Figure 6.

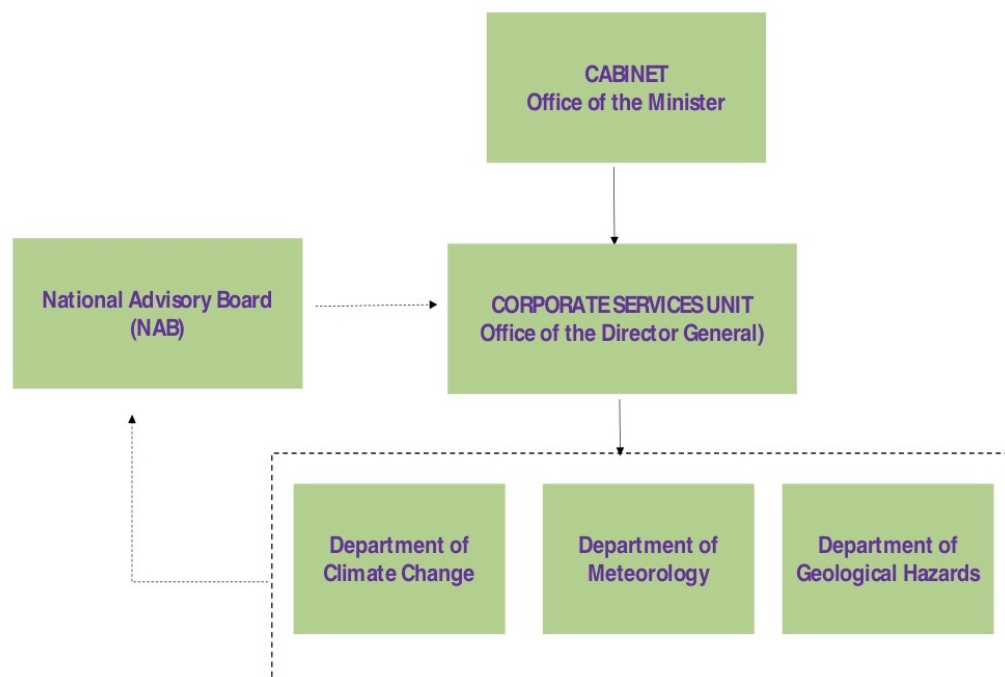


Figure 6: Institutional Structure to manage the climate change related issues, action, and initiatives in Vanuatu under the Climate Change Act (2016)

35. The Department of Forests (DOF) under the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity has the regulative and administrative responsibility for the management of the forestry sector throughout Vanuatu. It leads the implementation of the National Forest Policy and implements and enforces the forestry legislation. It promotes the integral and sustainable management of all forest resources for the supply of products and services. It approves utilization operation agreements and ensures that all forest-related orders and codes are implemented. It collects information about forest resources, conducts forest research and facilitates the development of commercial plantations and agro-forestry systems. It provides advice on forest conservation, protected areas and National Parks. The DOF provides forest policy advice to the Government and ensures the sustainable management and conservation of Vanuatu's forests^[50].

36. The current institutional system for GHG inventory preparation under the Department of Environment Protection and Conservation (DEPC) of Vanuatu, MOCC and including other line agencies is presented in Table 3.

Table 3: Current institutional system for GHG inventory preparation under the Department of Environment Protection and Conservation (DEPC) of Vanuatu, MOCC and other line agencies.

Organization	Role
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Department of Environmental Protection and Conservation Focal points: Donna Kalfatak (Director). Ionie Bolenga (Principle Pollution control Officer). Rolenas Baraeleo (Senior Conservation Officer).	Division of Environmental Protection-Waste management & Pollution Control includes Ozone and Chemicals Programs ?This division looks after ozone depleting substances control with businesses and companies. Division of Biodiversity & Conservation - Biodiversity and Protected Areas ? This division Looks after Protected areas ? which relates to carbon credit /sequestration programs that can coincide with protected areas.
Department of Meteorology Focal Point: Director	Agency mandated for climate and weather recording and monitoring ? National data records feed into GHG national reporting.
NAB	NAB oversees the progress of national reports such as the Third National Communications and First Biennial Update report and will be responsible to communicate these official (including others) reports to the UNFCCC.

37. The current institutional system for Adaptation related data collection under the Department of Environment Protection and Conservation (DEPC) of Vanuatu, MOCC and including other line agencies is presented in Table 4.

Table 4: Current institutional system for GHG inventory preparation under the Department of Environment Protection and Conservation (DEPC) of Vanuatu, MOCC and other line agencies.

Organization	Role
Department of Environmental Protection and Conservation Focal Point: Rolenas Baraeleo (Senior Conservation Officer)	(a) EMIS (Environment Management Information System) ? the EMIS also contain maps. (b) Community Conservation Area (CCA) database ? the database contains the registration and information of the biodiversity of a CCA
Department of Forestry Focal Point Michel Lilord (REDD+ GIS/IT specialist)	NFI (National Forestry Inventory) database
Department of Meteorology Focal Point Alan Rarai (Director)	Updating the Climate Portal ^[51] and associated data.
Department of Climate Change Focal Point Ana Bule (NAB Secretariat)	Updating the National Advisory Board (NAB) Portal ^[52] , and associated data.

38. At the Department of Forestry (DoF) the forest inventory data collection is done in two ways: (1) filed team after collecting data and send to a coordinator to check; (2) the coordinator send data to GIS specialist. The DoF is responsible for land use and land cover change analysis for nationwide vegetation cover.

39. At the DEPC, the data are stored in the hard drive for the row data, and also stored in the in the Environment Management Information System (EMIS). The data in the existing EMIS are collected in Excel spread sheet and some of them also in Shapefiles. The data collected by the DEPC are not updated since its collection in 2013. For the DoF, the data are uploaded into the database located in

DoF. The data are in the following format shapefiles, collect-data (by using open foris collect) and JPG formats for the photos. The data collected at DoF are stored in computer hard drive, and backed up on other computer, and also stored online on unique cloud. Existing MRV for NDC is for the Energy sector. Both EMIS and MRV for Energy are not connected to each other or with the NAB portal. The project can help to make these linkages and strengthen them. More elaboration on these linkages and status as well as operation of EMIS and MRV will be provided during PPG phase. Few adaptation related data are also currently collected by the Department of Environment Protection and Conservation (DEPC) of Vanuatu, MOCC as mentioned in Table 5.

Table 5: Examples of adaptation related data collecting by the Department of Environment Protection and Conservation (DEPC) of Vanuatu, MOCC.

Type of data	Collecting organization	Data format	Data storage/archiving procedure
Plant specification, and Forest inventory data.	Department of Forestry	(a) Shapefiles, (b) collect-data, (c) JPG format	Stored in computer and backed up on other computer, and also stored online on unique cloud.
Biodiversity and Community Conservation Area data.	Department of Environment	(a) Shapefiles, (b) excel spread sheet, (c) JPG format.	EMIS, and hard drive

40. The Department of Agriculture and Rural Development, under the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity^[53], is the coordinating agency in the country for the agricultural sector for climate change and disaster risk reduction. In 2013, the department released a national agriculture position on climate change and disaster risk reduction which outlined the key adaptation priorities for the country, and sets out a clear policy directive, to coordinate and guide all actors, regarding climate change and the development of the agriculture sector.

41. The Department of Industry (DoI)^[54] under the Ministry of Tourism, Trade, Industry, Commerce is the national entity to promote, facilitate, and support the growth of sustainable and value-added industry in Vanuatu. Major activities are: (i) formulate policies, strategies, programs to promote domestic industries and export development; (ii) strengthen institutional capacity; (iii) provide technical support to advance rural industries development; and (iv) facilitate establishments of cottage, small, medium to large scale manufacturing industries in the provinces.

42. The Ministry of Lands and Natural Resources^[55] oversees the functions of the Department of Lands, the Department of Water, Geology and Mines and the Office of The Valuer General. It also works in collaboration with other Ministries, such as the Ministry of Internal Affairs through the Port Vila Municipal Council, to deal with land issues. The key focus of this national entity are: (i) ensuring fair dealing in lands, and (ii) ensuring the rights of custom owners to their lands, and its developments, are fully recognized and protected.

43. The Ministry of Infrastructure and Public Utilities (MIPU)^[56] is a responsible national entity for all the public infrastructure of the government. The ministry of Finance is involved in any arrangements for financing energy systems, and other public utilities.

44. Designated National Authority (DNA)^[57] to fulfil obligations under the Kyoto Protocol, thereby supporting the implementation of sustainable development projects in Vanuatu under the Clean Development Mechanism (CDM).

45. Utilities Regulatory Authority (URA)^[58], an independent regulator, to provide prices and regulatory oversight of the electricity and water sectors. The URA also acts as an economic regulator for pricing, energy access, standards and monitoring of concession agreements.

2.6 Legal and Regulatory Framework on Climate Change:

46. Vanuatu's society, environment and economy are highly vulnerable to climate change and disaster risks. At the same time, the country is committed to global efforts on climate change mitigation. Hence, the country has a number of national legislation and policies relevant to climate change adaptation and mitigation. These are presented in Table 6, and the notable ones are discussed in the subsequent sections.

Table 6: National legislation and policies relevant climate change adaptation and mitigation.

Type	Legislation, Policies and Plans
Overarching instruments	Constitution of Vanuatu
	National Sustainable Development Plan 2016-2030, the "People's Plan" (overarching national plan)
	Priorities and Action Agenda (PAA) 2006 ? 2015
Climate change adaptation and disaster risk reduction	Meteorology, Geo-hazards and Climate Change Act 2016
	National Disaster Act 2006 and National Disaster Risk Management Bill 2016
	Disaster Risk Reduction and Disaster Management National Action Plan 2006 ? 2016
	Vanuatu Climate Change Disaster Risk Reduction Policy 2016-2030
	Vanuatu National Adaptation Plan for Action (NAPA) 2007
	National Climate Change Adaptation Strategy for Land-Based Resources (2012 ? 2022)
	National Policy on Climate Change and Disaster-Induced Displacement (2018)
Land, planning and environment	Customary Land Management Act 2013
	Land Sector Framework 2009-2018
	National Land Use Planning and Zoning Policy 2013
	Vanuatu National Environment Policy and Implementation Plan 2016 ? 2030
	Draft Greater Port Vila Plan and Strategy for Efate
	Environmental Management and Conservation Act 2002
	National Energy Road Map (NERM) 2013-2020
	NAMA on Rural Electrification
National Green Energy Fund (NGEF) 2016	

Type	Legislation, Policies and Plans
	Renewable Energy Electrification Master Plan 2016
Infrastructure	Vanuatu Infrastructure Strategic Investment Plan 2015-2024
WASH	National Water Strategy 2008-2018
	National Water Strategy 2018-2030
Food, agriculture and livelihoods	Vanuatu National Plan of Action on Food and Nutrition Security 2013-2015
	Vanuatu Agriculture Sector Policy 2015-2030
	Overarching Productive Sector Policy
	National Forest Policy 1997, 2011-2020, 2013-2023
	Reduced Emissions from Deforestation and forest Degradation (REDD+) national program
	National Livestock Policy
	National Fisheries Policy
	Vanuatu Oceans Policy
Education	Vanuatu Education Sector Strategy 2007-2016
Health	Vanuatu Health Strategy 2010-2016
	National Health Plan for Climate Change Adaptation and Disaster Risk Management, 2016 ? 2020
Gender	National Gender Equality Policy 2015-2019
Child protection	National Child Protection Policy 2016-2026
Disability	National Disability Policy and Plan of Action 2008-2015

2.6.1 Mitigation

47. Vanuatu National Environment Policy and Implementation Plan 2016?2030 (NEPIP)^[59] is an overarching policy for the sustainable conservation, development and management of the environment of Vanuatu. The objectives of NEPIP are:

- ? Policy Objective 1: Conservation of biological, ecosystem, genetic, human and cultural diversity.
- ? Policy Objective 2: Sustainable resource management.
- ? Policy Objective 3: Waste management and pollution control.
- ? Policy Objective 4: Climate change.
- ? Policy Objective 5: Environmental governance and capacity development.
- ? Policy Objective 6: Sustainable growth and development.
- ? Policy Objective 7: Financing and economic instruments

Under the Policy Objective 4: Climate change NEPIP, calls for supporting the implementation of the CCDRR Policy.

48. The Vanuatu?s Climate Change and Disaster Risk Reduction Policy (CCDRR)^[60] 2016-2030 is targeted for good governance, clear priorities and strategies for future climate actions. It is designed to deliver better information and assessment of climate change impacts and disaster risks, setting key strategies and transparently communicates to all stakeholders, including the communities, international donors and agencies. It applies six principles: 1) accountability, 2) sustainability, 3) equity, 4) community focus, 5) collaboration, and 6) innovation. Coordination and communication at all levels of government and across sectors and communities are the key policy emphasis of CCDRR. The strategic priorities of CCDRR focusing on systems, themes and cross-cutting issues are presented in the Figure 7.

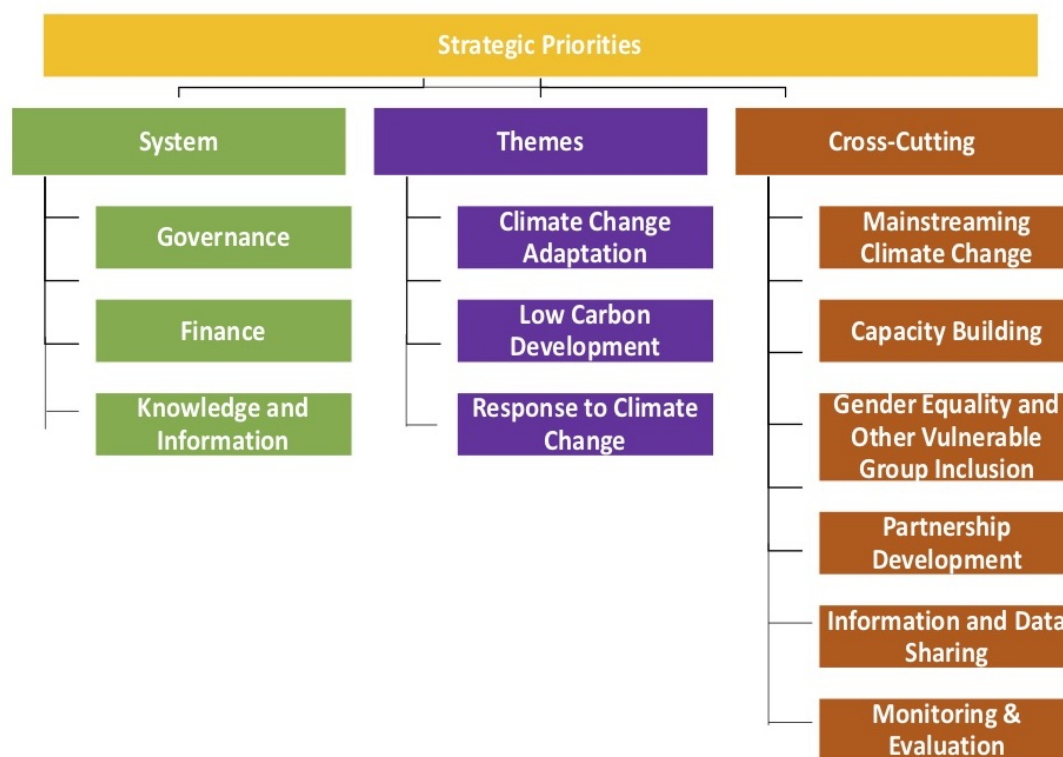


Figure 7: The strategic priorities of CCDRR focusing on systems, themes and cross-cutting issues.

49. National Sustainable Development Plan (NSDP) 2016-2030^[61]. This is also known as *the Vanuatu 2030: The Peoples Plan*, and focused on long-term vision, and serves as the highest-level overarching policy framework for achieving a “stable, sustainable and prosperous Vanuatu by 2030”. The national aspirations under the NSDP includes: (i) a vibrant cultural identity underpinning a peaceful, just and inclusive society; supported by responsive and capable state institutions delivering quality public services, including health and education, to all citizens; (ii) maintaining a pristine natural environment on land and at sea that serves our food, cultural, economic and ecological needs; (iii) with enhanced resilience and adaptive capacity to climate change and natural disasters; and (iv) a stable economy based on equitable, sustainable growth that creates jobs and income earning opportunities accessible to all people in rural and urban areas.

These collective aspirations are expected to be delivered through the 15 National Sustainable Development Goals (SDGs) focusing on three pillars: Society, Environment and the Economy. The three NSDP pillars are comprised of a total of 98 policy objectives spread over 15 goals as shown in Figure 8.



Figure 8: The three NSDP pillars and associated goals (Source: NSDP:2016-2030)^[62].

50. The ?Meteorology, Geological Hazards and Climate Change Act (2016)^[63] is dedicated towards governance and administrative provisions for national transparency and roles and responsibility focusing on meteorology, geological hazards and climate change related purposes. The key objectives of Climate Change Act are:

- ? Ensure that high quality services are provided in relation to weather, climate, flood forecasting and geological hazards in Vanuatu;
- ? Promote capacities of governments, communities and organizations to understand and respond to risks arising from weather events, climate change and geological hazards;
- ? Address the needs of operators of ships and aircrafts and of tourists, to access all necessary weather forecasts, bulletins, alerts, warnings and information concerning geological hazards which may impact upon the safety of their operations or activities;
- ? Facilitate the use and application within Vanuatu of relevant information, forecasts, bulletins and warnings generated and disseminated to and by local, regional and international bodies; and
- ? Ensure that the government and the public are informed of matters related to weather, climate and geological hazards, and are able to make effective use of such information and data, and to respond to warnings and alerts about such events, in order to protect the environment and the safety and welfare of the community.

51. After revision of the 1997 National Forest Policy, Vanuatu developed the ?Vanuatu Forest Policy 2011 ? 2020?^[64] for the sustainable development and management of the forestry sector. It was developed with clear directives (short-term, urgent, medium-term, and long-term) supported by implementation strategies including timelines and responsibilities. It was focused on forest-based rural

development, conservation of ecosystems, biological diversity and the silviculture of the indigenous species thereby enhancing economic growth, well-being and livelihood of Vanuatu people.

52. Vanuatu National Forest Policy (2013-2023)^[65] is the most recent forest related policy, which identifies the integration of climate change mitigation issues into forestry sector planning and activities as a specific objective. In particular, it focuses on the development of a national REDD+ initiative by the Department of Forests, the National Advisory Board on Climate Change and Disaster Risk Reduction (NAB), and non-governmental organizations.

53. Reduced Emissions from Deforestation and forest Degradation (REDD+)^[66] Programme of Vanuatu is the forestry sector mitigation action involving government and the Civil Society Organization (CSOs). The Department of Forests in support of the National Advisory Board for Climate Change and Disaster Risk Reduction (NAB), and the Vanuatu Geo-Hazard and Meteorological Department (VGMD) as the focal point, is taking the lead role as the key implementing agency in implementing the national Reduced Emissions from Deforestation and forest Degradation (REDD+) program.

54. National Energy Road Map (NERM)^[67] 2013-2020 of Vanuatu has an overall vision to *energize Vanuatu's growth and development through the provision of secure, affordable, widely accessible, high quality, clean energy services for an educated, healthy and wealthy nation?*. It focuses on the objectives in the energy sector from a national development perspective, key constraints and projects financing requirements for the energy sector implementation program with a timeframe 2013-2018. It identified five priorities for the energy sector: access, petroleum supply, affordability, energy security, and climate change; which is been slightly revised (updated) to: Accessible energy, Affordable energy, Secure and reliable energy, Sustainable energy, and Green growth. It also set out objectives, targets and proposes 68 key actions to achieve these priorities and contribute to the NERM's overall vision. These priorities reflect the high-level outcomes the Government ultimately seeks to achieve in the energy sector and sub-sectors (such as petroleum and other liquid fuels, electricity, and cooking fuels). It is implemented and monitored by the Department of Energy (DoE). A comprehensive NERM Implementation Plan (NERM-IP) and NERM Monitoring, Verification and Evaluation (NERM-MRV) Plan been developed and operation. It also formed basis for development of NDC in Vanuatu, and substantially important for achieving NDC targets.

55. NAMA Rural Electrification^[68] is focused on rural electrification and micro grids to improve access to electricity in the predominantly rural sector. It is a voluntary, non-binding policy instruments that provide a framework for pursuing a country's socio-economic and development goals, while contributing towards global GHG mitigation efforts. It covers two interventions:

? Micro grids establishment: Rural communities/tourism and agricultural facilities/health centres/schools are the focus of these micro grids due to their demand for electricity for lighting, cooling and appliances. The micro grids will use renewable energy sources (solar, wind, hydro) and will provide electricity for lighting, radio and phone charging for households, and for service and production activities in Rural Productivity Zones (RPZs).

? Extension of existing electricity grids on different islands: Households, public institutions and tourism/commercial consumers in the proximity of lines will be connected. Electricity will be provided for lighting, audio/TV, mobile phone charging, coastal fishing (refrigeration of the fish catches), tourism facilities (lodges), agricultural facilities (preparing, processing and packaging produces) or the production of handicrafts.

56. National Green Energy Fund (NGEF)^[69] was established in April 2016. It is targeted to mobilize financial resources to provide all households with access to electricity and meet the sustainable energy target by 2030. The characteristics of NGEF are: it will operate as a revolving fund, with an anticipated initial start-up capital of USD 10 million, to be sourced mainly from international sources, and from yearly contributions from domestically consolidated energy funds, totaling USD 300,000. It will offer funding like debt via intermediaries, including financial institutions and non-financial institutions in Vanuatu; project equity for project developers and technology providers risk sharing, in the form of a first loss facility for local banks, small grants for public institutions (no more than 5% of total fund investments). Energy efficiency investments also included renewable energy development, with a primary focus on increasing energy access in off-grid areas.

57. Vanuatu developed a Renewable Energy Electrification Master Plan ^[70] in 2016. It is a renewable energy-based off-grid electrification master plan for remote islands focusing on some pilot islands (Mataso, Makira, Emae and Aneityum) selected by the government, and scaling up gradually. It has two main components: (i) preliminary technical designs for renewable-energy based electrification for the four islands; and (ii) based on this sample of islands, development of a masterplan for electrifying Vanuatu's outer islands through affordable renewable energy.

58. Priorities and Action Agenda (PAA) 2006 ? 2015 of Vanuatu^[71] has seven strategic priorities to achieve the national vision, which are as follows:

- ? Private Sector Development and Employment Creation;
- ? Macroeconomic Stability and Equitable Growth;
- ? Good Governance and Public Sector Reform;
- ? Primary Sector Development, Environment, Climate Change, and Disaster Risk Management;
- ? Provision of Better Health Services, especially in rural areas;
- ? Education and Human Resource Development; and
- ? Economic Infrastructure and Support Services.

The country through this PAA has also prioritized various strategies which could lead to climate change mitigation like better transport services and infrastructure, sustainable utilization and management of land, improvement and strengthening of research and development in agriculture, livestock, fisheries and forestry, finalization and implementation of the climate change policy including its integration in the PAA, sector plans and ministry corporate plans etc.

59. The country is an active participant in Pacific island regional affairs and has signed on to a number of regional policies and initiatives that have implications for climate change mitigation. Some of these are briefly outlined here:

? *Pacific Plan for Strengthening Regional Cooperation and Integration (PPSRCI)*^[72]: It was sanctioned in October 2005 by the Pacific Island leaders. It includes some strategies to help promote environmentally sound energy options, and facilitate international financing for action on climate change.

? *Pacific Island Framework for Action on Climate Change (PIFACC)*^[73]: It was agreed in June 2005 by the Pacific island leaders. It includes regional activities aimed at contributing to global GHG reduction. Expected mitigation outcomes are: (i) promotion of improved energy efficiency in all sectors; (ii) introduction of cost-effective renewable energy technologies; (iii) promotion of local sources and knowledge; and (iv) development and implementation of Clean Development Mechanisms.

? *Pacific Islands Energy Policy*^[74]: It was adopted in November 2004, and includes a number of important goals focusing on mitigation like efficient power generation, environmentally clean and efficient transportation, development of renewable energy, and improved energy efficiency.

? *Solid Waste Management Strategy for the Pacific Region*^[75]: It is developed by the Secretariat of the Pacific Regional Environment Programme (SPREP), and adopted by the Pacific Island countries in 2005. It focused on promoting recycling and reduction of the amount of waste going to landfills, which in turn can reduce GHG emissions.

? *Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016-2025*^[76]: It is a comprehensive long-term strategy for integrated sustainable waste management and pollution prevention and control framework in this region to address waste, chemicals and pollutants. It is targeted to reduce associated threats to sustainable development of the region. Priority areas are: municipal solid waste, asbestos, electrical and e-waste, healthcare waste, chemicals (e.g.-organic pollutants, ozone depleting substances and mercury), used oil and lubricants, marine litter, ship-sourced pollution, disaster waste and liquid waste (e.g.-sewage and trade waste).

2.6.2 Adaptation

60. National Climate Change Adaptation Strategy for Land-Based Resources (2012 ? 2022)^[77] sets out a systematic, long-term approach for climate change adaptation into core sectoral functional activities. The NCCAS addresses sector and national needs, and contains specific and practical actions rather than project-based approach. Sector specific action plans includes: (i) translation of commitments into concrete actions, (ii) how changing circumstances will be accommodated, and (ii) how risks and barriers will be addressed. The sector action plans again outline the substantive interventions to address adaptation needs, and specify the allocation of responsibilities and definitive implementation timelines.

61. Vanuatu National Adaptation Programme of Action (NAPA)^[78] Vanuatu prepared both a National Adaptation Program of Action (NAPA) and a National Action Plan (NAP) for Disaster Risk Reduction. The identified priorities for action are: (i) agriculture and food security (preservation/processing/marketing, modern and traditional practices, bartering), (ii) water management policies/programmes (including rainwater harvesting), (iii) sustainable forestry management, (iv) community based marine resource management programmes (modern and traditional, aqua-culture), (v) mainstream climate change considerations into infrastructure design and planning (through Environmental Impact Assessment), (vi) sustainable livestock farming and management, and (vii) Sustainable tourism.

62. The Vanuatu's Climate Change and Disaster Risk Reduction Policy (CCDRR)^[79] 2016-2030 is focused on good governance, clear priorities and strategies for future climate actions. The vision of this national policy document is for Vanuatu to be a nation whose communities, environment and economy are resilient to the impacts of climate change and disaster risks. This policy provides a framework through which risks can be identified, assessed, reduced and managed. The policy will apply six principles: 1) accountability, 2) sustainability, 3) equity, 4) community focus, 5) collaboration, and 6) innovation. The actions are organized under three themes: (1) climate change adaptation, (2) low carbon development, (3) response to climate change covering 6 cross-cutting issues.

63. National Policy on Climate Change and Disaster-Induced Displacement (2018)^[80] aims to address the needs of all communities affected by displacement, including people at-risk of displacement, displaced people, internal migrants, people living in informal settlements, and host communities.

Through strengthening existing planning initiatives, multi-hazards mapping, disaster-risk reduction and climate change adaptation efforts, the policy aims to reduce the triggers of displacement as much as possible. In this national policy document systems-level interventions calls for (i) institutions and governance, (ii) safeguards and protection, (iii) evidence, information and monitoring, (iv) capacity-building, training and resources. Sectoral-level interventions relate to: (i) safety and security, (ii) land, housing, planning and environment, (iii) health and well-being, (iv) education, infrastructure and connectivity, (v) agriculture, food security and livelihoods, (vi) traditional knowledge, culture and documentation, (vii) access to justice and public participation.

64. The Vanuatu Forest Policy (2013-2023)^[81] highlights the following policy directives for climate change adaptation by Integrating climate change adaptation issues into forestry sector planning and activities. Such aspiration is reflected in the following strategies:

- ? Develop forestry-related adaptation demonstration projects including concerns for food security, soil stabilization, water management, and coastal erosion.
- ? Raise awareness of stakeholders on forestry climate adaptation opportunities in Vanuatu, and develop related materials.
- ? Liaise, collaborate and share expertise with relevant government and non-government organizations (national, regional and international) to assist local efforts to adapt to climate change.
- ? Introduce and promote climate change resilient tree species and varieties.
- ? Maintain and enhance food security through agro-forestry systems.
- ? Undertake ground cover initiatives to prevent soil and coastal erosion.
- ? Identify and seek financing for novel and promising forestry adaptation projects and programs.
- ? Train all stakeholders on the opportunities for climate change adaptation and impact assessment.
- ? Rehabilitate watershed and water catchment areas to secure water supplies.
- ? Systematically assess and continuously monitor the impacts of climate change on forest systems.
- ? Zone development activities and undertake land use planning to minimize site-specific climate change impacts.
- ? Minimize wind damage to crops and infrastructure by trialling windbreak species and systems.
- ? Establish and manage buffer zones around climate sensitive ecosystems, and undertake enrichment planting within these areas.
- ? Develop and regularly update a database of climate change adaptation information in the Vanuatu forest sector.
- ? Update the herbarium database to document existing vegetative biodiversity that may yield resilience to climate impacts.
- ? Enable the storage of forestry seeds for germination of vulnerable species ?out of season?.
- ? Identify, prioritize and implement appropriate and effective strategies for the forestry sector to adapt to climate change.

65. The has a National Water Strategy 2008-2018^[82] focusing on sustainable and equitable access to safe water and sanitation for the people to support improved health and promote social and economic development. It explicitly recognizes that climate related changes could be expected to limit the future availability of potable water, constrain its productive use, and impact negatively on Vanuatu's pristine natural environment.

66. National Water Strategy (2018-2030)^[83] proposed a major change in the role than the National Water Strategy (2008-2018). It focuses on the progressive devolution of responsibility, authority and

resources for water management down to provincial government level and the increased community involvement in planning, management and monitoring of water use. Considering the climate change it focuses on securing water future. It recognizes that water is the primary medium through the impact of Climate Change and the vulnerability to disasters significantly impacts the safety and security of water. The strategy identifies actions to strengthen coordination with other sectors and partners to understand, predict, design and invest to secure Vanuatu's water future.

67. The Disaster Risk Reduction and Disaster Management National Action Plan 2006 ? 2016^[84] entails technical, business management, and policy types of adaptations by, for example, facilitating the implementation of early warning systems which can reduce the vulnerability of the tourism sector to climate change-induced risks such as cyclones and storm surges.

68. The Environmental Management and Conservation Act 2002^[85] provided technical, policy, and research and education adaptation types whereby, for example, the establishment of conservation areas protects Vanuatu's natural resources, which provide future tourism attractions, thus making tourism less vulnerable to climate change-induced ecosystem damage.

69. Vanuatu's formal education sector is guided by the National Curriculum Statement which was fully climate mainstreamed in 2010. It mandates that climate change adaptation and resilience must be incorporated into all subjects at all levels of the curriculum. In 2013, the Curriculum Development Unit of the Ministry of Education completed Vanuatu's new English and French curriculum which fully mainstreams climate change and disaster risk reduction learning outcomes from levels K-13^[86].

2.7 Baseline initiatives towards ensuring transparency in Climate Change

70. The country has developed and implemented integrated Monitoring, Reporting and Verification (MRV) Tool for Energy Sector (currently being enhanced to cover additional mitigation sectors according to the updated NDC), and a Monitoring, Reporting Verification Tool for NERM:2016-2030^[87]. Vanuatu's integrated MRV tool is a web-based system includes a detailed online database for IPCC sectors and Climate actions, key features and modules includes:

- ? Module-1: GHG Inventory
- ? Module-2: Mitigation
- ? Module-3: Adaptation
- ? Module-4: Climate Finance
- ? Module-5: Sustainable Development Goals (SDGs)

The Vanuatu's Integrated MRV Tool aims to assist the Department of Climate Change (DoCC) and other line ministries/departments to develop a concise and strategic domestic national MRV system to enhance monitoring, tracking, reporting and verifying of climate actions including GHG emissions; mitigation, adaptation and SDG impact of projects, programme, policies etc.

71. The Vanuatu's Climate Change and Disaster Risk Reduction Policy (CCDRR)^[88] calls for incorporating rigorous processes, transparent decision-making and public reporting to ensure appropriate use of resources, and steering the climate change and disaster risk reduction agenda. It also calls for strengthening existing systems through building on experience, learning from events, activities and good practice to ensure continuity beyond the short and medium term. It also emphasizes

partnering among government, regional, global and national CSOs, private sector, development partners, donors, and academic institutions to build networks and share knowledge and information.

72. NAMA Rural Electrification[89] transparent monitoring of GHG emission reductions. It particularly focused on how to build and integrate a reliable and transparent structure of financial governance into the NAMA and how to manage the financial flows and the controls required to ensure a sustainable use of funds. The country also highlighted the results through implementation of NAMAs need to be amenable to Measurement, Reporting and Verification (MRV) to attract donors and to guarantee the sustainable success of the interventions. It states the need to follow the general principles of transparency, consistency, comparability, completeness and accuracy to all the components to be monitored. It also calls for a credible and transparent approach for quantifying and reporting GHG emission reductions.

73. National Sustainable Development Plan (NSDP) 2016-2030^[90], the so called *the Vanuatu 2030: The Peoples Plan* dedicated to achieve a 'stable, sustainable and prosperous Vanuatu by 2030'. It calls for enhance environmental monitoring, evaluation and research with relevant, open and transparent data sharing among relevant agencies (Policy objective ENV 5.6).

74. Vanuatu - Forest Carbon Partnership Fund (FCPF) Readiness Plan Preparation Project : FCPF Readiness activities in Vanuatu relate to strategic planning and preparation for Reducing Emissions from Deforestation and Forest Degradation Plus (REDD+). The development objective of this project is to assist Vanuatu to carry out the Readiness Preparation Activities by supporting the preparation of its REDD+ strategy through a participatory and inclusive process, and by producing technical and policy advice to help strengthen sustainable land and forest management practices. The project components are:

? Institutional Strengthening for REDD+ Management Arrangements at the national and decentralized level.

? Strengthening of the stakeholder? engagement process at the decentralized level.

? Development of a REDD+ strategy for Vanuatu.

75. Climate Action Enhancement Package (CAEP) : Through the Climate Action Enhancement Package (CAEP) Vanuatu aims to enhance the quality, increase the climate ambition, and implement nationally determined contributions (NDCs), as part of the 2020 update process.

[1] Vanuatu - Forest Carbon Partnership Fund (FCPF) Readiness Plan Preparation Project.

<https://www.forestcarbonpartnership.org/country/vanuatu>

[2] Climate Action Enhancement Package (CAEP). <https://ndcpartnership.org/countries-map/country?iso=VUT>

76. The above national aspiration towards climate transparency will be the main focus of this CBIT project with the technical support from FAO. Under this project technical and institutional capacities will be strengthened to meet the PA's Enhanced Transparency Framework (ETF) requirement. The proposed CBIT project will build on the previous projects on National Communication, forest reference emission level submission under REDD+ national program, ongoing MRV system development, as

well as other completed and ongoing climate change mitigation and adaptation projects as mentioned in Table 7.

Table 7: The baseline initiatives in Vanuatu contributing to climate change mitigation and adaptation, and possible linkages with the proposed CBIT project.

Name of Initiative	Implementing and executing agency	Linkages with the CBIT project
1. The First National Communication to UNFCCC. Donor: GEF Timeframe: 1999-2000	Under the Pacific Islands Climate Change Assistance Project (PICCAP) funded by the GEF and with the SPREP, and in collaboration with National Advisory Committee for Climate Change (NACCC), and National Disaster Management Office (NDMO).	The CBIT project will build on data and coordination mechanism.
2. The Second National Communication to UNFCCC. Donor: GEF Timeframe: 2013-2016	Ministry of Climate Change Adaptation (MoCC), Meteorology & Geo-Hazards, Energy, Environment and National Disaster Management (Executing agency-EA) and UNDP (Implementing Agency-IA).	The CBIT project will build on data and coordination mechanism.
3. The Third National Communication and Biannual Update Report to UNFCCC. Donor: GEF Timeframe: 2017-2021	MoCC (EA) and UNDP (IA)	The CBIT project will closely work with this initiative for data and institutional arrangement. Lessons learned and experiences from the activities will also be considered. Opportunities for exchange and joint capacity building will be sought with this project.
4. Preparation of A National Adaptation Program of Action (NAPA). Donor: GEF Timeframe: 2003-2006	National Advisory Committee on Climate Change (EA) and UNDP (IA)	The CBIT project will build on data and coordination mechanism.
5. Barrier Removal for Achieving the National Energy Road Map Targets of Vanuatu (BRANTV). Donor: GEF Timeframe: 2018-2022	Department of Energy, Ministry of Climate Change and Natural Disaster (DOE-MCCND) (EA) and UNDP (IA) &	The CBIT project will build on data and coordination mechanism.

Name of Initiative	Implementing and executing agency	Linkages with the CBIT project
6. Protecting Urban Areas Against the Impacts of Climate Change in Vanuatu. Donor: GEF Timeframe: 2015-2020	Public Works Department (PWD), Ministry of Infrastructure and Public Utilities (MIPU) (EA), and Asian Development Bank (IA)	Lessons learned and experiences from the activities will also be considered.
7. Mainstreaming Global Environmental Priorities into National Policies and Programmes. Donor: GEF Timeframe: 2015-2018	Department of Environment and Conservation, Ministry of Land and Natural Resources (DEC/MLNR) (EA) and UNDP (IA)	Lessons learned and experiences from the activities will also be considered.
8. R2R: Integrated Sustainable Land and Coastal Management. Donor: GEF Timeframe: 2015-2020	Ministry of Lands and Natural Resources; Ministry of Agriculture, Quarantine, Forestry and Fisheries (EA), and Food and Agriculture Organization (FAO) (IA).	The CBIT project will build on the coordination mechanisms, capacity, knowledge management and M&E systems.
9. Increasing Resilience to Climate Change and Natural Hazards. Donor: GEF Timeframe: 2012-2018	Vanuatu Meteorology and Geo-hazards Department (VMGD), with inputs from National Disaster Management Office (NDMO), Department of Local Administration (DLA), Department of Agriculture and Rural Development (DARD), Vanuatu Agriculture Research and Technology Center (VARTC), and Department of Rural Water Supply (RWS) (EA) and the World Bank (IA).	The CBIT project will build on the coordination mechanisms, capacity, knowledge management and M&E systems.
10. LDC/SIDS Portfolio Project: Capacity Building and Mainstreaming for Sustainable Land Management in Vanuatu. Donor: GEF Timeframe: 2005-2012	Department of Lands, within the Ministry of Lands and Natural Resources (EA), and UNDP (IA).	Lessons learned and experiences from the activities will also be considered.
11. National Capacity Needs Self-Assessment (NCSA) for Global Environmental Management. Donor: GEF Timeframe: 2004 to 2006	Environment Unit (EA), and UNEP (IA)	Lessons learned and experiences from the activities will also be considered.
12. Pacific Climate Change Collaboration Influencing and Learning (PACCCIL) Project. Donor: Australian Aid. Timeframe: 2018 ? 2021	Ministry of Climate Change Adaptation (MoCC), Meteorology & Geo-Hazards, Energy, Environment and National Disaster Management (EA) and Oxfam Vanuatu (IA)	Lessons learned and experiences from the activities will also be considered. Opportunities for data and information exchange, and joint capacity building will be sought with this project.

Name of Initiative	Implementing and executing agency	Linkages with the CBIT project
13. Vanuatu Ecosystems and Adaptation Project. Donor: GCF. Timeframe: 2016 ? 2021	Vanuatu Meteorology and Geo-Hazards Department (EA), and United Nations Environment Programme (UNEP) (IA)	Lessons learned and experiences from the activities will also be considered.
14. Adapting to Climate Change and Sustainable Energy (ACSE) Programme. Donor: EU. Timeframe: 2016 ? 2018	Implemented by fifteen Pacific ACP Island countries and GIZ (IA)	Lessons learned and experiences from the activities will also be considered.
15. Adaptation to Climate Change in the Coastal Zone in Vanuatu ? Phase II (VCAP II). Donor: GEF Timeframe: Concept Approved in 2020.	Ministry of Climate Change Adaptation (MoCC), Meteorology & Geo-Hazards, Energy, Environment and National Disaster Management (EA) and UNDP (IA).	Lessons learned and experiences from the activities will also be considered. Opportunities for data and information exchange, and joint capacity building will be sought with this project.
16. Ecosystem Restoration and Sustainable Land Management in Tongoa Island. Donor: GEF Timeframe: Concept Approved in 2020.	Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity & Ministry of Climate Change, Adaptation, Meteorology, GEO-hazards, Environment and Energy (EA), and FAO (IA).	Lessons learned and experiences from the activities will also be considered. Opportunities for data and information exchange, and joint capacity building will be sought with this project.
17. Expanding Conservation Areas Reach and Effectiveness (ECARE) in Vanuatu. Donor: GEF Timeframe: Concept Approved in 2020.	Department of Environmental Protection and Conservation (DEPC) (EA), and International Union for Conservation of Nature (IUCN).	Lessons learned and experiences from the activities will also be considered. Opportunities for data and information exchange, and joint capacity building will be sought with this project.

2.8 Climate Change and Gender in Vanuatu

77. The Paris Agreement calls for a *‘country-driven, gender-responsive, participatory and fully transparent approach to foster climate resilience and reduce vulnerability’*^[91]. So, the outcomes of the Paris Agreement offer new impetus to consider gender dimensions considerably on climate change transparency. Women are the most vulnerable groups to the effects of climate change, and they do not have sufficient adaptive capacity due to the lack of access, control, and participation in climate change policies. So, gender mainstreaming should be done in the development of climate change policies.

78. National Sustainable Development Plan (NSDP) 2016-2030^[92] calls for (i) implementing gender responsive planning and budgeting processes, and (ii) to ensure every child, regardless of gender, location, educational needs or circumstances has access to the education system. In addition, Vanuatu Agriculture Sector Policy (2015-2030)^[93] calls for mainstreaming gender and support women, youths and vulnerable groups in all agriculture initiatives.

79. Climate change impacts are not gender-neutral, and due to pre-existing inequalities women are disproportionately affected in the Pacific Islands communities[94]. The majority of women in the Pacific work in agriculture, often at subsistence level which increases their exposure to climate change[95]. Considering such aspect, the regional charter *Revised Pacific Platform for Action on Advancement of Women and Gender Equality 2005 to 2015*^[96], sets the direction for the region in improving outcomes for women. Besides, National Gender Equality Policy 2015-2019^[97] specifically mention the climate change vulnerability and gender issue. It clearly specifies that more women than men (49% and 41% respectively) are involved in the subsistence economy, which makes them more susceptible to poverty, climate change, disasters and other livelihood stresses. It also calls for gender responsive climate change and disaster risk reduction policies, projects and governance mechanisms.

80. The Vanuatu's Climate Change and Disaster Risk Reduction Policy (CCDRR)^[98] emphasizes that women have full opportunities to participate in policy development, decision making and implementation at all levels. Initiatives are under way to ensure gender and climate change and disaster risk reduction efforts are aligned, and efforts should be up-scaled.

81. Hence, the different roles and responsibilities of women in climate transparency should be considered in CBIT through gender analysis. The project will, where possible, account for and apply a gender-sensitive approach to data and information collection and analysis, which will be reported in project findings, relevant publications, bi-annual and annual reports.

2.9 Barriers and Gaps in Vanuatu influencing the ETF requirement

82. The NDC identified a number of barriers as mentioned below:

- ? Most training is ad hoc in nature and not linked to a formal professional development strategy.
- ? At the information and knowledge management level, systems exist but are not fully utilized. This makes information sharing and learning of lessons difficult.
- ? Insufficient institutional resources, and coordination.
- ? Lack of data; information management problems and; inadequate human resources and infrastructure.

83. The SNC ^[99] have identified a number of barriers as mentioned below:

- ? Insufficient institutional and financial resources.
- ? Lack of research data; information management.
- ? Inadequate human resources and infrastructure.
- ? High uncertainty associated with data of AFOLU sectors.
- ? Lack of comprehensive information, data archiving and lack of country specific emission factors.
- ? For Land Use Change there is no national data available.
- ? The waste sector also lacks information on waste characterization and composition.
- ? Inadequate training and capacity building on GHG inventory training.

84. The Vanuatu Risk Governance Assessment (2013)^[100] has identified key barriers and opportunities for improved climate change governance. Several weaknesses have been identified, which are as follows:

- ? There is an inconsistent of engagement of senior officials.

- ? Lack of transparency in climate change decision making.
- ? Lack of comprehensive assessment of the capacity gaps in relation to measurement, reporting and verification of GHG emission.
- ? Most information/data sharing initiative are project based, and not through a formalized institutional continuous process.

85. During the preparation of the PIF, consultation was done with the government stakeholder Department of Environment Protection and Conservation (DEPC) of Vanuatu, MOCC. As per the consultation following limitation of DEPC is potential hindrance of transparency requirement.

? Centralized database for relevant divisions i.e: Environmental Protection; Pollution control and Waste management feed into main department database and accompanying data collection mechanisms, systems and infrastructure.

? Need to improve the Environment Management Information System (EMIS) with software and database to collect & analyses data for planning and reporting of progress towards achieving goals for sustainable environmental management, climate change mitigation, and adaptation. As part of the improving of EMIS there should be links to the National Sustainable Development Plan, and international indicators.

? Updated data of project proposals and implemented projects (including their findings) related to the Paris Agreement.

? Lack of training on data collection and storage, information accessibility, GHG inventory preparation, land use change analysis and converting the land use change data to GHG emission, adaptation project monitoring and complying with national adaptation priorities, and transparency elements relating to the different thematic areas under the Paris Agreement.

86. Based on the gaps and barriers as mentioned above the key barriers that should overcome to ensure the National MRV system can comply with the requirement of Enhanced Transparency Framework in the Paris Agreement are follows:

? *Barrier 1-lack of integrated, systematic, continuous coordination and institutional mechanism focusing on data and information sharing related to climate change mitigation and adaptation.*

Though some of the national entity collect the data related to climate change mitigation and adaptation as mentioned in the section 2.5, and there is MRV tool for the energy sector focusing on NERM:2016-2030; there is a lack of integrated, systematic, continuous coordination and institutional mechanism focusing on data and information sharing related to climate change mitigation and adaptation focusing on Energy, Agriculture, Forestry, and Land use change. The existing data and information collection system is mostly project based, and is not a continuous process based on hardware, software, and human skills. Lack of integrated, systematic, continuous coordination, and institutional mechanism affecting the efficient monitoring of NDC actions. Besides, there is a lack of awareness among the stakeholders regarding the ETF requirement of Paris Agreement. Limited coordination is also prominent among the national stakeholders by sharing data and information related to Energy, Agriculture, Forestry, and Land use change. In addition, there is a lack of harmonized indicator and monitoring systems for prioritized national adaptation activities.

? *Barrier 2-Lack of technical expertise and knowledge of measuring, reporting, and verification (MRV) of GHG emission, and monitoring of adaptation actions.*

There is a lack of national expertise focusing on calculation on the quantification and uncertainty of GHG emissions focusing on Agriculture, Forestry, and Land use change, because these are the sectors with highest uncertainty. Similarly, there are a lack of information on the data quality related to GHG emissions estimates, and progress of adaptation actions. Also, there is a lack of national expertise on updated IPCC GHG emission quantification methodologies, comprehensive tools, and best practices to comply with ETF requirements. Limited technical capacity and resources for prioritizing and monitoring the NDC adaptation actions progress. In conclusion, lower number of national technical experts affecting the development of domestic MRV systems for climate change mitigation and adaptation focusing on Energy, Agriculture, Forestry, and Land use change.

? *Barrier 3- Lack of centralized data storage, archiving, and information management system focusing on mitigation and adaptation activity data*

The previous GHGI data are collected indirectly from expert sources and statistics, and sometimes it is also approximated. There is a clear gap of activity data focusing on Agriculture, Forestry, and Land use change sectors, and also end use of the energy. Such insufficient activity data can lead to incomplete emissions estimates. Besides, developing country-specific emission factors related to Agriculture, Forestry, and Land use change will also improve the estimates of GHG emissions.

(3) THE PROPOSED ALTERNATIVE SCENARIO

87. The proposed project is aimed at assisting the Vanuatu to implement its GHG emission reduction commitments under the Paris Agreement to the UNFCCC and also track the NDC adaptation actions. Specifically, project objective is to build Vanuatu's institutional and human capacities for complying with Enhanced Transparency Framework (ETF) reporting requirements of the Paris Agreement, and implementation and monitoring of Vanuatu's Nationally Determined Contribution focusing on Energy, Agriculture, Forestry and other Land-use Sectors.

88. The theory of change (TOC) (Figure 9) underlying this project is based on the premises that for Vanuatu to establish and achieve climate change mitigation and adaptation goals that it has committed to under the Paris Accord in the most cost-effective manner, and without compromising on its national development goals and economic growth potential.

89. The project consists of two inter-linked components aimed at comprehensively addressing the barriers mentioned in section 82. The first component addresses institutional capacity constraints related to preparation and update of national and sectoral NDC targets, as well as limited awareness about ETF requirement. This component in partnerships with a number of government organizations, NGOs, and private entity will support the development of robust institutional arrangement for the implementation of domestic MRV. Under the second component the project will work to set-up and strengthen MRV system through centralized information management system and human capacity development through training.

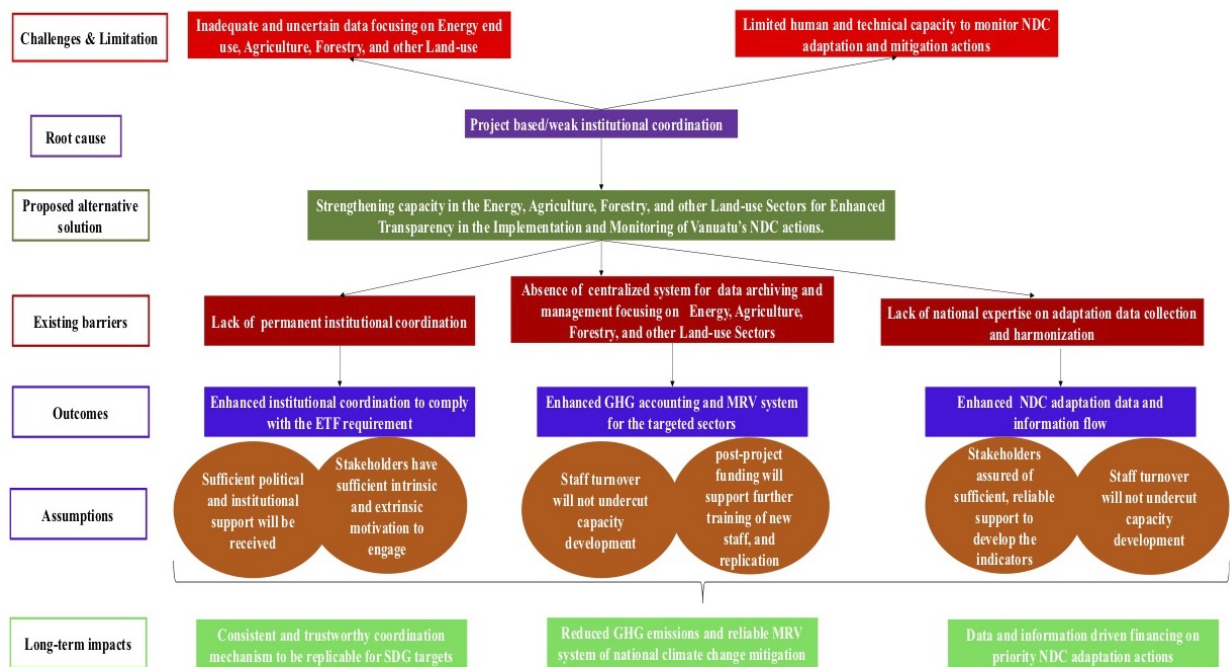


Figure 9: Theory of change of the proposed CBIT project.

Component 1: Strengthening Vanuatu's institutional arrangements for a robust MRV system for NDC climate change mitigation and adaptation actions.

90. The CBIT project will help to strengthen the capacities of national and local institutions by placing a proper political and institutional arrangement for meeting ETF requirements (Output 1.1.1). The project is expected to strengthen the institutional requirement for ETF through strategies that consist of (i) Conducting gaps assessment focusing on institutional, regulatory, human, technology, finance and capacity-building support needed, and stakeholder mapping to meet the transparency framework of NDC and enhanced NDC actions (Activity 1.1.1.1); (ii) working groups with institutional focal persons are identified and formalized through ministerial decree for data collection and processing focusing on mitigation and adaptation and **loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address them)** (Activity 1.1.1.2), and (iii) Establishment of the National ETF body under the DEPC involving the relevant ministries of targeted sectors (Activity 1.1.1.3). Under this component sectoral transparency guidelines and protocols will be established for NDC and enhanced NDC climate change mitigation and adaptation actions and **loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address them)** (Output 1.1.2). The project is expected to strengthen the sectoral transparency guidelines and protocols through activities of (i) regulatory framework and guidelines with a focus on gender for national ETF institutional arrangements are drafted and adopted to track the progress of NDC and enhanced NDC actions and **loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address**

them) (Activity 1.1.2.1); and (ii) metrics and indicators for monitoring the NDC and enhanced NDC actions focusing on climate change mitigation, adaptation and loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address them) are designed and validated (Activity 1.1.2.2). Under this component operational quality control and assurance mechanism will be established (Output 1.1.3). The project is expected to strengthen the operational quality control and assurance mechanism through activities of (i) development of quality control system (data collection, archiving, and data sharing) focusing on climate change mitigation and adaptation actions loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address them) mentioned in NDC and enhanced NDC (Activity 1.1.3.1); (ii) development of data collection templates and guidelines focusing on climate change mitigation, adaptation and loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address them) in NDC and enhanced NDC (Activity 1.1.3.2); and (iii) establishment of mechanism (through agreement, MoU) between the stakeholders for collection, generation, archiving, and dissemination of data on NDC and enhanced NDC climate change mitigation, adaptation and loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address them) (Activity 1.1.3.3). The NDC highlighted 5 top priority adaptation sectors. Out of these 5 priority adaptation sectors, under this project focus will be given to priority adaptation sectors ?Agriculture and food security? and ?Sustainable Forest Management? as pilot case. Based on the lessons learned other priority adaptation sectors (Sustainable tourism development, Community based marine resource management, and Integrated water resource management) will be incorporated in future.

91. Component 1 will strengthen guidelines on monitoring and reporting of climate financing focusing on domestic and international sources, and both public and private sector (Output 1.2.1). Under this output the activities will be (i) assessment of needs, constraints, and stakeholders on tracking climate finance on NDC and enhanced NDC actions and loss and damage (Activity 1.2.1.1), (ii) developing methodologies, guidelines, and protocols to collect, archive, and disseminate climate finance data (Activity 1.2.1.2), (iii) establishment of National Climate Finance Reporting and Monitoring (NCFRM) cell linked with the proposed National ETF body to track climate finance of NDC and enhanced NDC actions under DEPC involving other relevant ministries (Activity 1.2.1.3). Component 1 will also strengthen capacity of national climate changes stakeholders to track the NDC and enhanced NDC adaptation actions and loss and damage (Output 1.2.2). Under this output the activities will be (i) assessment of good practices for monitoring and reporting on NDC and enhanced NDC priority adaptation actions (Activity 1.2.2.1), (ii) designing and implementing a gender-sensitive training program involving relevant institutions at different levels to monitor NDC and enhanced NDC priority adaptation actions (Activity 1.2.2.2).

92. The above strategies will help Vanuatu to develop a long-term action plan on climate transparency, and to switch away from a project-based approach to MRV toward a full institutionalization of the ETF. By defining long-term and mid-term actions, which will not be impacted by political change, the country will be able to accelerate transparency actions in compliance with the Paris Agreement. The proposed institutional mechanism will operate continuously focusing on national communications, and biennial transparency reports (BTR), and will build on the previous institutional arrangement for (i)

national communications, (ii) forest reference level submission, (iii) NAB institutional arrangements, and (iv) Vanuatu's Climate Change Act (2016) institutional arrangements. The project will ensure coordination with Third National Communication, and BUR, as well as ongoing adaptation related projects to avoid duplication and enhance synergies on institutional arrangement. The project will ensure coordination with the ongoing REDD+ work in the country. The ongoing REDD+ work in the country has focus on the activities such as land degradation, agroforestry etc., and such activities can provide data for the AFOLU sector. In addition, REDD+ work and the reporting obligations can also provide data for Climate Change mitigation and adaptation for national communications. For example, National Forest Inventory can provide Activity data and emission factors. So, the proposed project will work through the proposed institutional framework and will ensure the smooth data and information flow from the ongoing REDD+ work in the country. The institutional framework will build on existing data management systems and initiatives like MRV system of NERM:2016-2030. Also, the proposed institutional framework will be linked to the NAB to coordinate high-level climate change activity (e.g. legislative and policy direction, supervision, oversight, and guidance) across different levels. In the long run, these strategies will ensure preparation of GHG inventories, and tracking of NDC actions will be supported by the Vanuatu's national budget. In addition, support from the Vanuatu's national budget will ensure the continuation of the established institutional arrangement, due to data support from the proposed strategies for the tracking of relevant sustainable development goals (SDG), such as Affordable and Clean Energy (SDG 7), Sustainable Cities and Communities (SDG 11), Responsible Consumption and Production (SDG 12), and Climate Action (SDG 13). In addition, the project will ensure the training program organized under this component 1 will follow Training of Trainers (ToT) approach, so that the training can be replicated for the newly recruited staffs. Similarly, under the ToT national/regional institution or university faculties will be included to disseminate the technical knowledge as university curricula.

Component 2: Provision of an online platform, tools, and training for a robust MRV system focusing on Energy, Agriculture, Forestry, and other Land-use Sectors.

93. Component 2 will upgrade the existing EMIS system through Information Technology (IT) infrastructure development for a robust MRV system hosted by DEPC (Output 2.1.1). Under this output the activities will be (i) procurement of hardware and software to develop an online-based integrated MRV system (Activity 2.1.1.1), (ii) historical activity data are archived and new data are collected (Activity 2.1.1.2), (iii) national specific emission factors are collected and archived (Activity 2.1.1.3), (iv) centralized database development with archived historical data for NDC actions hosted by DEPC (Activity 2.1.1.4), (v) operational integrated MRV system with online visualization and dissemination platform on NDC mitigation and adaptation actions **loss and damage (observed and potential climate change impacts, incl. extreme weather events and slow onset event; and activities to avert, minimize and address them)** (Activity 2.1.1.5). Component 2 will also strengthen human capacity on GHG emissions and removal tools, and climate vulnerability assessment through training and peer to peer learning (Output 2.1.2). Under this output the activities will be (i) designing and implementation of gender-sensitive training on data collection, storage, and management; GHG emission and removal estimation and reporting; and transparency elements (Activity 2.1.2.1), (ii) dissemination of training knowledge materials through training proceedings and recorded video of the training session through the established online MRV system (Activity 2.1.2.2), (iii) exchanging the

lessons learned at the regional and global levels through the CBIT Global Coordination Platform (Activity 2.1.2.3).

94. Under this component 2, gender-sensitive training programs will be developed on GHG inventory methodologies and tools, national specific climatic and socio-economic scenarios to assess the climate change mitigation, land use change analysis, emission factors, methodologies, and tools for mitigation assessment. The project will ensure the training program organized under this component 2 will follow Training of Trainers (ToT) approach, so that the training can be replicated for the newly recruited staffs. Similarly, under the ToT national/regional institution or university faculties will be included to disseminate the technical knowledge as university curricula. Component 2 will build on the results of baseline activities as mentioned in the section 2.7 to establish and strengthen fit-for-purpose MRV system focusing on Energy, Agriculture, Forestry and other Land-use Sectors. Based on the lesson learned under this project, the established infrastructure will also focus on other IPCC sectors (IPPU and Waste) for them to be incorporated in the future.

The above two components will support the country to increase transparency over time. For example, robust institutional arrangements and knowledge management structures for gathering, and coordinating under this project will ensure future emission factors and activity data development. In addition, enhanced knowledge sharing and coordination will ensure gradual improvement towards more transparent framework.

(4) INCREMENTAL COST REASONING

95. The proposed CBIT project agrees with *“fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity building initiative for transparency (GEF Focal Area CCM-3-8: supports)*. GEF investment for this proposed CBIT project will ensure transparency, accuracy, consistency, compatibility, and clarity of data and information related to climate change mitigation and adaptation. The national and sectoral institutional and technical capacity gap will likely to persist, and the project-based approach in Vanuatu, if not assisted through the proposed CBIT project. Vanuatu through some completed, and ongoing project has developed disaggregated initiative (for example, national REDD+ program, or MRV tool for the NERM:2016-2030), but there are still several barriers hindering the achievement of national aspiration of climate transparency. Due to such barriers the country will not be able to achieve the transparency requirement of the Paris Agreement, if the proposed CBIT project is not implemented.

96. As a small island nation, climate change constitutes one of the political priorities in Vanuatu; yet existing technical and institutional capacity barriers affecting the execution of NDC priorities. The country needs to focus on coordinated actions focusing on data and information analysis, and systematic collection, archiving and management of NDC actions related data. This project will give this opportunity to Vanuatu, and in the long run, the mechanisms and tools, which will be developed under this project, will be gradually integrated into the national system.

97. Table 8 present how the existing barriers and constraints will be addressed by the expected outputs of the project with the GEF finance.

Table 8: Enhanced Transparency Framework (ETF) requirements and how the existing barriers and constraints will be addressed by the proposed CBIT project in Vanuatu.

Barriers and Constraints	Expected Outputs to Address Barriers and Constraints	Expected contributions
Lack of Clear and robust institutional arrangements and knowledge management structures to ensure sector-specific ETF monitoring and reporting exercises	1.1.1 2.1.1	Robust institutional arrangements and knowledge management structures for gathering, coordinating and ensuring sector-specific information for ETF monitoring and reporting exercises.
Lack of Strong technical capacity and robust data to track mitigation contributions and adaptation actions. Lack of activity data and local emission factors. Not using the updated IPCC methodologies. Low technical capacity of national stakeholders on domestic MRV systems. Quality Assurance (QA)/Quality Control (QC) and verification processes are also limited. Lack of expertise and knowledge on the detailed calculation on the uncertainty of emissions	1.1.3 1.2.1 1.2.2 2.1.1 2.1.2	Strong technical capacity and robust data generation system to establish MRV systems for tracking mitigation contributions
Lack of enhanced knowledge sharing and coordination of amongst transparency practitioners for ETF compliance	1.1.2 1.2.1 1.2.2 2.1.1 2.1.2	Enhanced knowledge sharing and coordination to comply with the transparency requirement of ETF.

Lack of awareness and understanding of ETF requirements	1.1.1	Increased awareness and understanding of ETF requirements
	1.1.2	

(5) GLOBAL BENEFITS

98. The proposed project will strengthen the capacity of the country through an operational, robust, and functional MRV system to implement the NDCs and comply with the Paris Agreement. This will be done through high-quality GHG emission mitigation data, and data driven progress of NDC adaptation actions. Though the project is focused on Vanuatu, through the achievement of the NDC actions, the project has the potential to contribute towards global climate change actions. Most importantly, the proposed system will enable the country to design and prioritize cost-effective project proposals to avoid duplication.

99. Indirectly, the proposed project will also provide global benefits focusing on land degradation, and biodiversity through the development of MRV system on forest and land use change. Improved management of ecosystems and natural resources due to efficient MRV system will also generate socio-economic benefits to local livelihoods. Most importantly, the proposed project will develop the technical and operational capacity of national stakeholders? local institutions, including government, academia, civil society, and the private sector data collection and analysis, quality assurance/quality control (QA/QC), GHG inventory methodologies, and adaptation progress.

100. The CBIT project will lead the low carbon development in Vanuatu in the long run, because a coordination and monitoring framework at the institutional level for GHG inventory, and NDC mitigation and adaptation actions involving key national stakeholders will be created. Thus, the global benefits will be derived through this project in the form of capacity development focusing on GHG emission reductions, adaptation, and similar approach in the long run can be taken to track the SDGs progress. Such success will not be possible to achieve based on a sporadic project-based approach of NC and BUR development.

(6) INNOVATION, SUSTAINABILITY, AND SCALING UP

101. Innovation: The proposed CBIT project will solve the gaps highlighted in previous NCs, and NDC, and will provide long-term benefits to Vanuatu by addressing the current weaknesses of the national GHG inventory system and partnering with relevant institutions. Coordination mechanism focusing on GHG inventory, mitigation action, loss and damages, and support received will be developed in relation to ETF reporting. FAO will deploy the deeply rooted technical expertise on best practices, tools and lessons learned in climate change issues, such as Open Foris and SEPAL for the GHG inventory data generation in forestry sector.

102. Sustainability: The proposed activities will be resulted in close partnership of relevant institutions working on climate change adaptations and mitigation. So, the activities of this project will be sustainable through institutionalization of the system after the completion of the project due to

stakeholders' needs. The initiatives developed under the project will be continued through the technical and infrastructural expertise developed under this project. The country will also strengthen collaboration with global platform, such as-global CBIT platform, and two FAO CBIT global projects. The country has recently graduated from LDC. Hence, Vanuatu can play a significant role to share the lessons learned to enhance the climate transparency within the Small Island Developing States (SIDS), and with other comparable countries.

103. Scaling up: The focal point of the key national stakeholders will disseminate their acquired knowledge through the established institutional mechanism. Therefore, long term scaling of the project benefits will be ensured through their institutionalizations. The key national stakeholders of this project will enable to manage adequate exit points of the project, avoid disruption, and will ensure continuity of project benefits. In addition, the project outcome will be disseminated at the national and regional levels through global networks and forums, such as CBIT Global Coordination Platform. In addition, the knowledge materials will be disseminated and stored through the proposed information management system.

[1] The Paris Agreement.

https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

[2] The Paris Agreement.

https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

[3] United Nations Framework Convention on Climate Change (UNFCCC) <https://www.nab.vu/unfccc0>

[4] United Nations Framework Convention on Climate Change (UNFCCC) in Vanuatu.

<https://www.nab.vu/unfccc0#:~:text=Vanuatu%20signed%20the%20convention%20on,50%20Parties%20had%20ratified%20it.&text=Vanuatu%20ratified%20the%20Kyoto%20Protocol,Paris%20Agreement%20in%20September%202016>.

[5] https://www.unescap.org/sites/default/files/publications/WP-19-04%20LDC%20Graduation_Challenges%20and%20Opportunities%20for%20Vanuatu.pdf

[6] Vanuatu, Well Represented at Global Climate Forum. <https://www.sprep.org/news/vanuatu-well-represented-global-climate-forum>

[7] <https://www.ctc-n.org/ctcn-countries/vu>

[8] Vanuatu National Adaptation Programme of Action (NAPA). <https://www.adaptation-undp.org/projects/vanuatu-national-adaptation-programme-action-napa#:~:text=Vanuatu%20is%20the%20only%20Pacific,the%20NAP%2C%20also%20identified%20priorities>.

[9] nama on rural Electrification in Vanuatu.

https://www4.unfccc.int/sites/PublicNAMA/_layouts/UN/FCCC/NAMA/Download.aspx?ListName=NAMA&Id=156&FileName=NAMA%20Final%20Vanuatu%202.pdf

[10] National Climate Change Adaptation Strategy for Land-Based Resources.

https://www.adaptation-undp.org/sites/default/files/downloads/vanuatu_national_climate_change_adaptation_strategy_-_2012-2022.pdf

- [11] Major Earthquake Jolts Island Nation Vanuatu.
<https://web.archive.org/web/20110713025110/http://www.india-server.com/news/major-earthquake-jolts-island-nation-4551.html>
- [12] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [13] Country Profile: Vanuatu. <https://worldpopulationreview.com/countries/vanuatu-population>
- [14] Country Profile: Vanuatu. <https://data.worldbank.org/country/VU>
- [15] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [16] Country Profile: Vanuatu. <https://worldpopulationreview.com/countries/vanuatu-population>
- [17] LDC Graduation: Challenges and Opportunities for Vanuatu
https://www.unescap.org/sites/default/files/publications/WP-19-04%20LDC%20Graduation_Challenges%20and%20Opportunities%20for%20Vanuatu.pdf
- [18] World Bank Open data base.
<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=VU>
- [19] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [20] CIA World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/fields/214.html>
- [21] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [22] Basic Statistics, Asia and the Pacific. Asian Development Bank. <https://data.adb.org/dataset/basic-statistics-asia-and-pacific>
- [23] Vanuatu: World Bank development indicators.
<https://data.worldbank.org/indicator/SH.STA.SMSS.UR.ZS?locations=VU>
- [24] Vanuatu: Highlights based on country reported GLAAS 2016/2017 data.
https://www.who.int/water_sanitation_health/monitoring/investments/country-highlights-2017/vanuatu-glaas207-country-highlight-20181121.pdf?ua=1
- [25] Vanuatu Human Development Report 2019. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/VUT.pdf
- [26] Vanuatu Education Stats. <https://www.nationmaster.com/country-info/profiles/Vanuatu/Education>
- [27] 2009 National Population and Housing Census, Gender Monograph
<https://statswiki.unece.org/download/attachments/122325861/2009%20Vanuatu%20Census%20Gender%20Monograph.pdf?api=v2>
- [28] Poverty and Equity Brief: Vanuatu (2019).
https://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Archives-2019/Global_POVEQ_VUT.pdf
- [29] Vanuatu: World Bank development indicators.
<https://data.worldbank.org/indicator/SH.STA.SMSS.UR.ZS?locations=VU>
- [30] Vanuatu Human Development Report 2019. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/VUT.pdf
- [31] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [32] World Risk Report 2012.
https://www.droughtmanagement.info/literature/UNU_world_risk_report_2012_2012.pdf

- [33] Global Climate Risk Index 2019.
https://reliefweb.int/sites/reliefweb.int/files/resources/Global%20Climate%20Risk%20Index%202019_2.pdf
- [34] Vanuatu National REDD+ Programme. <http://reddplus.vu/>
- [35] Initial National Communication (INC) of Vanuatu. <https://www.nab.vu/document/vanuatus-initial-national-communication-unfccc>
- [36] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [37] Initial National Communication (INC) of Vanuatu. <https://www.nab.vu/document/vanuatus-initial-national-communication-unfccc>
- [38] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [39] Profile of Risks from Climate Change and Geohazards in Vanuatu (2013).
<https://www.nab.vu/sites/default/files/documents/Risk%20Profile%20Report%20Final.pdf>
- [40] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [41] An assessment of the impact of climate change on agriculture and food security: A case study in Vanuatu. <http://www.fao.org/3/i0530e/i0530e02.pdf>
- [42] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [43] Coping with Climate Change in the Pacific Island Region (CCCPIR): Climate Adaptation through Forestry Pele Island, Vanuatu. https://www.nab.vu/sites/default/files/nab/projects/forest_nursery.pdf
- [44] Pacific adaptation to climate change: Vanuatu.
https://www.sprep.org/attachments/Climate_Change/PACC_Report_of_in-country_consultations_Vanuatu.pdf
- [45] Climate change impacts in North Efate, Vanuatu.
<https://www.spc.int/sites/default/files/wordpresscontent/wp-content/uploads/2016/12/Climate-change-impacts-North-Efate.pdf>
- [46] National Adaptation Programme of Action (NAPA) of Vanuatu.
<https://unfccc.int/resource/docs/napa/vut01.pdf>
- [47] National Climate Change and Disaster Risk Reduction Policy.
https://www.preventionweb.net/files/46449_vanuatuccdrpolicy2015.pdf
- [48] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [49] Meteorology, Geological Hazards and Climate Change Act No.25 of 2016.
<https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/105148/128518/F-500801273/VUT105148.pdf>
- [50] <https://forestry.gov.vu/>
- [51] <https://vmgd.gov.vu/vmgd/index.php/climate/climate-information-services/data-services>
- [52] <https://www.nab.vu/>
- [53] <https://malffb.gov.vu/index.php?id=6>
- [54] <https://doi.gov.vu/>
- [55] <https://mol.gov.vu/index.php/en/>
- [56] <https://mipu.gov.vu/>
- [57] <https://www.nab.vu/glossary/designated-national-authority-dna>

- [58] <http://www.ura.gov.vu/>
- [59] National Environment Policy and Implementation Plan 2016-2030 (NEPIP).
<https://www.sprep.org/attachments/Publications/EMG/vanuatu-nepip.pdf>
- [60] Climate Change and Disaster Risk Reduction Policy.
https://www.preventionweb.net/files/46449_vanuatuccdrpolicy2015.pdf
- [61] National Sustainable Development Plan (NSDP). <https://ogcio.gov.vu/images/nsdp/Vanuatu2030-EN.pdf>
- [62] National Sustainable Development Plan (NSDP). <https://ogcio.gov.vu/images/nsdp/Vanuatu2030-EN.pdf>
- [63] Meteorology, Geological Hazards and Climate Change Act No.25 of 2016.
<https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/105148/128518/F-500801273/VUT105148.pdf>
- [64] Vanuatu Forest Policy 2011 - 2020.
http://cn.china.cn/2011images/vanuatu/NFP_Comprehensive_June_2011.pdf
- [65] Vanuatu National Forest Policy.
<https://malffb.gov.vu/doc/forests/Vanuatu%20National%20Forest%20Policy.pdf>
- [66] <http://reddplus.vu/>
- [67] National Energy Road Map.
<https://doe.gov.vu/images/docs/publications/Updated%20Vanuatu%20National%20Energy%20Road%20Map%202016-2030.pdf>
- [68] NAMA on rural electrification in Vanuatu.
https://unfccc.int/files/cooperation_support/nama/application/pdf/vanuatu_nama_final.pdf
- [69] <https://gggi.org/project/vanuatu-national-green-energy-fund-ngef/>
- [70] <https://pacific-data.sprep.org/dataset/report-3-consultancy-services-develop-renewable-energy-based-grid-electrification-2>
- [71] <https://www.adb.org/sites/default/files/linked-documents/cobp-van-2015-2017-sd.pdf>
- [72] <https://www.adb.org/sites/default/files/linked-documents/robp-pac-2010-2013-oth01.pdf>
- [73] https://www.sprep.org/climate_change/PYCC/documents/PIFACC_001.pdf
- [74] <http://prdrse4all.spc.int/system/files/PI0041.pdf>
- [75] https://www.sprep.org/attachments/Pacific_RSWMS_2010-2015.pdf
- [76] https://sustainabledevelopment.un.org/content/documents/commitments/1326_7636_commitment_cleaner-pacific-strategy-2025.pdf
- [77] https://www.globalsupportprogramme.org/sites/default/files/downloads/vanuatu_national_climate_change_adaptation_strategy_-_2012-2022.pdf
- [78] <https://unfccc.int/resource/docs/napa/vut01.pdf>
- [79] Climate Change and Disaster Risk Reduction Policy.
https://www.preventionweb.net/files/46449_vanuatuccdrpolicy2015.pdf
- [80] <https://www.refworld.org/pdfid/5b44ce864.pdf>
- [81] <https://malffb.gov.vu/doc/forests/Vanuatu%20National%20Forest%20Policy.pdf>
- [82] <http://extwprlegs1.fao.org/docs/pdf/van176920.pdf>
- [83] https://mol.gov.vu/images/News-Photo/water/DoWR_File/Strategy/Vanuatu-National-Water-Strategy-2018-30.pdf
- [84] <https://www.sprep.org/att/IRC/eCOPIES/Countries/Vanuatu/123.pdf>

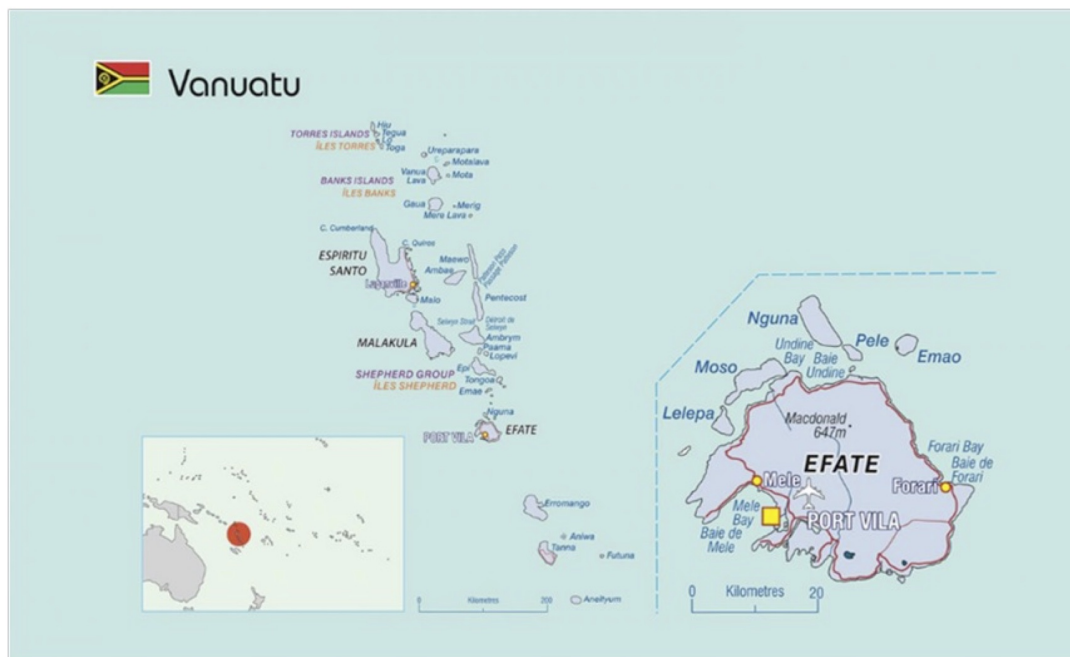
- [85] https://www.unodc.org/res/cld/document/environmental-management-and-conservationact_html/Environmental_Management_and_Conservation_Act.pdf
- [86] https://www.preventionweb.net/files/32504_vanuatdrrecurriculumbaseline20121.pdf
- [87] Vanuatu's Enhanced Nationally Determined Contributions (NDC) 2020-2030 (draft).
- [88] Climate Change and Disaster Risk Reduction Policy.
https://www.preventionweb.net/files/46449_vanuatuccdrpolicy2015.pdf
- [89] NAMA on rural electrification in Vanuatu.
https://unfccc.int/files/cooperation_support/nama/application/pdf/vanuatu_nama_final.pdf
- [90] National Sustainable Development Plan (NSDP). <https://ogcio.gov.vu/images/nsdp/Vanuatu2030-EN.pdf>
- [91] https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf
- [92] National Sustainable Development Plan (NSDP). <https://ogcio.gov.vu/images/nsdp/Vanuatu2030-EN.pdf>
- [93] <https://pafpnet.spc.int/images/articles/policy-bank/vanuatu/Vanuatu-Agriculture-Sector-Policy-Outline-2015-2030-English.pdf>
- [94] Aipira, C., Kidd, A., & Morioka, K. (2017). Climate change adaptation in Pacific Countries: fostering resilience through gender equality. In *Climate Change Adaptation in Pacific Countries* (pp. 225-239). Springer, Cham.
- [95] Asian Development Bank. (2014). Gender-based violence in Asia and the Pacific. Retrieved October 29, 2020 from <http://www.adb.org/news/infographics/gender-based-violence-asia-and-pacific>
- [96] <https://pacificwomen.org/wp-content/uploads/2017/09/web-RPPA-for-CSW1.pdf>
- [97] <https://dwa.gov.vu/images/policies/NationalGenderEqualityPolicyJuly2015.pdf>
- [98] Climate Change and Disaster Risk Reduction Policy.
https://www.preventionweb.net/files/46449_vanuatuccdrpolicy2015.pdf
- [99] Second National Communication (SNC) of Vanuatu.
https://unfccc.int/sites/default/files/resource/Vanuatu%20NC2_15%20October%202016.pdf
- [100] https://nab.vu/sites/default/files/nab/documents/03/04/2014%20-%2012%3A42/final_rga_report_26_february_14.pdf

[LC1] Why specifically select the first six SDGs?

[LC2] At what frequency? Annual?

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.



2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities No

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

104. Previously gathered data/information for past national communications, forest reference level submission, adaptations project involving indigenous Peoples, local communities, CSOs, private sector entities, etc will be use by the project executing entity DEPC, and implementing entity FAO. The project will invite the stakeholders, including CSOs, academia, and indigenous people in the validation and inception workshop, national consultation, training, working group discussions during the project proposal grant (PPG), and implementation stage. By involving government agencies, private sector, academia (for example, University of the South Pacific Emalus Campus, Vanuatu Institute of Teacher Education, Vanuatu Agricultural Research and Technical Centre -VARTC), and Civil Society Organizations (CSOs) this project will establish a domestic MRV at national and local levels to strengthen the process and progress related to NDC actions. During the validation workshop of this

CBIT PIF government agencies, private sector, academia and Civil Society Organizations (CSOs) are involved.

105. The key stakeholders and a brief description of their engagement will be as follows:

Table 9: Stakeholders of the proposed CBIT project in Vanuatu, and their Responsibilities.

Name of key stakeholders	Responsibility/expertise
1. Department of Environment Protection and Conservation (DEPC) of Vanuatu MOCC	? Project Executing Entity ? Liaising with other inter-ministerial agencies.
2. Other associated ministries important for the domestic MRV system and tracking the progress of NDC actions: 2.1. The Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management (Department of Energy, Vanuatu Meteorology and Geo-Hazards Department); 2.2. Department of Strategic Policy, Planning & Aid Coordination (DSPPAC), Ministry of Prime Minister. 2.3. Vanuatu's National Advisory Board on Climate Change & Disaster Risk reduction (NAB). 2.4. Livestock Department, Ministry of Agriculture, Livestock, Forestry, Fisheries & Biosecurity. 2.5. Forestry Department, Ministry of Agriculture, Livestock, Forestry, Fisheries & Biosecurity. 2.6. Agriculture Department, Ministry of Agriculture, Livestock, Forestry, Fisheries & Biosecurity. 2.7. Ministry of Finance and Economic Management. 2.8. Ministry of Land and Natural Resources. 2.9. Department of Foreign Affairs. 2.10. Department of Women Affairs. 2.11. Vanuatu Investment Promotion Authority. 2.12. Ministry of Public Utilities and Infrastructure 2.13. Ministry of Education. 2.14. Ministry of Health. 2.15. Vanuatu National Statistics Office (VNSO) 2.16. Department of Tourism 2.17. Office of the Government's Chief Information Officer	? Focal persons and capacity building of relevant government officials. ? Institutional arrangement. ? Data collection, archiving, and analysis ? Decision-making and national investment ? Sectoral expertise
3. Local government (Port Vila Municipal Council-PVMC, and Luganville Municipal Council)	? Data collection and analysis ? Capacity building

Name of key stakeholders	Responsibility/expertise
4. Local/ national and international NGOs related to Climate Change actions 4.1 The Foundation of the Peoples of the South Pacific International (FSPI). 4.2 Care International 4.3 Oxfam International 4.4 Vanuatu Association of NGOs (VANGO) 4.5 Vanuatu Climate Adaptation Network (VCAN) 4.6 Vanuatu National Council of Women	? NGOs will be engaged in the implementation of the project, including the best practice analysis and validation and appraisal of the data/GHG information/Adaptation data management system.
5. Civil society organizations/Private organizations/ Oil and Gas companies/ Electricity company/ other major industries related to GHG emissions and Climate Change actions 5.1 Union Electrique du Vanuatu Limited (UNELCO) 5.2 Vanuatu Utility Infrastructure (VUI), Ltd. 5.3 Vanuatu Renewable Energy and Power Association (VANREPA): 5.4 Renewable energy equipment suppliers (Vanuatu Sun Solar, Vate Electrics, Solar Communication, Van Global, Energy 4 all, Green Tech, Jem solar, etc.)	? Data collection ? Capacity building
6. Regional Institutes 6.1 The Secretariat of the Pacific Regional Environment Programme (SPREP). 6.2 The Pacific Community. 6.3 Applied Geo-Science and Technology Division, the Pacific Community.	? Data collection ? Capacity building
7. National Research institutes and universities 7.1 University of the South Pacific Emalus Campus 7.2 Vanuatu Agricultural Research and Technical Centre -VARTC 7.3 Institute of Teacher Education	? Activity data collection. ? Emission factors development. ? Data quality. ? Training and curriculum development.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

106. Based on GEF Policy on Gender Equality (2017)[1]², the Guidance to advance Gender equality in GEF Projects and Programs (2018)[2]³, and GEF Gender Implementation Strategy (2018)[3]⁴ the proposed CBIT project will develop gender-responsive results-based indicators. This will ensure women's participation in project design, implementation, and evaluation. In addition, representative women's

participation during the validation, and inception workshops, as well as in national consultation will be ensured. Overall, the proposed CBIT project will account and apply a gender-sensitive approach for data and information collection and analysis wherever possible. This gender sensitive analysis and evaluation results will be presented and highlighted in project findings, annual and biannual reports, project publications, and knowledge materials.

[1] GEF Policy on Gender Equality (2017). <https://www.thegef.org/publications/gef-policy-series-gef-policy-gender-equality>

[2] GEF Guidance on Gender (2018). <https://www.thegef.org/publications/gef-guidance-gender-equality>

[3] GEF Gender Implementation Strategy (2018). https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.54.06_Gender_Strategy_0.pdf

107. Mitigation and adaptation activity related gender-responsive results-based indicator will allow this project to address appropriate responses to national efforts towards NDC mitigation and adaptation activities. The proposed CBIT project will also utilize different gender toolkit for national communications, and MRV of GEF funded Global Support Programme.

[1] <https://www.un-gsp.org/documents>

[LC1] In the core indicators section, we have reported only 2 female as direct beneficiaries. We should consider increasing the number

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

108. Vanuatu has had a long history of private sector involvement in the electricity and energy sector. In recent years it is also increasing due to renewable energy equipment suppliers. So, they will be involved during the institutional arrangement process for the capacity building and data collection purpose. Few of the private organization that will be involved are discusses here, and more opportunities and collaboration will be explored during the PPG phase.

? *Union Electrique du Vanuatu Limited (UNELCO)*-UNELCO is a privately-owned utility that has been providing electricity to Port Vila and Luganville for several decades and has recently extended its services to parts of East Malekula and Tanna. However, UNELCO's concession for Luganville ended in 2010, a new power utility, Vanuatu Utility Infrastructure (VUI), Ltd, won the concession.

? *Vanuatu Utility Infrastructure (VUI), Ltd.*: It is a US-based company and recent player in Vanuatu's power sector. In January 2011, through competitive bidding the company won the concession for power generation and supply for Luganville, on the island of Espiritu Santo after UNELCO's concession expired. VUI's installed capacity in 2011 was 4.1 MW and generation was approximately 8,570 MWh. Demand was 7,600 MWh and forecast to grow at 2-3% annually. There are 2,302 customers, of which 614 are high consumers. The customer base is growing at around 300 customers per year.

? *Petroleum Supply*: Consumers of petroleum in Vanuatu are currently served predominantly by two private suppliers-*Pacific Petroleum (diesel, petrol, kerosene and lubricants)* and *Origin Energy (LPG)*. Both are supported by a few private retailers and distributors throughout the country.

? *Vanuatu Renewable Energy and Power Association (VANREPA)*: It is an NGO, and has been active since 2003 in bringing wind power to rural areas, managing renewable energy projects for donors and selling solar lighting kits and energy-efficient stoves through Green Power, a retail spinoff. Through Green Power, VANREPA has teamed up with the Vanuatu Women's Development Scheme (VANWODS) to provide micro-finance for pico-solar kits. VANREPA also provides renewable energy generating systems to communities under its Community Powerhouse model.

109. During the PPG phase more opportunities and collaboration will be explored with organizations under AFOLU sector. Vanuatu Primary Producers Authority (VPPA) is an example of the AFOLU sector organizations that work to identify the farmers association at the community. VPPA helps to register and support the establishment of the Farmers' Associations in Vanuatu, which are mainly the grass-root associations. The VPPA can help during PPG phase to provide more information on the farmers associations. Also, local NGOs like Nasituan and Foundation of the Betterment of Society have Farm Support Association that are working related to AFOLU sectors will be involved. Vanuatu Chamber of Commerce (Agriculture, Livestock and Food Cluster) will be also contacted during the PPG phase.

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

110. Limited institutional capacities, lack of technical expertise, and lack of adequate data can hinder the progress of the project. To overcome obstacles, FAO will work closely with international initiatives. For example, FAO will utilize the CBIT Global Coordination Platform, and will deploy long-standing expertise in institutional coordination, database development, and information management system development focusing on energy, agriculture, forestry and land-use change. The collaboration through Pacific Regional Environment Programme (SPREP) and Pacific Community, as well as south-south cooperation, and peer to peer support will be utilized to strengthen the capacity of the national stakeholders. Besides, there is a risk from ongoing COVID-19 and future pandemic to hindrance the technical capacity building process, inception, validation, national consultation, and technical group meeting, as well as day to day project activities. In view of such risk, online platform like Zoom/MS Team will be utilize to conduct the day to day project activities, technical capacity building process, inception, validation, national consultation, and technical group meeting.

111. The potentials risks and associated mitigation approach are mentioned in Table 10:

Table 10: Risks to CBIT project implementation and mitigation approaches to address them

No	Description of risks	Types of Risks	Probability and impact (1-5)	Measures to address the risks
1	Potential slow down/non-progress of the project activity due to COVID-19/other pandemic	Global	P=4 I=5	Day to day project activities will be conducted considering work from home modality. In addition, technical capacity building process, inception, validation, national consultation, and technical group meeting will be conducted through online platform like Zoom/MS Team. Technical capacity building activities will be recorded, uploaded and disseminated through information management system under this project.
2	Limited cooperation on data and information sharing among stakeholders	Organizational	P=2 P=3	MoU and data-sharing agreement among key national stakeholders to collect, archive, and manage the data and information.
3	Lack of coordination among ministries and local government.	Political	P=2 I=4	Specifying the roles and responsibilities of the national institution supported by the project guideline and arrangements.

No	Description of risks	Types of Risks	Probability and impact (1-5)	Measures to address the risks
4	Possible government change resulting in a lack of political will to support the project activities	Political	P=4 I=5	Combining the decision-makers for awareness-raising through a strong stakeholder involvement plan.
5	The incapability of the government after the project cycle to fund the ETF related activities	Financial	P=4 I=4	Utilize the resources available with baseline projects, and exploring the South-South cooperation for potential investment.
6	Gender mainstreaming hindered by resistance from local and national stakeholders.	Cultural	P=3 I=2	Informing the key national stakeholders at the beginning regarding gender equality/representativeness as one of the key indicators of the project progress.
7.	Climate change impacts on the NDC priority sectors, including agriculture, land-use, energy and waste sectors and the capacity to monitor and report under the Paris Agreement.	Natural	P=3 I=1	This is a capacity building project that aims to develop Vanuatu's institutional and human capacities to comply with reporting requirements of the Paris Agreement. Though climate change impacts do not pose a risk to the project interventions or implementation, as such, established protocols and guidelines of the government and national institutions will be followed in case of any adverse climatic events.
8.	High staff turnover affecting the developed capacity and sustainability of the project	Organizational	P=3 I=4	The project will focus on building capacity of a broad spectrum of stakeholders including government agencies, research institutions, and academia. This will help to mitigate the risk of high staff turnover. On the other hand, ToT program, established coordination mechanism, data management system, and established protocols will be institutionalized. The training materials and video will be disseminated through the established GHG information system. Hence, new staff will have the opportunity to be trained even after the project completion.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

112. Department of Environment Protection and Conservation (DEPC) of Vanuatu MOCC will be the Lead Executing Agency, and FAO will be the GEF Implementing Agency. DEPC, MOCC and will be responsible for the overall coordination and execution of the project, including monitoring and evaluation. Other stakeholders will be involved in the project implementation as described in Table 9. The HAC assessment will be done during the PPG phase.

113. At the DEPC, MOCC, a Project Management Unit (PMU) will be housed to execute the day-to-day management of the project activities, as well as with financial and administrative reporting. The PMU will be consisting of thematic national and international experts, project admin and accountant, and a project coordinator.

114. A Project Steering Committee (PSC) will be established, and the details will be described in PPG Phase. The PSC will provide strategic guidance and take decisions related to the project implementation, project plan, budget, and revisions. The PSC will meet twice a year, or based on the agreed frequency at the start-up phase to build common understanding and smooth implementation of the project.

115. In addition, ongoing third national communication and first biannual update report will be also supportive to the proposed CBIT project, and through the completion of this project, several challenges mentioned in previous national communications and NDC (e.g. data quality management, use of updated IPCC methodology, and institutional arrangement) will be addressed. This proposed CBIT project will also coordinate with the National REDD+ program, and will maintain close connection the ongoing national REDD+ initiatives.

116. The project will coordinate with the two FAO global CBIT projects: (i) Global capacity-building products towards enhanced transparency in the AFOLU sector (CBIT-AFOLU), and (ii) Building global capacity to increase transparency in the forest sector (CBIT-Forest). The proposed project will also coordinate with the global CBIT project: (i) to identify needs and gaps in national transparency systems, (ii) to share lessons learned through regional and global meetings, (iii) enabling knowledge sharing to facilitate transparency enhancements, and (iv) access to emerging practices, methodologies, and guidance on transparency of climate action and support. The coordination will focus on the access to emerging practices, methodologies, and guidance on transparency

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

- Nationally Determined Contribution (NDC).
- Enhanced Nationally Determined Contribution (NDC).
- National Bio Strategy Action Plan (NBSAP)
- CBD National Report
- Cartagena Protocol National Report
- Nagoya Protocol National Report
- UNFCCC National Communications (NC)
- UNFCCC Biennial Update Report (BUR)
- UNFCCC National Determined Contribution
- UNFCCC Technology Needs Assessment
- UNCCD Reporting
- ASGM National Action Plan (ASGM NAP)
- Minamata Initial Assessment (MIA)
- Stockholm National Implementation Plan (NIP)
- Stockholm National Implementation Plan Update
- National Adaptation Programme of Action Update
- Others

117. The project is consistent with the national strategies, and National Communications as mentioned in section 1.2, and national strategies and regulatory framework as mention in section 2.6. The Vanuatu's Climate Change and Disaster Risk Reduction Policy (CCDRR) calls for incorporating rigorous processes, transparent decision-making and public reporting to ensure appropriate use of resources, and steering the climate change and disaster risk reduction agenda. It also calls for strengthening existing systems through building on experience, learning from events, activities and good practice to ensure continuity beyond the short and medium term. It also emphasizes partnering among government, regional, global and national CSOs, private sector, development partners, donors, and academic institutions to build networks and share knowledge and information. So, the proposed CBIT project is in lie with the national strategies, plans, and reports. In addition, ongoing third national communication and first biannual update report will be also supportive to the proposed CBIT project, and through the completion of this project, several challenges mentioned in previous national communications and NDC (e.g. data quality management, use of updated IPCC methodology, and institutional arrangement) will be addressed. This project also in line with the National REDD+ program, and will maintain close coordination with the ongoing national REDD+ initiatives. Through this project, several challenges mentioned in the Nationally Determined Contribution (NDC), and Enhanced Nationally Determined Contribution (NDC) (e.g. data quality management, use of updated

IPCC methodology, and institutional arrangement) will be addressed. The institutional arrangement and capacity building activities will help the country to actively track the progress of mitigation and adaptation actions mentioned in the Nationally Determined Contribution (NDC), and Enhanced Nationally Determined Contribution (NDC).

^[1] Climate Change and Disaster Risk Reduction Policy.
https://www.preventionweb.net/files/46449_vanuatuccdrpolicy2015.pdf

8. Knowledge Management

Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

1. During the PPG phase a general knowledge management strategy for the project with explicit budgetary support will be defined. Several types of knowledge management strategy will be addressed, such as: (i) how to develop and disseminate project training materials and toolkits to target audiences in the country most effectively; (ii) how to use existing information sharing networks maintained by FAO, the GEF, the UNFCCC, and other organizations to share lessons learned; and (iii) how to communicate most effectively with projects in other countries that have a similar focus. The strategy will also determine how to disseminate project information effectively at key international events, such as COPs.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Low			

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

119. The project has been categorized as 'low risk' when screened against FAO's Environmental and Social Safeguards Screening Checklist's set of 9 safeguards criteria. Since this is a capacity building project that aims to strengthen Vanuatu's institutional and individual capacities to comply with the reporting requirements of the Paris Agreement, there are no anticipated environmental or social risks as a result of project intervention.

The detailed Environment and Social Safeguards Screening and the climate Risk Screening for Vanuatu proposal are attached as supporting documents.

Supporting Documents

Upload available ESS supporting documents.

Title	Submitted
FAO ES Screening Checklist Vanuatu_CBIT 01Feb2021	
Climate risk screening- Vanuatu	

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): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Donna Kalfatak	Operational Focal Point and Director, Department of Environment Protection and Conservation	Ministry of Climate Change	8/11/2020

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

