



Project Identification Form (PIF) entry – Full Sized Project – GEF - 7

## Adaptation to Climate Change in the Coastal Zone in Vanuatu – Phase II (VCAP II)

### Part I: Project Information

**GEF ID**

10415

**Project Type**

FSP

**Type of Trust Fund**

MTF

**CBIT/NGI**☐ CBIT☐ NGI**Project Title**

Adaptation to Climate Change in the Coastal Zone in Vanuatu – Phase II (VCAP II)

**Countries**

Vanuatu

**Agency(ies)**

UNDP

**Other Executing Partner(s)**Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment,  
Energy and Disaster Management**Executing Partner Type**

Government

**GEF Focal Area**

Multi Focal Area

**Taxonomy**

Mainstreaming, Biodiversity, Land Degradation, Focal Areas, Climate Change, Influencing models, Stakeholders, Gender Equality, Gender results areas, Capacity, Knowledge and Research, Gender Mainstreaming, Beneficiaries, Women groups, Gender-sensitive indicators, Climate Change Adaptation, Complementarity, National Adaptation Plan, Disaster risk management, Sea-level rise, Climate resilience, National Adaptation Programme of Action, Community-based adaptation, Small Island Developing States, Least Developed Countries, Climate information, Ecosystem-based Adaptation, Innovation, Forest, Forest and Landscape Restoration, Sustainable Land Management, Sustainable Livelihoods, Improved Soil and Water Management Techniques, Sustainable Agriculture, Community-Based Natural Resource Management, Integrated and Cross-sectoral approach, Ecosystem Approach, Restoration and Rehabilitation of Degraded Lands, Food Security, Land Degradation Neutrality, Land Productivity, Agriculture and agrobiodiversity, Fisheries, Infrastructure, Protected Areas and Landscapes, Coastal and Marine Protected Areas, Community Based Natural Resource Mngt, Terrestrial Protected Areas, Productive Landscapes, Biomes, Wetlands, Sea Grasses, Mangroves, Coral Reefs, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Demonstrate innovative approaches, Civil Society, Non-Governmental Organization, Community Based Organization, Private Sector, Individuals/Entrepreneurs, Local Communities, Communications, Public Campaigns, Education, Awareness Raising, Type of Engagement, Partnership, Information Dissemination, Consultation, Participation, Access to benefits and services, Capacity Development, Access and control over natural resources, Participation and leadership, Knowledge Generation and Exchange, Learning, Theory of change, Adaptive management

**Rio Markers****Climate Change Mitigation**

Climate Change Mitigation 0

**Climate Change Adaptation**

Climate Change Adaptation 2

**Duration**

60 In Months

**Agency Fee(\$)**

1,128,963

**Submission Date**

10/10/2019

## A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-2-7	GET	2,936,009	10,750,000
LD-1-1	GET	2,563,008	15,500,000
LD-2-5	GET	125,000	2,000,000
CCA-1	LDCF	6,370,020	25,070,000
CCA-3	LDCF	350,000	4,000,000
BD-1-1	GET	200,000	1,500,000
Total Project Cost (\$)		12,544,037	58,820,000

**B. Indicative Project description summary****Project Objective**

To improve the resilience of the vulnerable areas and communities therein to the impacts of climate change through the conservation of biodiversity and natural ecosystems and the implementation of integrated approaches in order to sustain livelihoods, food production and ensure biodiversity conservation and reduce land degradation by building on the lessons learned from the first phase project.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
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Component 1: Integrated community approaches to natural resource management and climate change adaptation developed and implemented	Investment	Outcome 1.1: Biodiversity conserved to improve the integrity of natural ecosystems towards increased climate resilience	<p>1.1.1 Survey and evaluation of the proposed PA sites to determine appropriate designation for PA establishment, governance and management at terrestrial and marine protected areas in 12 Area Council locations with a potential combined area of about 22,315 hectares. Information sources will include biophysical, ecological and socioeconomic surveys, threat and management issues assessment and community consultations. Priorities will be identified.</p> <p>1.1.2 PA Registration and Management Plans developed in at least 6 priority protected areas (either terrestrial or marine following prioritization in Output 1.1.1) selected from the 12 locations; management planning conducted through participatory processes with local communities and other stakeholders</p> <p>1.1.3 Implemented key aspects of management plans, including measures to mitigate illegal and unsustainable use of species and to reduce pressures on vulnerable ecosystems to improve ecological integrity and climate resilience</p>	GET	2,750,000	7,060,000
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Component 1: Integrated community approaches to natural resource management and climate change adaptation developed and implemented	Investment	Outcome 1.2: Supported Sustainable Land Management initiatives at the community level to restore ecosystem services and improve resilience to climate impacts	Output 1.2.1 Degraded areas assessed in the selected project sites to identify the key drivers of land degradation covering approximately 5,000 hectares within the 12 priority Area Council locations  Output 1.2.2 Strategies for the restoration of degraded landscapes agreed through participatory processes and subsequently implemented to cover approximately 5,000 hectares	GET	1,900,000	12,000,000
Component 1: Integrated community approaches to natural resource management and climate change adaptation developed and implemented	Investment	Outcome 1.3: Improved climate resilience of coastal and upland areas through integrated approaches	Output 1.3.1 Climate-smart model farms established in approximately 8 Area Council locations with the technologies upscaled/replicated at the farm level in selected areas  Output 1.3.2 Improved resilience through climate proofing of selected public conveyance, water provision infrastructure and evacuation facilities in the coastal zone in priority communities within the 12 priority Area Council locations	LDC F	4,000,000	9,000,000
Component 1: Integrated community approaches to natural resource management and climate change adaptation developed and implemented	Investment	Outcome 1.3: Improved climate resilience of coastal and upland areas through integrated approaches	Output 1.3.1 Climate-smart model farms established in approximately 8 Area Council locations with the technologies upscaled/replicated at the farm level in selected areas  Output 1.3.2 Improved resilience through climate proofing of selected public conveyance, water provision infrastructure and evacuation facilities in the coastal zone in priority communities within the 12 priority Area Council locations	GET	250,000	

Component 2: Information and early warning systems on coastal hazards	Investment	Outcome 2.1: Reduced exposure to flood-related risks and hazards in the target coastal and inland communities	<p>Output 2.1.1. Automated systems for real time monitoring of climate-related hazards such as cyclones, coastal flooding, storm surges, landslides, designed, installed and maintained in selected vulnerable areas</p> <p>Output 2.1.2 Timely releases of early warnings about cyclones, coastal flooding, storm surges and landslides through various public media; early warnings are received in a timely manner by all concerned villages in all the islands of Vanuatu</p> <p>Output 2.1.3 Capacity of VMGD staff in the operation and maintenance of weather forecasting AWS and in the analysis of data strengthened</p>	LDC F	1,500,000	11,000,000
Component 3: Climate Change and Natural Resource Management Governance	Technical Assistance	Outcome 3.1: Climate change <i>adaptation</i> plans at the community level and enabling policies and supportive institutions in place at both local and national levels	<p>3.1.1 CC-Adaptation Plans (including nature-based solutions) mainstreamed into Provincial and Integrated Area Council Development Plans and implementation supported in the 12 priority Area Councils</p> <p>Output 3.1.2. Legislation and national/sector policies reviewed to ensure integration of climate change adaptation and a policy reform agenda developed and implemented</p> <p>E.g. incorporation of CCDRR into the EIA Policy, and sector policies in forestry, coastal fisheries, agriculture, water and sanitation- incorporating ecosystem-based or nature-based solutions to CC adaptation.</p>	LDC F	350,000	4,000,000

Component 3: Climate Change and Natural Resource Management Governance	Technical Assistance	Outcome 3.2 Mainstreaming biodiversity and sustainable land management in national development and sectoral policies	Output 3.2.1 Biodiversity conservation mainstreamed in national and local policies; gazetting of selected PAs initiated and completed (in conjunction with Output 1.1.2)  Output 3.2.2 SLM and LDN Strategy developed and integrated into development policies and decisionmaking processes at national and local levels	GET	250,000	4,000,000
Component 3: Climate Change and Natural Resource Management Governance	Technical Assistance	Outcome 3.3: Human resources in <i>place</i> at the national, provincial and area council levels to support integrated approaches to natural resource management and climate change adaptation	Output 3.3.1 Capacity building of key national and provincial government agencies (DEPC, DCC, PWD, Department of Internal Affairs, Departments of Fisheries, Forestry, Water) in areas of compliance and enforcement, monitoring and evaluation and mainstreaming of climate-related policies and nature-based solutions (biodiversity conservation and sustainable land management) and regulations  Output 3.3.2 Communities empowered to deal with climate change impacts in the coastal zone through participatory approaches in vulnerability assessments, planning and community-based adaptation measures and capacity building.	LDC F	305,000	6,000,000

Component 3: Climate Change and Natural Resource Management Governance	Technical Assistance	Outcome 3.3: Human resources in <i>place</i> at the national, provincial and area council levels to support integrated approaches to natural resource management and climate change adaptation	Output 3.3.1 Capacity building of key national and provincial government agencies (DEPC, DCC, PWD, Department of Internal Affairs, Departments of Fisheries, Forestry, Water) in areas of compliance and enforcement, monitoring and evaluation and mainstreaming of climate-related policies and nature-based solutions (biodiversity conservation and sustainable land management) and regulations  Output 3.3.2 Communities empowered to deal with climate change impacts in the coastal zone through participatory approaches in vulnerability assessments, planning and community-based adaptation measures and capacity building.	GET	250,000	
Component 4: Knowledge management and Lessons Sharing	Technical Assistance	Outcome 4.1: Increased awareness and ownership of climate risk reduction processes at the national and local levels.	Output 4.1.1 Best practices are captured, documented, and distributed to all local and national stakeholders and shared globally in appropriate mechanisms (development, populating and maintenance of national website for CC).  Output 4.1.2 Awareness, training and education programs in relation to biodiversity conservation, sustainable land management and integrated approaches to climate change adaptation developed and implemented.	LDC F	250,000	2,000,000

Component 4: Knowledge management and Lessons Sharing	Technical Assistance	Outcome 4.1: Increased awareness and ownership of climate risk reduction processes at the national and local levels.	Output 4.1.1 Best practices are captured, documented, and distributed to all local and national stakeholders and shared globally in appropriate mechanisms (development, populating and maintenance of national website for CC).  Output 4.1.2 Awareness, training and education programs in relation to biodiversity conservation, sustainable land management and integrated approaches to climate change adaptation developed and implemented.	GET	150,000	
Sub Total (\$)					11,955,000	55,060,000
Project Management Cost (PMC)						
GET					274,017	3,760,000
LDCF					315,020	
Sub Total(\$)					589,037	3,760,000
Total Project Cost(\$)					12,544,037	58,820,000

## 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(\$)
Government	Departments of Environment, Fisheries, Forestry, Agriculture, Water Resources	In-kind	Recurrent expenditures	10,000,000
Donor Agency	The 11th European Development Fund (EDF11) for agriculture sector	In-kind	Recurrent expenditures	20,000,000
Donor Agency	Australian Center for International Agricultural Research Project: Strengthening and scaling community-based approaches to Pacific coastal fisheries management	In-kind	Recurrent expenditures	1,000,000
Donor Agency	European Union: By-catch and Integrated Ecosystem Management (BIEM) component of the Pacific-European Union Partnership Program	In-kind	Recurrent expenditures	1,000,000
CSO	Nia Tero	In-kind	Recurrent expenditures	60,000
Government	Departments of Climate Change, Water Resources, Local Authorities, Public Works	In-kind	Recurrent expenditures	10,000,000
Donor Agency	Green Climate Fund: Climate Information Services for Resilient Development in Vanuatu Project	In-kind	Recurrent expenditures	10,000,000
Donor Agency	USAID: Pacific Climate Ready Project	Grant	Investment mobilized	200,000
GEF Agency	UNDP: Pacific Risk Resilience Program, Phase 2 (Vanuatu Component)	Grant	Investment mobilized	1,360,000
GEF Agency	UNDP: People with disabilities responses to climate change and disaster (pipeline project)	Grant	Investment mobilized	5,000,000
GEF Agency	UNDP	In-kind	Recurrent expenditures	200,000
<b>Total Project Cost(\$)</b>				<b>58,820,000</b>

**Describe how any "Investment Mobilized" was identified**

\*Cash provided by the USAID-funded Pacific Climate Ready Project (<https://www.pacificclimatechange.net/project/usaids-climate-ready>) to support project formulation and design as VCAP II is aligned with the objectives of the USAID project. \*\*New funds to be provided to Vanuatu partly due to VCAP II.



## 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(\$)
UNDP	GET	Vanuatu	Biodiversity	BD STAR Allocation	3,136,009	282,241	3,418,250
UNDP	LDCF	Vanuatu	Climate Change	NA	6,720,020	604,802	7,324,822
UNDP	GET	Vanuatu	Land Degradation	LD STAR Allocation	2,688,008	241,920	2,929,928
Total GEF Resources(\$)					12,544,037	1,128,963	13,673,000

**E. Project Preparation Grant (PPG)****PPG Amount (\$)**

300,000

**PPG Agency Fee (\$)**

27,000

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
UNDP	GET	Vanuatu	Biodiversity	BD STAR Allocation	75,000	6,750	<b>81,750</b>
UNDP	GET	Vanuatu	Land Degradation	LD STAR Allocation	64,286	5,786	<b>70,072</b>
UNDP	LDCF	Vanuatu	Climate Change	NA	160,714	14,464	<b>175,178</b>
<b>Total Project Costs(\$)</b>					<b>300,000</b>	<b>27,000</b>	<b>327,000</b>


## Core Indicators









## Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use




Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
27,040.00	0.00	0.00	0.00

## Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
16,660.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
1. Yarsu ( South Epi)			850.00			








10. East Ambae AC	400.00	
11. West Ambrym AC	1,000.00	
12. Paama / Lopevi	2,790.00	
2. Metoma	100.00	
3. North Erromango AC	2,400.00	
4. Futuna AC	320.00	
5. South Tanna AC	1,200.00	
6. West Coast Santo	5,000.00	





7. South Santo 2 AC	2,000.00	
8. Big Bay AC	500.00	
9. North Pentecost AC	100.00	

## Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
10,380.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
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Ambrym Megapode Reserve	313520	40.00	
Big Bay ( Vatthe CCA)		1,746.00	
Eden Hope		890.00	
Elma	313522	100.00	
Erromango – Kauri Reserve	18274	3,000.00	
Hiu	313527	5.00	
Keisi – Karpesu- leniang conservation		20.00	






Loh	313529	5.00	
Penouru		1,580.00	
Tabwemasana		2,989.00	
Tegua	313528	5.00	

**Indicator 2 Marine protected areas created or under improved management for conservation and sustainable use**








Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,672.00	0.00	0.00	0.00

**Indicator 2.1 Marine Protected Areas Newly created**

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
2,375.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
12. Yarsu (South Epi)			100.00			
13. Metoma			25.00			
14. North Erromango AC			250.00			
15. Futuna AC			75.00			
16. South Tanna AC			400.00			





17. West Coast Santo	500.00	
18. South Santo 2 AC	100.00	
19. Big Bay AC	250.00	
20. North Pentecost AC	25.00	
21. East Ambae AC	100.00	
22. Paama / Lopevi	300.00	
22. West Ambrym AC	250.00	

## Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
297.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
ambryn Deep Point			5.00						
Big Bay (Vatthe CCA)			20.00						
Epi			15.00						
Hiu			5.00						
Kwamera CCA			6.00						

Laone	6.00	
Lawai	5.00	
Loh	5.00	
Loltong	3.00	
Tasmate	4.00	
Tegua	5.00	
Toga	5.00	
Vasalea	3.00	

Wairua	210.00	
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## Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5000.00	0.00	0.00	0.00

## Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,000.00			

## Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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2,000.00

**Indicator 3.3 Area of natural grass and shrublands restored**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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1,000.00

**Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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0.00

**Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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5000.00	0.00	0.00	0.00
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**Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,000.00			

**Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

**Indicator 4.3 Area of landscapes under sustainable land management in production systems**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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4,000.00			
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#### Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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#### Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted
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#### Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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5,000.00			
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**Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations**

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Type/name of the third-party certification

**Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia**

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	0	0	0

LME at PIF

LME at CEO Endorsement

LME at MTR

LME at TE

**Indicator 5.3 Amount of Marine Litter Avoided**



**Metric Tons (expected at PIF)**

**Metric Tons (expected at CEO Endorsement)**

**Metric Tons (Achieved at MTR)**

**Metric Tons (Achieved at TE)**

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

	<b>Number (Expected at PIF)</b>	<b>Number (Expected at CEO Endorsement)</b>	<b>Number (Achieved at MTR)</b>	<b>Number (Achieved at TE)</b>
<b>Female</b>	134,194			
<b>Male</b>	138,265			
<b>Total</b>	272459	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

Data is sparse in Vanuatu which is an LDC. It is intended that during the PPG, these core indicators will be filled in properly with more information collected in during the site visits.

## Part II. Project Justification

### 1a. Project Description

1A-1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description);

**Development context:** Vanuatu comprises of over 80 islands, of which 68 are inhabited, and with a population of around 266,555 people (2016 Government of Vanuatu). Vanuatu has a land area of 14,760 km<sup>2</sup> and a maritime exclusive economic zone of 680,000 km<sup>2</sup>. The country experiences severe tropical cyclones during the summer months of December to March. In addition, there are anomalously long dry spells associated with the El Nino-Southern Oscillation (ENSO). These climate risks combine with Vanuatu's frequent earthquakes, volcanic and seismic activity due to its location along the "Pacific Ring of Fire". According to the Commonwealth Vulnerability Index<sup>[1]</sup>, Vanuatu is one of the world's most vulnerable countries due to its high exposure to natural disasters, scattered island geography, narrow economic base, rudimentary communication and transportation networks and limited capacity to cope with disasters including climate change.

Like all small island nations, the coastal zone is the hub of economic activities in Vanuatu. All the land area in Vanuatu is within 25 km of the coastline and can be considered as coastal. About 74% majority of the population is concentrated in the narrow strip of the coastal zone as many islands are volcanic with a mountainous terrain in the interior. Many island inhabitants live in rural areas and engage in subsistence, rain-fed agriculture on the coastal plains. Coastal fisheries contribute significantly to food security and over 49% of households are reported as engaged in fishing. 85% of rural households are engaged in livestock production. Yet many life-supporting coastal ecosystems are increasingly under stress from climate change and other human-induced activities. The geography of Vanuatu also creates significant challenges to infrastructure development and the provision of basic social services, such as healthcare, education and early warning for cyclones and other natural disasters.

1A-2) The baseline scenario and any associated baseline projects,

Most rural villagers' regular communication comes through public radio broadcasts. Telephone communications are improving with 86% of households with access to mobile phone network, which not all people can afford. These mobile networks are concentrated in most large islands, and in many small islands mobile reception may be patchy or non-existent. As most infrastructures (e.g. roads, buildings, power plants, industries, markets, and tourism facilities) are located in the coastal zone, there is potential for storms and challenges from climate change to severely endanger economic activity, the provision of social services, and human security. Around 30% of households have reported that they have had their dwellings completely damaged by a cyclone. The impact would be more felt in smaller islands which often have inadequate access to infrastructure.

Climate change context.

A robust assessment of potential climate changes in Vanuatu was undertaken by the Pacific Climate Change Science Program (PCCSP), led by the Australian Government in collaboration with the Vanuatu Meteorological and Geohazards Department (VMGD) of the Government of Vanuatu. In addition, the Risk Governance Assessment Report<sup>[2]</sup> in 2013 of the "Strengthening Climate and Disaster Risk Governance in Vanuatu Project" summarized key climate change findings as follows:

- Increase in daily temperatures is projected to be the same across all of Vanuatu for minimum, mean and maximum daily temperatures. Compared to 1995, by 2040 temperature will be higher by 1.2°C (global 1.9°C), and 2070 projected to be higher by 2.3°C (global 3.6°C);
- Increase in sea surface temperatures will bring the whole of Vanuatu in a zone where coral bleaching will be frequent (above 29.5°C);
- The change in precipitation is unclear: half the models project a change of less than 10% by 2040, while the other half projects a stronger change. This will pose challenges to planning and policy development. This uncertainty is much higher than the differences over the islands;
- Sea level is estimated to be currently increasing from CC by 6mm / year. Models simulate an increase of up to 15 cm by 2030, with increases of up to 60 cm indicated by 2090.
- Information on local vertical land movement is crucial. For Port Vila, an observed sea level increase of 159 cm is projected for 2100, when the observed sinking of 4.8 mm/year is taken into account;
- In 20 years' time it is projected that ocean acidification will have damaged 80% of the coral reefs around the world, including those in Vanuatu. Considering their crucial role for coastal protection, food security and tourism, this makes it one of the most significant impacts of climate change for Vanuatu;
- The extreme temperatures (including heat-waves) will reach higher levels and become more frequent. By 2040, the current 1-day maximum occurring once every 20 years will occur every other year;
- The duration of dry periods will become longer. The 1 in 5 year event will lengthen from just under 19 days to 28 days;
- Extreme rainfall will become more frequent and intense. By 2040, the 1 in 100 year event will have increased 10-11%. This change is the same over all islands. Frequencies of current events will increase by 1.2 - 2.5%;
- Episodic high sea surface temperatures will increase from about 10% of the time currently to 25% of the time by 2040 (in Efate). This is different for different islands;
- Above projected climate change impacts may serve to exacerbate geophysical activities such as the vertical motion (subsidence/uplift) of Vanuatu archipelago of +/- 1cm per year.

Such changes will have a range of very significant impacts. These will include a decrease agricultural productivity, damage to coastal ecosystems and marine environments, accelerate coastal erosion, and affect the quality and availability of drinking water. There will be severe impacts on terrestrial environments and terrestrial biodiversity.

Historical events appear to support the potential impact of the preceding projections. Vanuatu is one of the most vulnerable island countries in the Pacific as it has been subjected to extreme climate events such as cyclones, floods and droughts almost annually. In particular, cyclones have been a major threat averaging 2 to 3 events per season. For the Pacific region, the highest concentration of cyclones occurs in the vicinity of Vanuatu as it is one of the primary cyclone paths, experiencing cyclonic activities nearly every year.

In 2015 Tropical Cyclone Pam impacted on Vanuatu and is regarded as one of the worst natural disasters in the history of the country. This cyclone was the second most intense tropical cyclone of the south Pacific Ocean in terms of sustained winds. Up to 16 people lost their lives either directly or indirectly as a result of Pam with many others injured. Thousands of homes, schools and buildings were damaged or destroyed, with an estimated 3,300 people displaced as a result. Other serious cyclones to impact on Vanuatu include: Uma in 1987; Betsy in 1992; Prema in 1993; Dani in 1999; Sosé in 2001; and Ivy in 2004. While climate change impacts do not predict an increase in cyclone frequency around Vanuatu, it is anticipated that cyclones will increase in intensity.

The Vanuatu Infrastructure Reconstruction and Improvement Project (VIRIP) is seeking to reconstruct and/or improve the disaster and climate resilience of selected public sector assets in provinces impacted by Tropical Cyclone (TC) Pam, and to provide immediate and effective response to an Eligible Crisis or Emergency. The MIPU and the World Bank are implementing this \$50 million project (2016-2022) to contribute to Road reconstruction and improvement for roads works affected by TC Pam to undertake spot improvements to road assets, such as small road structures and footpaths, and to improve the resilience of road assets; School reconstruction and improvement based on the extent of damage from TC Pam to more than 70 primary and secondary schools in cyclone affected areas; Public building reconstruction and improvement several public buildings, provincial and national government offices, workshop and associated buildings on TC Pam-affected islands that suffered serious damage; the project is working in Ambae, Malekula; Tanna and Efate.

The Project "Climate Information Services for Resilient Development in Vanuatu (VANKIRAP)" is supporting Climate Information Systems (CIS) for 5 key sectors: tourism, agriculture, infrastructure, water & fisheries. To enhance utility of CIS, capacity to use CIS by national development agents, to enhance CIS communications, knowledge products, tools, and resources; and to improve information sharing and data management. This Green Climate Fund (GCF) project is contributing US \$22.95 million to support these efforts between 2017 and 2021. This project aims to address key climate change vulnerabilities and support climate resilient development through the delivery of tailored CIS, with a focus on 5 priority development sectors. Effective delivery will require that key barriers to uptake are addressed and that CIS products and services are relevant, practical. In particular this provide will support: Capacity development activities; CIS development case studies; Suite of customized communication, capacity development and outreach resource materials including communication and media products, training materials, climate management tools; New weather and climate infrastructure for enhancing development and delivery of CIS in Vanuatu; 5. Digitised and quality controlled observational and related/ancillary socio-economic data secured and accessible within functional CDMS; and Down-scaled and/or regionally specific CLEWS, sub-seasonal/seasonal forecast and long-term projections data and information tailored to sectoral needs. SPREP is assisting in implementation of this project.

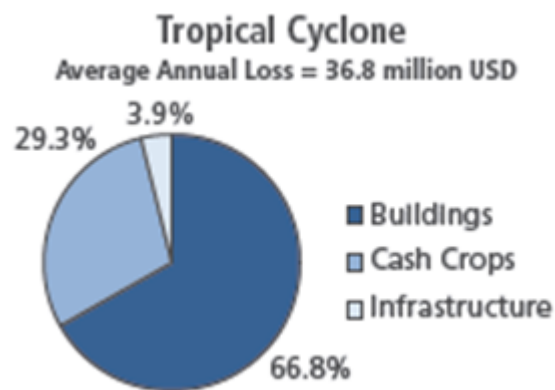
The impacts of climate change described above will have serious consequences on the coastal environment in Vanuatu. The bio-geophysical effects include coastal and inland erosion, increased flooding, loss of coastal lowlands and wetlands and salinization of surface and groundwater. The loss and degradation of coastal wetlands will impact on the livelihoods and nutrition of coastal dwellers that depend on the ecosystem services from intact and healthy mangroves, coral reefs and other coastal habitats. In addition, the effects on the socio-economy of the country include the risks to human life and health, loss of property and infrastructure, deterioration of agriculture, tourism and recreation and loss of livelihoods. All these threaten the way of life of coastal communities that have strong affinity to coastal ecosystems for economic, social and sometimes spiritual purposes. Many stretches of coastline, notably some important tourism areas within Vanuatu, have experienced dramatic rates of coastal erosion with considerable economic costs to owners and the nation. Nevertheless, significant areas remain relatively pristine and are targeted for tourism and other development.

Adding to Vanuatu's physical characteristics, other conditions contribute to the country's vulnerability is a narrow economic base and a weak developing economy. Vegetable crop production is undertaken by 88% of all households in Vanuatu and 97% of rural households. 74% of rural households rely upon agriculture for cash crop production. Sixty percent of rural households engage in fishing. The local market is small. The growing tourism sector, with 115,634 arrivals in 2018<sup>[3]</sup> mainly around Port Vila, is the main foreign exchange earner. This narrow economic base makes the cash economy particularly vulnerable to disruption by natural disasters.

- Weak inter- and intra-island communication and transport networks. Well-developed road transport exists only near population centers (just 111 kilometers of roads are sealed), mostly on the larger islands. While air service is daily to the main islands, there are only 5 airports with sealed runways (out of 29 in total).
- Wide dispersal of 80 islands spread over a huge 680,000 km<sup>2</sup> with many areas of the country isolated and extremely vulnerable in the event of disaster.

The Risk Pacific Catastrophe Risk Assessment and Financing Initiative (2015)<sup>[4]</sup> - Vanuatu Country Profile notes the following:

- Vanuatu is susceptible to a variety of both hydrometeorological and geophysical disasters due to its location in the South Pacific tropical cyclone basin and the Pacific Ring of Fire.
- Vanuatu should refine its disaster financing to provide a muchneeded boost to the current limited response funds. Vanuatu has a maximum of US\$16.6 million available in ex-ante instruments for financing disaster-related losses.
- Vanuatu uses a variety of disaster risk financing and insurance (DRFI) tools, but its available funds are limited.
- A number of options for DRFI include: (a) develop an integrated disaster risk financing and insurance strategy; (b) develop a post-disaster budget execution manual to minimize the loss of institutional knowledge should personnel leave DoFT; and (c) explore the use of contingent credit to access additional liquidity post-disaster.



In summary, the costs of climate change impact in Vanuatu are high. If more cyclones follow the path that Pam took in 2015, people's livelihoods, as well as the larger economic development of the country, will essentially come to a halt as government will be forced to focus on recovery rather than development efforts. The cyclone affected nearly 100,000 people and caused destruction in the hundreds of millions of dollars (US\$). The study by SOPAC estimated that the average annual loss from tropical cyclones is about US\$37 million in terms of damages to buildings and other infrastructure and to agriculture, which is a major sector of the economy. It is expected that most of these will occur in the coastal zone where the concentration of



infrastructure is highest as with farming and related activities. These direct losses from tropical cyclones are caused by wind and flooding due to rain and storm surges, all of which are climate-induced.

## BIODIVERSITY CONTEXT

Vanuatu's island biodiversity is special and unique. Vanuatu's National Biodiversity Strategy and Action Plan 2018-2030 (NBSAP) notes Vanuatu is within the East Melanesian Islands Biodiversity Hot Spot region that needs attention for the protection of its unique flora and fauna. Vanuatu has a number of endemic plant and animal species that are not found elsewhere and some are at risk of becoming extinct if measures are not continuously taken to protect them.

The NBSAP notes that Vanuatu's biodiversity remains poorly known, with detailed studies of only a few genera and few studies of the biota of smaller or less accessible islands. However, a review of studies of the flora and fauna of Vanuatu has shown that there are endemic species, rare species and uncommon variants within many of the genera that have been studied in detail. Much of Vanuatu's diversity beneath the species level has only been classified by indigenous knowledge systems that vary from one language group to another and are not documented.

Patterns of species diversity reflect classic island biogeography, where island size and distance from continental source are key determinants of number of species. The larger and older islands generally support a greater diversity of terrestrial ecosystems, and a greater diversity of plants and animals (Taiki et al., *unpublished*). The islands are separated by the sea, and catchments and lowland habitats are separated by mountains – these are barriers to many species, and produce conditions whereby relatively rapid sub-speciation and speciation occurs. Altitudinal gradients provide opportunities for montane endemics, such as the Mountain Starling (*Aplonis santovestris*) of Santo, which add diversity to high island faunas that is not possible on low islands no matter how large they are. Frequent disturbance due to tropical cyclones, earthquakes and volcanic activity also affects the distribution and abundance of species, especially on the smaller islands. Lastly, there is significant variation with latitude, with species that occur at high altitudes in the tropical north occurring at much lower altitudes in the sub-tropical south. Consequently, there is considerable variation in the distribution of species within and between islands, and Vanuatu's biodiversity is of particular interest for its on-going processes of immigration, range extension and contraction, and sub-speciation (Department of Environmental Protection and Conservation, 2014).

The greatest threats to biodiversity conservation result from human activities. Human settlements are generally found concentrated in the coastal lowlands. Consequently, biodiversity is most at risk in lowland and coastal areas and small islands, yet remains relatively intact in the high-altitude forests of larger islands. Land cannot be alienated from the traditional landholders, but can be leased for fixed periods and agreed purposes. This system of land and resource

management limits the capacity of government to conserve biodiversity without the support, understanding and commitment of landholders. This therefore, creates an imperative for landholders as resource owners and managers to work independently or in cooperation with other landholders, organisations or government to conserve biodiversity.

The 2010 Vanuatu National Assessment Report notes that Vanuatu's environment quality is rapidly deteriorating. It lists increasing frequency and severity of natural disasters, including cyclones, flooding and coral bleaching; and deforestation, air, land and marine pollution as growing problems. The assessment observes that population growth leads to more pressure for food and investment resulting "not only in land degradation and overfishing, but also destruction of mangroves and fish breeding areas" (GoV, 2010). Invasive Alien Species (IAS) is an existing and growing concern, threatening forests and biodiversity of Vanuatu. The direct effects of climate change and their interactions with the current threats will only exacerbate the risks to biodiversity. These pressures work singly or in tandem with each other in complex ways.

The EU-ACP Biodiversity and Protected Areas Management (BIOPAMA) programme will continue to support implementation of the NBSAP and protected areas management in Vanuatu. BIOPAMA is jointly implemented by the International Union for Conservation of Nature (IUCN) and the Joint Research Centre of the European Commission (EC-JRC). In the Pacific region, BIOPAMA is implemented by IUCN's Oceania Regional Office (IUCN ORO) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP). The partnership between IUCN ORO and SPREP has seen the enhancement of the Pacific Islands Protected Area Portal (PIPAP), the 'one-stop shop' for all information on Protected Areas maintained by SPREP with partners and members.

Nia Tero will be working on Vanuatu in the Santo mountain range which is also a KBA (Key Biodiversity Area) for Vanuatu. They will work with local NGO's and communities to support their community initiatives for conservation. The project should start by early 2020. This initiative has a budget of approximately \$60,000.

Vanuatu's coral reefs are categorised as either fringing, barrier or atoll reefs. These areas are listed as globally threatened due to reef damage and bleaching, and will suffer additional impacts from sea temperature and pH changes associated with climate change. Coral reefs are also the habitat for most of the threatened coastal fishes of the region, such as Humphead Wrasse (*Cheilinus undulatus*), Green Bumphead Parrotfish (*Bolbometopon muricatum*) and Hump-backed Rock Cod (*Cromileptes altivelis*). Seagrass beds occur in soft-bottom areas and, like coral reefs, require clear water (low turbidity) away from sediment plumes of large rivers. Seagrass beds are the habitat of Dugong (*Dugong dugon*), which reaches the eastern limits of its distribution in Vanuatu.

The Department of Fisheries is implementing a number of specific initiatives for the further development of sustainable coastal fisheries and support the creation of community managed marine areas. These are supported by initiatives including the JICA funded project for the Promotion of the Grace of the Sea in Coastal Villages Phase 3 and the provision of Advisors for Livelihood Improvement through Community-based Coastal Resource Management and Utilization.

The Australian Government through the Australian Centre for International Agricultural Research is supporting a project titled "Strengthening and scaling community-based approaches to Pacific coastal fisheries management in support of the New Song". The objective of this project is to enhance food security, sustainability and human well-being achieved through improved governance and management; Increase capacity in research and management in national and sub-national agencies and in communities; and policy outcomes including improved sub-national and national law and policy, and integration of fish into rural development policy through whole-of-government approaches to nutrition outcomes.

The By-catch and Integrated Ecosystem Management (BIEM) coordinated in the region by SPREP has a value of about \$1 million. This project will work predominantly in 3 sites in Vanuatu to strengthen bi-catch mitigation and coastal fisheries management.

Expanding Conservation Areas Reach and Effectiveness (ECARE) in Vanuatu (GEF-6) (2020-2024). The ECARE's Objective is: Improved national systems and capacity for achieving a representative, effective and expanded protected areas network in Vanuatu. It is understood that the focus has recently been updated to contribute to an updated legal framework and policy for PAs in Vanuatu covering terrestrial, coastal and offshore areas, develop tools and process guidelines for PA designation, management planning and effectiveness, and for integration in Area Council development plans, and socioeconomic and Ecological Field surveys of priority existing and proposed PAs conducted. VCAP II welcomes the possibility to link and collaborate with ECARE in delivery of a comprehensive and integrated PA system. VCAP II also notes that ECARE can build upon the VCAP I experience of capacity building at the Area Council Level. VCAP II has been specifically designed for complement ECARE and to avoid duplication. The PPG Phase of VCAP II will further develop the substantial opportunities for cooperation.

Dugongs are protected in Vanuatu under the Fisheries Act 2014, which prohibits the capture of marine mammals in Vanuatu's international waters. Dugongs were formerly hunted but their numbers are so low now that there are few contemporary records of hunting. Mangroves are a marine habitat and widely recognised as an important nursery for juvenile fish. They also provide coastal buffering against tropical cyclones and other extreme weather events. As with terrestrial forests, mangroves and seagrass meadows remove and store carbon from the atmosphere.

While the oceans offer great potential in terms of sustainable economic development, they are also under increasing pressure from many uses and impacts. Changes in the marine environment resulting from human activities are occurring faster than previously anticipated, affecting, especially, vulnerable marine ecosystems such as coral reefs. Major threats to the marine ecology include: impacts associated with climate change including rising ocean temperatures, acidity and sea level rise; coastal and offshore developments (e.g. from Deep Sea Mining, shipping) and the destruction of marine ecosystems such as coral reefs and mangroves; unsustainable and destructive fisheries practices; pollution from land-based and offshore sources including from ships and damage from shipwrecks;; conflicting uses and the increasing intensity of hurricanes and other storm events, as recently experienced.

The marine environment's ability to maintain its diversity and productivity, and to provide a wide array of valuable services to people, is therefore increasingly being compromised. Designing and implementing effective governance and management strategies is critical to address the challenges posed by the increasing impacts of human activities on the marine environment and to ensure the effective management and sustainable use of living and non-living marine resources (Vanuatu's National Ocean Policy, 2017).

## LAND DEGRADATION CONTEXT

Seventy four percent (74%) of land in Vanuatu is covered with natural vegetation. Forest types include tropical lowland evergreen rain forest, broad-leaved deciduous forest, closed conifer forest, montane rain forest, cloud forest and coastal forest. Other notable vegetation includes swamp forest on Efate, kauri pine strands on Erromango and scattered mangrove forests covering around 3,000 ha (most of which occur on Malekula Island).

Lowland forest has largely been cleared and replaced by anthropogenic vegetation but forested areas remain the dominant landscape element on most islands. High forests are restricted on most of the islands (especially those that are densely populated, such as Pentecost, Ambae, Tanna and Shepherd; or have active volcanoes, such as Ambrym). However low montane forests are generally well preserved and occupy large areas. Secondary forests (often consisting of a Hibiscus community) are dense and extensive in Vanuatu.

The forests of Vanuatu have been impacted by human activities, which have diminished and altered forest cover and biodiversity. There has been immense pressure on some timber species on the larger islands, where harvesting is concentrated. In 1998, for instance, 92% of logs harvested were of just two species, *Endospermum medullosum* (Whitewood or Basswood), and *Antiaris toxicaria* (known in Vanuatu as Milk Tree) (Bakeo and Qarani, 2005).



The National Action Program to address land degradation and mitigate the effects of drought (2009) details a number of specific actions. These include (1.2) the activities in each provide demonstrating in each province demonstrating good land use practices; (1.3) education and awareness; develop programs to strengthen community leadership. 3.6 Demonstrate forest management practices; and demonstrate water\shed resiliellence.

The Agriculture, Fishing and Forestry sector has recovered from a decline in 2015 by registering a positive growth of 5.1%; an increase of 10.7 percentage points. The components of agriculture that contribute to this positive growth, were crop production, it grew by 5.9%, followed by animal production at 2.6%, fishing at 3.9% and forestry at 0.7% (Vanuatu National Statistic Office, 2017). In the mid-2000s, natural forest cover in Vanuatu was estimated at 444,000 ha, equivalent to 36% of the total land area (1.22 million ha) (FAO, 2010), and at least 40% of the commercial forest area was regarded as degraded (King, 2007). Most of the high value forests were over-exploited in the 1980s and 1990s, until the government imposed a ban on the export of round logs in 1998. Large scale logging has been banned since that time. Many landowners have used their logged forest lands for alternative activities like commercial agriculture. Vanuatu has not yet committed to a Land Degradation Neutrality (LDN) target and this will be address by VCAP II.

The 11th European Development Fund (EDF11), through the Vanuatu Value Chain Programme (VaVac), is providing a total of 20 million Euro in Budget Support to the Vanuatu Government over five years. The VaVac Programme focuses on three value chains: Beef, Coconut and Fruits and Vegetables. To facilitate the development of these value chains from production to value addition, funding is shared across three ministries: the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity (MALFFB), the Ministry of Trade, Tourism, Industry, Commerce and Ni-Vanuatu Business (MTTICVBN) and the Ministry of Finance and Economic Management (MFEM). From these Ministries the VaVac Programme comprises of at least 8 departments: Agriculture, Livestock, Biosecurity, Tourism, Industry, Co-operatives, Vanuatu National Statistics Office and Vanuatu Bureau of Standards. These efforts will contribute to the development of sustainable agriculture management practices in Vanuatu. The funding period was initially 2017-2021, the first tranche was only released to Departments in late 2019. It is now expected to run until at least 2022.

Integrated Sustainable Land and Coastal Management (Ridge to Reef) FAO/GEF 2017- 2021 (GEF 5): At the national level the project is supporting the development or strengthening of various sectoral policies in support of integrated and sustainable land and coastal management, within a ridge-to-reef vision. The program has a protected area component which will support an expansion of terrestrial CCAs and (coastal) marine protected areas in three new target locations: Aneityum, Tanna and Efate. It will also seek to further expand on two sites, South Pentecost and Gaua. The R2R program will include a focus on management capacity and financial sustainability in these sites, seeking to increase the CCA and MPA area by 5000ha, increase the average Management Effectiveness score from 31.9 to 85 and see an increase by \$150,000 per year in financial resources from tourism for PA management with a specific focus on cruise-ship companies and locally-managed alternative tourism initiatives. VCAP II will build on the experience gained through this project. It will not duplicate actiites in specific sites, but rather has chosen sites close that R2R project sites to ensure local momentum can be captured to move forward.

### **Governance context.**

"Vanuatu 2030" is the National Sustainable Development Plan (NSDP) for the period 2016 to 2030. It serves as the country's highest-level policy framework. It builds upon the Priorities and Action Agenda 2006-2015. This plan seeks to further extend the linkages between resources, policy and planning to the people.

Environment is one of the three pillars as part of the NSDP. These environment pillar has five goals and 29 policy objectives with 62 indicators and 64 targets. V-CAP II is aligned to address the Environment Goals 2,4 and 5 as outlined below. Environment goal 3 – Climate and disaster resilience - A strong and resilient nation in the face of climate change and disaster risks posed by natural and man-made hazards ENV 3.1 Institutionalise climate change and disaster risk governance, and build institutional capacity and awareness ENV 3.2 Improve monitoring and early warning systems ENV 3.3 Strengthen post-disaster systems in planning, preparedness, response and recovery ENV 3.4 Promote and ensure strengthened resilience and adaptive capacity to climate related, natural and man-made hazards ENV 3.5 Access available financing for climate change adaptation and disaster risk management. In addition, Environment Goal 4 on

Natural Resource Management and Environment will contribute to ENC 4.1 Strengthen local authorities and municipal planning authorities to enact and enforce land use planning laws and regulations ENV 4.2 Protect vulnerable forests, watersheds, catchments and freshwater resources, including community water sources ENV 4.3 Prevent land degradation and downstream environmental damage from mineral resource extraction ENV 4.4 Promote the sustainable development of the fisheries sector that values the protection and conservation of marine and freshwater resources ENV 4.5 Reduce and prevent the degradation and erosion of foreshore and coastal areas ENV 4.6 Reduce deforestation and ensure rehabilitation and reforestation is commonplace ENV 4.7 Build capacity and support local communities to manage natural resources. In addition, Goal 5 on Ecosystems and biodiversity will be implemented ENV 5.1 Protect biodiversity and ecosystems and their significant role in our culture, society and environment ENV 5.2 Create and manage conservation and protected areas ENV 5.3 Support local conservation and protection of endangered, threatened or endemic species and ecosystems including though traditional knowledge and practices ENV 5.4 Protect our borders and environment through effective customs and biosecurity services ENV 5.5 Increase awareness on biodiversity conservation and environmental protection issues across government and publicly ENV 5.6 Enhance environmental monitoring, evaluation and research with relevant, open and transparent data sharing among relevant agencies

The Government of Vanuatu has been proactive in global and regional dialogues on climate change and finalised its National Adaptation Programme of Action (NAPA) in 2007. The project will explicitly address four of eleven priorities identified in the NAPA including: 1) community-based marine resource management, 2) integrated coastal zone management, 3) Land use planning and management; and 4) mainstreaming climate change into policy and national planning processes. The NAPA places particular emphasis on the need for community-based resource management, embracing both traditional and modern practices and enhancing the resilience of vulnerable communities. To address these priorities, the project will focus on adaptation options outlined in the NAPA including: i) development of provincial / local adaptation and ICM plans, ii) climate proofing of infrastructure design and development planning, iii) development of an efficient early warning system, iv) Landslides associated with prolonged and intense rainfall, iv) awareness raising and capacity building, and v) coastal re-vegetation and rehabilitation.

Vanuatu has responded positively to the climate change challenges. It has established the Ministry of Climate Change Adaptation (MCCA), Meteorology & Geo-Hazards, Energy, Environment and National Disaster Management Office. This Ministry draws together key agencies working directly on climate change adaptation and mitigation.

In addition, a coordination mechanism has been established through the National Advisory Board for climate change (NAB). This has strengthened the governance structure over CC adaptation, DRM and DRR initiatives in the country. The secretariat of NAB is based in the Department of Climate Change based at the Ministry. Vanuatu's National Advisory Board on Climate Change & Disaster Risk Reduction, mandated by the Council of Ministers on 15 October 2012 to "Act as Vanuatu's supreme policy making and advisory body for all disaster risk reduction and climate change programs projects disaster risk reduction and climate change programs, projects, initiatives and activities." It fulfils this mandate by:

- Integrates the governance of climate change & disaster risk reduction across whole of Government
- Supports the development of CC/DRR policies, guidelines and positions
- Advises on international and regional DRR and CC obligations
- Facilitates and endorses the development of new DRR & CC programs, projects, initiatives and activities
- Acts as a focal point for information - sharing and coordination on CC/DRR
- Guides and coordinates the development of national climate finance processes

The NAB is chaired by the Directors-General of the Ministry of Climate Change & the Prime Minister's Office. Members are senior-level representatives from sectoral government agencies, CSO representatives, and technical advisors.

There is a high degree of commitment across Vanuatu's 12 ministries to integrate climate change issues into national planning documents and sector plans, but there is a significant challenge in collaboration across ministries and sectors, allocation of budget for climate change adaptation, and implementation of cross-sector agreements. To guide the implementation of efficient adaptation activities, Vanuatu has endorsed a National Climate Change Adaptation Strategy (NCCAS) for the period 2012-2022. The plan provides policy recommendations by outlining sector specific adaptation plans and a systematic, long-term approach for embedding climate change adaptation into core national and sector activities.

The Department of Environmental Protection and Conservation (DEPC) began as the Vanuatu Environment Unit in 1986. DEPC is recognised as a department under the Ministry of Climate Change Adaptation, Meteorology & Geo-Hazards, Environment, Energy and Disaster Management. In 2002, the Government of the Republic of Vanuatu passed the *Environmental Management and Conservation Act No. 12 of 2002, now the Environmental Protection and Conservation Act [CAP 283] (the EPC Act)*. The EPC Act formally established DEPC in legislation and outlines its role in the development, coordination and implementation of the Government's environmental policies and programs.

The DEPC is responsible for the implementation a range of strategies and plans including:

- Vanuatu National Environment Policy and Implementation Plan 2016–2030;
- National Invasive Species Strategy and Action Plan 2014-2020;
- Vanuatu National Biodiversity Strategy and Action Plan (NBSAP 2018-2030).

The NBSAP outlines specific links to the NDSP and ensures alignment in the delivery of Government efforts for both environment management and sustainable development. The NBSAP has 7 strategic areas for delivery. This VCAP II will support the delivery of the NBSAP, in particular contribute to:

- Strategic Area 1: Conservation Area Management (terrestrial and marine)– increase the area of representative coverage of Protected Areas (PAs) in Vanuatu in the form of community conservation areas (CCAs);
- Strategic Area 2: Forest and inland water ecosystem conservation and management
- Strategic Area 3: Coastal and marine ecosystems conservation and management (CME)
- Strategic Area 5: Management of invasive alien species (MIAS)
- 

The DEPC will play an important role in the delivery of VCAP II. This will involve leading on working with communities for the establishment and management to establish Community Conservation Areas and support specific elements of NBSAP implementation in line with the NSDS.

The Vanuatu Climate Change Finance Review Final Report was released by the Government of Vanuatu in June 2018. This assessment will be useful in the development of V-CAP through the project preparation phase. Of special note is the Policies and Planning Analysis highlighted the following elements as priority approaches for the delivery of climate change projects:

1. Utilise the Vanuatu's National Sustainable Development Plan (NSDP) M&E framework to guide the development of an aligned M&E framework for the Climate Change and Disaster Risk Reduction (CCDRR) policy, as a project management tool that includes and recognises the role of all actors and ensures all stakeholders are informed of the process.
2. As part of the CCDRR Policy Framework, ensure a process to track the integration and implementation of relevant CCDRR activities within other sectoral policies.
3. Strengthen sectoral policy inclusion of CCDRR to mainstream CCDRR as a cross-cutting priority issue
4. Progress with the development of a data management system within MCCA to provide necessary support for developing M&E processes and more efficient reporting.
5. Ensure consideration of the Climate Public Expenditure and Institutional Review (CPEIR) recommendations relevant to the development of a National Adaptation Plan (NAP). In particular, the need to ensure community engagement and identification of local level adaptation priorities within national processes, as well as comprehensive gender and social inclusion processes. The NAP process must be inclusive and be transparently led by the NAB and build on other planning processes such as the Nationally Determined Contributions (NDC), Vulnerability Assessment Framework (VAF) and Country Program under the Readiness Program and provincial strategies and plans

These important efforts for provision of a policy framework will be strengthened by suitable frameworks for sustainable development. This will include integrated and comprehensive sectoral policies and plans. Example include a National Integrated Coastal Management Framework (NICMF) and Implementation Strategy with a vision towards a 'clean and healthy coastal and marine environment for current and future generations...'. It is important that other acts, e.g. *Environmental Management and Conservation Act 2002*, *National Disaster Act 2000*, *Forestry Act 2001*, *Fisheries Act 2005*, *National Parks Act 1993*, and the *Water Resource Management Act 2002* are updated to ensure integration of climate change adaptation.

At all levels of government, there is minimal understanding of climate change and its impacts on coastal ecosystems and few resources to implement new policy. Moreover, lack of coordination between government agencies, provincial authorities, and rural communities hinders climate change adaptation and knowledge exchange. Technical support, education and training is therefore required to further mainstream climate change into legal frameworks and sector plans as well as to equip decision makers, planners, coastal managers, and communities with the best knowledge, skills, and motivation to address climate change adaptation.

All "investment mobilized" were taken from known and programmed allocation of grant funds to the Government of Vanuatu to support climate change adaptive, biodiversity conservation and sustainable land management initiatives identified in consultation with the government, CSO and other sources. Related co-financing letters will be provided during the PPG phase.

The description of the general context in the preceding section clearly indicates that while Vanuatu has taken decisive steps at the governance level to address the impacts of climate change, there remain serious gaps for the country to effectively increase resilience in the coastal zone. The proposed project is described below focusing on the proposed 4 components. Further context and specific baseline for each component are also discussed below.

## Project approach

A number of barriers have constrained the implementation of comprehensive approaches to climate change adaptation and natural resource management in coastal areas of Vanuatu. These constraints, along with remedial actions to be undertaken by the project include:

Limited useful information on the health of coastal ecosystems and a monitoring system to determine the status of marine ecosystems including coral reefs and mangroves as basis for monitoring impacts of climate change in Vanuatu. Given the increasing surface temperatures and the reliance of local communities on marine resources for their daily survival, this is essential. *V-CAP II will continue to develop solid ecosystem health baselines including climate change resilience indicators for each of the target V-CAP II sites.*

The growing rural population of Vanuatu relies heavily on biodiversity for food security and livelihoods. The daily rate of utilisation is increasing with increasing population. Invasive species is impacting on local biodiversity and few species has formal protection and action plans to address the the survival of the species. Limited knowledge hampers action. *V-CAP II will focus on understanding critical biodiversity values and species. It will assess threats to key species and will take action to protect these values both as individual species and with the protected area framework.*

Threats to biodiversity and forested systems have increased in recent decades through expansion of subsistence agriculture and commercial plantations as well as the growth of the logging and mining industries. The increaisng focus on livestock is impacting natural island systems. The underlying drivers of these threats include population growth, urbanization, lack of awareness, unsustainable economic development models and weak governance. *V-CAP II will continue to focus on understanding landscape level needs and will take action toward sustainable land management. It will take action to generate solid ecosystem services baselines and promote action with key indicators for each of the target V-CAP II sites.*

Fragmented, single sector development efforts (including donor funded initiatives) across different landscapes and government levels often do not include needed spatial management techniques and are hindered by unclear institutional responsibilities, weak policies, communication & coordination. However, this is improving and *V-CAP II will seek to support an integrated planning and delivery mechanism that demonstrates best-practice in supporting efforts of appropriate agencies and institutions.*

Limited experience and capacity in linking sustainable land management in watersheds (IWRM, SLM, SFM and managing upland erosion issues) and intergrating Community Conservation Areas (CCAs) with both the marine environment and related livelihood needs of downstream coastal residents through approaches. *V-CAP II will seek to strengthen integration of these approaches through a Reef to Ridge approach.*

Lack of deployment of CCADRR models to the local level – in particular to isolated rural communities. Lack of capacity, for comprehensive implementation of climate change adaptation as a fundamental part of Decentralization Act mainstreaming in Community and Area Council Plans, with linked financial flows to support CAA and DRR activities. *V-CAP II will continue to work with the DLA to ensure Area Councils within the project's target sites to develop sustainable development plans incorporating CCA components, which build upon village level plans created by CDC's (Community Disaster Committees).* These V-CAP II project sites will serve as models for other Area Councils to pursue similar planning initiatives that consider CCA.

Lack of integration of traditional knowledge in approaches to disaster reduction, environmental management and responses to climate variability by local communities. *V-CAP II will recognise and build upon traditional knowledge and integrate appropriate approaches in the identification and application processes and plans to build resilient communities.*

Limited recognition of the role of “soft” engineering solutions such as erosion control, river bank management combined with “hard” engineering solutions to increase the useful life of public conveyance infrastructure while reducing long-term maintenance funding requirements of said infrastructure. *V-CAP II will continue to promote “soft infrastructure” solutions as models for other locations in Vanuatu.*

Where successful practices have been trialed, often trials have not been scaled-up or replicated due to lack of resources or progressed. *V-CAP will seek to build upon the models developed by various development partners, (GIZ, FAO, Research Centres, BOM, NZ Met Service, IRD, and other related agencies) and provide communities with the knowledge and opportunities to expand these model approaches.*

Severe shortage of government extension services (environment, agriculture, fisheries and forestry workers) at the community level, especially in isolated areas has severely restricted community knowledge and use of agriculture, farming and fisheries climate change adaptation strategies. *V-CAP II will continue to support technical agencies in the delivery of extension services on the ground through the demonstration of integrated, long-term and sustainable approaches.*

Limited access to human resource development opportunities, including education and training, especially at local levels. *V-CAP will continue to support comprehensive capacity building at the local, Area Council, Provincial and National levels.*

V-CAP II will comprehensively address four of eleven priorities identified in the NAPA. These include i) Land use planning and management (integrating community conservation areas), ii) community-based marine resources management; iii) integrated coastal zone management; and iv) mainstreaming climate change into policy and national planning as outlined in the table below. Further, the NAPA places particular emphasis on the need for community-based marine resource management, embracing both traditional and modern practices, in enhancing the resilience of vulnerable coastal communities. In addition, it will complement NAPA priority 3 in scaling up and distributing results of climate proofing agriculture and will enhance approaches to water management as identified as NAPA priority 4.

To address these priorities, V-CAP II will target a number of adaptation options outlined in the NAPA including: development of local adaptation plans, climate proofing of infrastructure, development of an efficient early warning system, awareness raising and capacity building, and coastal re-vegetation and rehabilitation. Such adaptation activities will help to promote food security, which the NAPA defines as an overarching goal of all adaptation activities. V-CAP II adopts cross-sector and participatory approaches to promote action and learning at multiple levels. These approaches are also important in accounting for interaction between human activities, ecosystems, and biophysical processes.

A key underlying principle in the delivery of V-CAP II will be to continue to build on existing coping strategies of rural communities who have a long history of responding to geological and climate variability and change, with varying success. These short-term coping strategies form the basis of successful long-term development strategies. However, care needs to be taken as some of these traditional coping strategies could prove to be unsustainable over time as population and climate change progresses leading to a greater risk of maladaptation. Innovative approaches and new technologies, along with careful monitoring of the effectiveness of strategies in view of changing circumstances is needed to ensure these adaptation strategies remain appropriate. Rural communities are therefore the key actors for implementing adaptation strategies and hard-won lessons can be learned, communicated and fed into adaptation decision making at higher levels to benefit the nation.

The V-CAP II approach will seek to represent a comprehensive approach to biodiversity conservation, sustainable land management and CCA by encompassing communities, area councils and provincial and national mechanisms. In this way V-CAP is not a standalone project, but rather supports existing government plans, policies and procedures with the long-term objective of building local and national level capacity and expanding this approach to other programs.

### 1A-3) the proposed alternative scenario with a brief description of expected outcomes and components of the project;

The proposed alternative scenarios with a brief description of expected outcomes and components is outlined below. It will be further refined in the PPG phase of the project.

VCAP II will work to ensure improved management of critical island ecosystems to support better informed integrated management of land and coastal areas to achieve the co-benefits to strengthen resilience to climate change and achieve biodiversity conservation outcomes. This will be supported by information systems for climate and disaster forecasting and warning, strengthened policy frameworks, and competent trained and informed stakeholders. VCAP II will build upon government decentralizing process to build capacity at the Provincial and Area Council Levels to mainstream biodiversity conservation and climate change adaption. It will link with other initiatives, e.g. ECARE to ensure integrated delivery.

#### Component 1: Integrated community approaches to natural resource management and climate change adaptation developed and implemented

V-CAP II will focus on the delivery of integrated approaches to community adaptation, protected area, marine area and landscape management. VCAP II will focus on building resilience at the Area Council and local levels in all six-provinces of Vanuatu. An initial site selection process was undertaken to select these sites using the selection criteria outlined below.

- Sites to link to established Area Councils
- Isolated communities with challenges in accessing support
- Reliance on natural ecosystems for daily subsistence
- Vulnerable to CC effects- storm, flooding, and climate risk
- Challenges in ability or inability to access- health, education, economic- markets, evacuation routes
- Marginalized / disadvantaged communities
- Expansion potential / replication potential
- Alignment to national & provincial work plans
- Lack of substantial development projects already
- Avoid duplication with other initiatives / ongoing projects
- Ensure commitments from communities to project delivery, i.e recognise there are sites where projects do not work.

This initial site selection was also based on the experience and lesson learnt from VCAP I. It also incorporated the target sites for PA established and on-going management detailed in the NBSAP. In addition, it incorporated the key biodiversity areas outlined in the *CEFP- Ecosystem Profile East Melanesian Islands Biodiversity Hotspot*.

This initial site list presented below will be refined in the PPG phase though screening with Senior Officials at the National, Provincial and Area Council levels.

**Table 1. Priority provinces/sites and indicative focus of project interventions**

Province and site	Specific focus	CEPF – HOTSP OT*	Focal activities	Number of area councils**
SHFFA				

<b>STEL</b>				
ELMA	Sustainable Land management / Avoided deforestation	CEPF hotspot (Ref VUT6)	BD, LD, CC -A	1
South Epi	Area council planning with a focus on SLM and CC-A.		LD, CC-A	1
<b>TORBA</b>				
Torres – all is land	Area council planning addressing vulnerability and specific PA approaches and fisheries approaches	CEPF hotspot (Ref VUT22)	BD, LD, CC -A	1
Mota Island	Biodiversity conservation focus: - Link in species protection and PA elements	CEPF hotspot (Ref VUT22)	BD, CC-A	1
<b>TAFEA</b>				
Erromango	Area council focus with specific SLM and PA approaches	CEPF hotspot (Ref VUT 5)	BD, LD, CC -A	2
South Tanna	Focussed delivery- Specific R2R approach including land degradation		LD, CC-A	1
Futuna	Biodiversity TD focus: Link in species protection and PA elements	CEPF hotspot (Ref VUT 6)	BD, LD, CC -A	1
<b>SANMA</b>				
West Coast Santo	Area council focus including CC-A, PA, SLM with R2R approaches	CEPF hotspot (Ref VUT 19)	BD, LD, CC -A	1
South Santo	PA, SLM and CC_A	CEPF hotspot (Ref VUT 19)	BD, LD,	1
Big bay	PA, SLM and CC_A	CEPF hotspot (Ref VUT 19)	BD, LD,	1
<b>PENAMA</b>				
North Pentecost	Area council focus with specific R2R approach including SLM and PAs	CEPF hotspot (Ref VUT 16)	BD, LD, CC -A	1
East Ambae	Link in land degradation and PA elements.	CEPF hotspot (Ref VUT 1)	BD, CC-A	1
<b>MALAMPA</b>				
Ambrym	Area council focus with specific R2R approach including SLM and PA	CEPF hotspot (Ref VUT 2)	BD, LD, CC -A	1
Paama/Lopevi	Protected Areas and community conservation		BD	1
<b>Total</b>		<b>11</b>		<b>15 area Councils</b>

\*CEPF refers to the CEPF Hotspot analysis and references the sites number (see figure below).

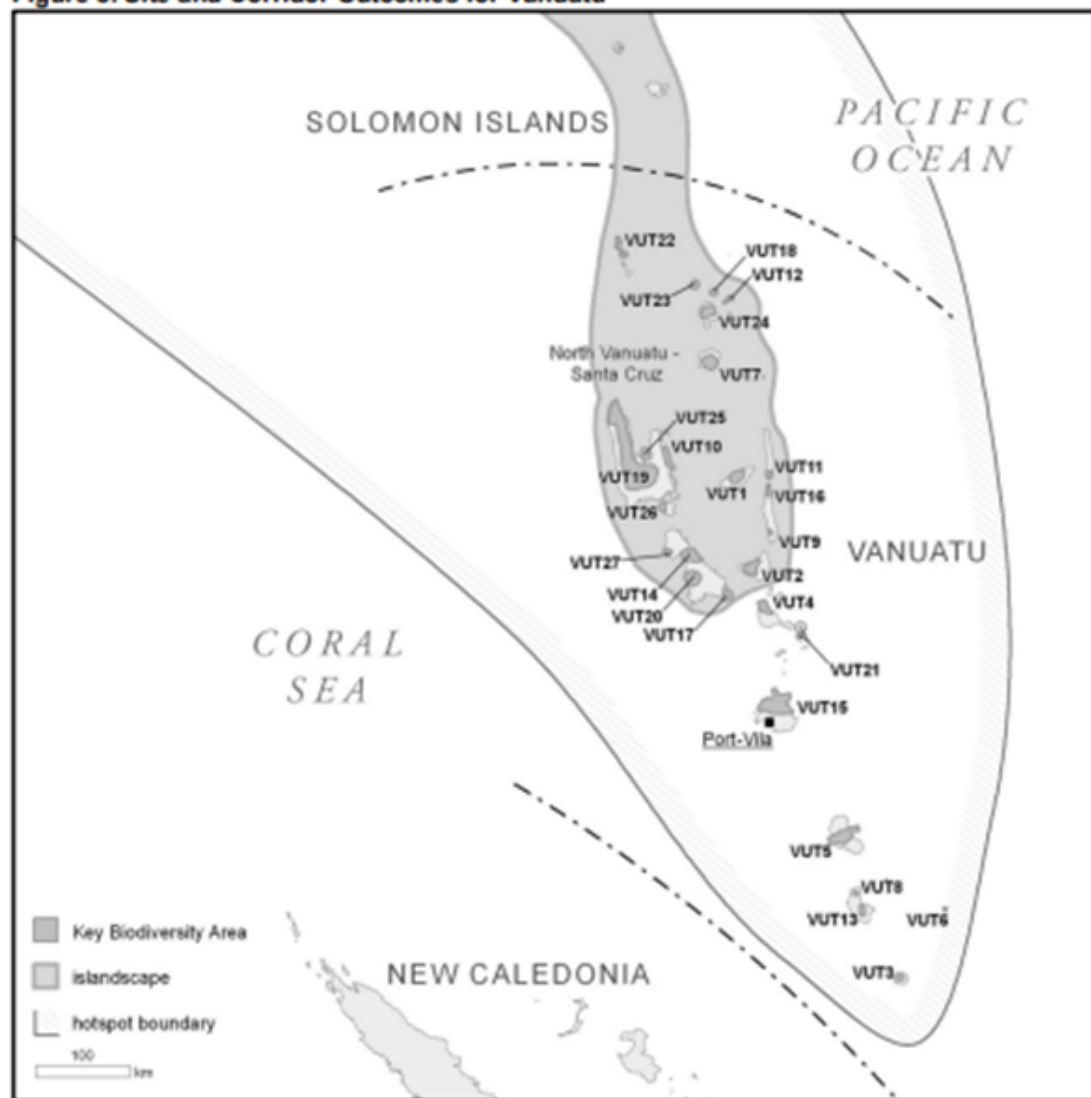


\*\*Further prioritization will be undertaken during the PPG inception to identify the Area Council locations and the corresponding project sites.

Figure 1: Sites identified as KBAs in Vanuatu as part of the East Melanesian Group

**Figure 1: Sites identified as KBAs in Vanuatu as part of the East Melanesian Group**

**Figure 8. Site and Corridor Outcomes for Vanuatu**





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At the Local Area Council technical support will be provided with a specific focus on building the capacity of the Local Area Secretary and Administrator to develop an Area Council Development Plan to address the focus of VCAP II. This Area Council-wide strategy will be developed through an integrated “bottom-up” process and will be based on the priorities developed in the local (village) development plans. The Area Council Development Plans will inform the allocation of funds provided to the Area Council through the Province allocated under the Amendment to the Decentralisation Act 2013. It will provide clear plans for the use of the funds and will also inform other development partners of funding priorities in targeted communities.

VCAP II will be implemented through the specific Outcomes and Outputs detailed below.

***Outcome 1.1: Biodiversity conserved to improve the integrity of natural ecosystems towards increased climate resilience***

The NBSAP lists over 100 Protected Areas, Marine Protected Areas, Community Conservation Areas and Locally Managed Marine Areas. There are to be well progressed in line with the 2030 target. VCAP II will support the implementation of identify the boundaries, issues, management measure and specific actions to be taken to the effective management of these areas.

*Output 1.1.1 Survey and evaluation of the proposed PA sites to determine appropriate and designation for PA establishment, governance and management at terrestrial and marine protected areas in 12 Area Council locations with a potential combined area of about 14,212 of existing (marine and terrestrial) and 16,600 hectares of potential PAs. Information sources will include biophysical, ecological and socioeconomic surveys, threat and management issues assessment and community consultations. Priorities will be identified.*

Many of the proposed and current Protected Areas proposed for VCAP II are yet to be fully understood surveyed to determine their full biodiversity values, landscape context, interest of by local communities and the key issues impacting on the sites. The full boundaries are yet to be determined and full range of ecosystem services need to be understood.

Specifically, VCAP II will undertake scoping of each of the sites, which will include:

- Specific surveys to determine high quality habitats, biodiversity values;
- Landscape context of the site to optimise protection of the full range of ecosystem values;
- Determine interest of local communities and the “buy in” for the establishment of community-based protected areas (Community Conservation Areas); and
- Key threat assessment and management issues assessment.

The above activities will provide a formal report on the status and potential of each of the sites, specific needs and process to move forward. If communities are willing to support the ongoing management and/or establishment of a Protected Area or Community Conservation Area, this will be progressed through Output 1.1.2 below.

*Output 1.1.2 PA Registration and Management Plans developed in at least 6 priority protected areas (either terrestrial or marine following prioritization in 1.1.1) selected from the 12 Area Council locations; management planning conducted through participatory processes with local communities and other stakeholders*

VCAP II will support the participatory formulation of management plans for the priority PAs. These will set out key issues including management objectives, management strategies, internal zoning, resource needs, organizational frameworks and financing.

The broader SLM approaches developed in other Outputs will be an important aspect to reflect of landscape-wide considerations in the zoning and buffers for the sites. .

*Output 1.1.3 Implemented key aspects of management plans, including measures to mitigate illegal and unsustainable use of species and to reduce pressures on vulnerable ecosystems to improve ecological integrity and climate resilience*

VCAP II will support the implementation of the management plans to be developed under Output 1.1.2 together with local communities and landholders. The project will support the establishment of appropriate structures required to sustain the management of the PAs and to enable landowners to work with the Government at all levels as well as civil society and specialist agencies. These structures will utilize existing community structures to ensure the potential for long-term sustainability.

***Outcome 1.2: Supported Sustainable Land Management initiatives at the community level to restore ecosystem services and improve resilience to climate impacts***

In each target site, VCAP II will provide direct support to the restoration of areas impacted by land degradation. This will enhance their ability to provide long-term ecosystem services. It will also contribute to supporting Land Degradation Neutrality in the country.

*Output 1.2.1 Degraded areas assessed in the selected project sites to identify the key drivers of land degradation covering approximately 5,000 hectares within the 12 priority Area Council locations*

In each of the localities, opportunities for support will be identified through participatory and land use planning process. It will firstly seek to identify priority sites to stem erosion and design specific approaches to address these challenges. Across the landscape of each project site will seek to develop integrated models of sustainable agriculture and forestry. It will document the lessons learnt from other similar initiative in Vanuatu and will identify the key drivers of land degradation. Where applicable, a plan will be develop with specific application for each of the project sites. These plans will focus on enhancing awareness among local people in the focal sites on the practical feasibility and benefits of ecosystem restoration and management.

A specific focus for these sites are areas around the existing and/or proposed protected areas to be supported by VCAP II. This will seek to ensure broader landscape management with a focus on both addressing biodiversity conservation (output 1.1) while addressing broader landscape management issues in an integrated approach.

*Output 1.2.2 Strategies for the restoration of degraded landscapes agreed through participatory processes and subsequently implemented to cover approximately 5,000 hectares*

Based on the results of Output 1.2.1, specific plans will be finalized and implemented through Area Councils with local communities. These specific actions may include planting vetiver grasses or pineapples in high erosive areas, through to agroforestry and intercropping. This will be particularly critical on those islands with higher mountains and elevated plateaus, e.g. Tanna, Efate and Santo Islands.

Where there are terrestrial protected and community conservation areas, efforts will promote the sustainable management of the landscapes, and link to Outcome 1.1. Examples include buffer zones to minimize the potential encroachment into PAs.

### ***Outcome 1.3: Improved climate resilience of coastal and upland areas through integrated approaches***

*Output 1.3.1 Climate-smart model farms established in approximately 8 Area Councils with the technologies upscaled/replicated at the farm level in selected areas*

VCAP II will support climate-smart agriculture to assist farmers and communities respond effectively to climate change. The sustainability of traditional cyclical farming systems is in many localities throughout the country being increasingly undermined by the growth in population. Pests and diseases are also presenting challenges in isolated communities. The provision of additional support to build upon lessons learnt from VCAP I and the broader agricultural sector will contribute to more productive agricultural landscapes.

VCAP II will support water resources management and supply rely on the effective management of water resources and water catchments. This links directly to catchment management and watershed protection. In some areas communities require supplementary assistance to provide water year round due to changing rainfall patterns.

*Output 1.3.2 Improved resilience through climate proofing of selected public conveyance, water provision infrastructure and evacuation facilities in the coastal zone in priority communities within the 12 priority Area Council locations*

This output will focus on the climate proofing of “public conveyance infrastructure, water provision infrastructure and evacuation facilities” all of which are vulnerable to the impacts of climate change. Public conveyance infrastructure is the infrastructure that provides linkages between communities and services and markets, e.g. health centres, schools and markets. Unsealed walking paths and trails are a source of erosion which will become worse under droughts, additional rains and changes in seasonality. There may be increased landslides. Water flows in river crossings will become more unpredictable. Water provision infrastructure would refer to rainwater harvesting and storage particularly in the areas subject to prolonged droughts due to climate change. Evacuation centres will be needed in low-lying and other areas that are susceptible to storm surges and flooding due to intense rainfall.

The activities in this component make use of both soft and hard interventions and are designed to increase resilience (i.e. reducing vulnerability) of public conveyance infrastructure to the impacts of climate change through strengthening natural, built, social, and governance systems. All of these elements are essential in the long-term maintenance of public conveyance infrastructure.

Examples of hard infrastructure to reduce vulnerability will include additional contributions to the government’s upgrading of Area Council Offices to ensure they are “climate proofed” and able to withstand storms as these will serve as evacuation centres. Incremental funding to support community and Government efforts for climate proofing public conveyance infrastructure, i.e. hard solutions to meet additional specifications for climate proofing walking tracks and roads, and upgrading water infrastructure to withstand climate events, i.e. concreting bases of water sources in mountainous areas.

Softer engineering options will be identified together with local communities and may include slope stabilization of roads and walkways through planting with vetiver grass and bamboo, and the stabilization of the coast through the planting of mangroves, coastal vegetation and related species.

## **Component 2: Information and early warning systems on coastal hazards**

This component will address the lack of understanding of CC and variability that requires a coordinated approach to addressing climate related risks in Vanuatu. It will enhance the capacity for systematic analysis and prediction of climate-related events. It will be improving forecasting and warning systems that will make a valuable contribution to Vanuatu’s economy. It will address financial and human constraints for departments dealing with climate-related issues, particularly Meteorology and Environment. It will ensure accurate and timely information is provided to those who need the information. This component will be housed in the Vanuatu Meteorology & Geo-Hazard Department to ensure coordination and integration with other related initiatives as this office will implement this component and the GCF project.

### ***Outcome 2.1: Reduced exposure to flood-related risks and hazards in the target coastal and inland communities***

#### ***Output 2.1.1. Automated systems for real time monitoring of climate-related hazards such as coastal flooding, storm surges, sea-level rise, landslides, designed, installed and maintained in selected vulnerable areas***

The current weather information collection platform that was made during VCAP I will be enhanced and upgraded to improve forecasting. This quality information will be further supported by obtaining a satellite “Cloud Data Set” from an appropriate source. The Himawari-8/9 satellite’s provision of image data is an essential meteorological service. To distribute the enormous volumes of Himawari-8/9 imagery, JMA established an Internet cloud service called HimawariCloud for National Meteorological and Hydrological Services (NMHSs) in the East Asia/Western Pacific regions and elsewhere. To have access to this very high resolution and true colour satellite data, the Department of Meteorology will require very high capacity server and a very good internet bandwidth. This will also contribute to the production of high-quality TV weather and climate change information for dissemination throughout the country. This will require appropriate equipment and software including professional video recording equipment’s and a dedicated space with proper services.

*Output 2.1.2 Timely releases of early warnings about cyclones, coastal flooding, storm surges and landslides through various public media; early warnings are received in a timely manner by all concerned villages in all the islands of Vanuatu*

VCAP II will continue to support a process for risk assessments, communication, and a monitoring and warning service operating 24 hours a day with reliable communication channels for early warning, and response capacity. These services and functions are important for human security as well as economic development of both land- and marine-based activities. This will include utilisation of telephone and media channels. It will also strengthen the system for disseminating appropriate forecasts, warnings and technical reports that can be accessed remotely by all communities via different media sources, aviation industries, Education sectors, Insurance companies, transportation sectors, public, government and international communities.

*Output 2.1.3 Capacity of VMGD staff in the operation and maintenance of weather forecasting (long-range and short-range) AWS and in the analysis of data strengthened*

This output will enhance the capacity of the VMGD for weather forecasting, in a range of activities to enhance their capacity. It will support the development of an appropriate "one stop weather forecast and warning system" that will pull together all weather data such as radar, AWS, manual observation data, community rainfall network, buoys, tide gauges, satellite data and etc. The delivery of Output 2.1.1 will rely upon a continuation of the capacity building activities for the technical staff of the VMGD through exchange of meteorologists to master certain skills to improve EWS within VMGD.

The outputs of this component will be shared with other Government Initiatives including "Climate Information Services for Resilient Development in Vanuatu (VANKIRAP)" which will use this information to support Climate Information Systems (CIS) for 5 key sectors: tourism, agriculture, infrastructure, water & fisheries.

### **Component 3: Climate Change and Natural Resource Management Governance**

The government of Vanuatu is committed to mainstreaming biodiversity, SLM and climate change into national planning and development plans. The development of the NSDP and the inclusion of this specific climate change, biodiversity and sustainable land management policy goals highlight the need to integrate these issues as a cross-cutting development issue at the highest national level.

A current example of this approach is the NSDS and the Vanuatu Climate Change Finance Review (2018) which is seeking more effective coordination and delivery of the policy to support integration of climate change adaptation into the various sectors. The Vanuatu Climate Change Finance Review (2018) notes that Vanuatu has made significant progress over the last few years in the development and endorsement of climate change specific policies, strategies and planning tools.

Vanuatu's National Action Plan on Disaster Risk Reduction and Disaster Management 2006-2016 is currently being reviewed and updated. This will align with the recent review of the National Disaster legislation that aims to provide a strengthened legislative environment for disaster management in light of lessons learned from recent Tropical Cyclone Pam.

Finally, the Vanuatu National Environment Policy and Implementation Plan 2016-2030 within the Environmental Management and Conservation (Amendment) Act No. 28, which specifies the consideration of climate change adaptation and mitigation issues within the scope of all environmental management activities. As such, this policy includes climate change as a key policy objective area and stipulates supporting the implementation of the CCDRR Policy and mainstreaming CCDRR into policies, strategies, budgets and planning at all levels.

***Outcome 3.1: Climate change adaptation plans at the community level and enabling policies and supportive institutions in place at both local and national levels***

***Outputs 3.1.1 CC-Adaptation Plans (including nature-based solutions) mainstreamed into Provincial and Integrated Area Council Development Plans and implementation supported in the 12 priority Area Councils***

The Project Identification process identified fifteen target areas for V-CAP II implementation to develop plans to support building climate change resilience and enhance biodiversity conservation and SLM. The Area Councils will be the focus of V-CAP II implementation.

A Strategy will be developed in a holistic manner to address both the threats to climate change on the natural resources that communities depend upon, and will focus on a number of different elements including SLM, management of water and water sources, coastal and marine area management, community conservation areas, DRR and management of infrastructure.

The holistic planning process used to develop these Strategies will also address the need to link with the village committees to ensure an integrated community development approach. Because these strategies will be developed with specific targets, indicators and outputs to ensure their effective delivery, this will serve to build the capacity of other local committees whose members participate in the planning processes.

***Output 3.1.2. Legislation and national/sector policies reviewed to ensure integration of climate change adaptation and a policy reform agenda developed and implemented***

The CCDRR Policy has a number of specific recommendations for integration of climate change adaptation into sectoral policies and plans. This policy proposes the development of a specific M&E Framework to assist to track and report on progress against the CCDRR Policy implementation.

VCAP II will support the following plans:

- Finalisation of the Integrated Coastal Zone policy that responds to the NSDP and incorporates the specific needs for integration of coastal zone management;
- Water sector policy for the integration of catchment management, recognising the ecosystem benefits provided by sustainably managed catchments; and
- Contribute to future updates of relevant policies and plans to and development of new policies by developing guidance on actions, targets, indicators specifically addressing adaptation to climate change as standardised components.

***Outcome 3.2 Mainstreaming biodiversity and sustainable land management in national development and sectoral policies***

***Output 3.2.1 Biodiversity conservation mainstreamed in national and local policies; gazetting of selected PAs initiated and completed (in conjunction with Output 1.1.2)***

VCAP II will support a number of specific policy and legislation initiatives to support implementation of the NBSAP. These include:

- Supporting the development of specific species regulations to control the taking and exploitation of listed flora and fauna for consumption and commercial purposes (please note the Department of Fisheries currently lists a range of marine species for protection, but there are plans to transfer this responsibility to DEPC);



- Control measures and regulations for the management of mangroves; and
- Develop control measures and regulations for the physical planning of land-use and protected areas into current planning policies include related land legislation.
- Formal declaration of the PAs in the national system

*Output 3.2.2 SLM and LDN Strategy developed and integrated into development policies and decision-making processes at national and local levels*

VCAP II will contribute to supporting the frameworks for the development of an SLM and LDN Strategy for Vanuatu. VCAP II will seek to develop a model for Land Degradation Neutrality (LDN) target setting, planning and implementation at the local level. This will eventually be scaled up to national level. Using a phased approach, the project aims to first strengthen the enabling environment for Land Degradation Neutrality and multi-sectoral land-use planning processes. It will seek to support the development of a Decision Support System (DSS) for LDN.

In particular, VCAP II will develop an M&E framework for the NSDP in relation to SLM and LND, and will establish clear targets to be achieved as part of the NSDP through to 2030.

***Outcome 3.3: Human resources in place at the national, provincial and area council levels to support integrated approaches to natural resource management and climate change adaptation***

The depth of local capacity is recognized as a constraint to address environmental and climate change issues. This component will attempt to increase the capacity through trainings of relevant stakeholders, including communities to understand their predicament and be better equipped at implementing integrated approaches.

*Output 3.3.1 Capacity building of key national and provincial government agencies (DEPC, DCC, PWD, Department of Internal Affairs, Departments of Fisheries, Forestry, Water) in areas of compliance and enforcement, monitoring and evaluation and mainstreaming of climate-related policies and nature-based solutions (biodiversity conservation and sustainable land management) and regulations*

This output will focus on building the capacity of national and provincial government agencies (DEPC, DCC, PWD, Department of Internal Affairs, Departments of Fisheries, Forestry, Water) in areas of compliance and enforcement, monitoring and evaluation and mainstreaming of climate-related policies and nature-based solutions. Priority areas for capacity building include design and identification of CC adaptation measures in the context of ecosystem-based adaptation, formulation and mainstreaming of climate-related policies and regulations and monitoring and evaluating compliance and enforcement, within the context of their respective offices. The capacity building activities will be designed in ways that the analytical mindsets are broadened through periodic mentoring and monitoring. It is through sustained efforts that capacity building activities will have lasting impacts on the participants and therefore on the objectives of the project.

*Output 3.3.2 Communities empowered to deal with climate change impacts in the coastal zone through participatory approaches in vulnerability assessments, planning and community-based adaptation measures and capacity building.*

Communities will be empowered to develop their local development strategies through participatory process that include detailed vulnerability assessment process to form the basis for detailed and holistic climate change adaptation planning, biodiversity conservation and SLM planning and implementation.

At the village level, communities will be supported to develop – grassroots level committees on specific focal areas including community conservation and protected areas, SLM and disaster planning. These village level groups will be encouraged to integrate CC adaptation components to each of these plans.

#### ***Component 4: Knowledge management and Lessons Sharing***

Increasing understanding of climate change, adaptation approaches, sustainable land management and disaster risk reduction is vital for the people and economy of Vanuatu. Tropical Cyclone Pam and the World Bank's Post Disaster Needs Assessment, endorsed by the Vanuatu Government, estimated total damage and loss from Tropical Cyclone Pam at around \$600 million, or 64 per cent of GDP. The need for increased awareness is obvious.

The NSDS, NAPA and NBSAP emphasizes that awareness raising and education are core issues that should be an integral part of sustainable island management. The lack of human, financial, and technical resources often constrains information sharing, education, and knowledge generation on climate change. Lack of knowledge and training constitutes a major barrier to biodiversity conservation, land management and climate resilience. Knowledge management will consider Vanuatu's high literacy rate (94% in 2009) and limited access to the internet (middle to bottom in the global rankings).

#### ***Outcome 4.1: Increased awareness and ownership of climate risk reduction processes at the national and local levels.***

*Output 4.1.1 Best practices are captured, documented, and distributed to all local and national stakeholders and shared globally in appropriate mechanisms (development, populating and maintenance of national website for CC).*

V-CAP- II will build upon the successful outcomes V-CAP-I. The project will document lessons learnt from V-CAP I and will ensure emerging lessons from V-CAP II are shared. In particular this will focus on protected area establishment and operation and approaches to address sustainable land use.

The unique position of V-CAP II working at the national level and with all of the provinces will provide an opportunity for comprehensive delivery of the biodiversity conservation, land use management and adaptation approaches, and disaster risk reduction at the National, Provincial and Local Area Council and community levels.

This will be achieved through:

- Suitable information kits about sustainable land management will be prepared based on field experience and through partnerships with other sustainable land management initiatives;
- Information material documenting best practices to integrated planning to incorporate climate change adaptation will be prepared and training courses will be integrated into planning process of the Department of Local Authorities;
- In the last two years of the project, the lessons learnt on the establishment of community conservation and protected areas will be documented and lessons learnt developed.

*Output 4.1.2 Awareness, training and education programs in relation to biodiversity conservation, sustainable land management and integrated approaches to climate change adaptation developed and implemented.*

Specifically, the awareness training and education programs will focus on:

- Training will be provided at all Area Council staff from Department of Local Authorities in the integration of climate change adaptation;
- Training key officials, civil society staff and local communities on biodiversity conservation and sustainable land use practices;
- Utilisation of various environmental media will be utilised with a focus on video, digital mechanisms, radio and broadcast.
- A project website linked to the NAB will be created to cater to the climate change community of practitioners within Vanuatu and elsewhere.
- Contributions will be made to global portals such as the Adaptation Learning Mechanism.

1A-4) Alignment with GEF focal area and/or Impact Program strategies;

Specific alignment elements include:

- Vanuatu ratified the UN Framework Convention on Climate Change (UNFCCC) in March 1993 and the Kyoto Protocol in July 2001. Its National Adaptation Programme of Action (NAPA) was submitted to the UNFCCC in December 2007.
- Vanuatu ratified the UN Framework Convention on Combating desertification in 1999. The National Action Program to address land degradation and mitigate the effects of drought (2009) details a number of specific actions was submitted to the UNCCD. VCAP II is aligned to this NAP.
- Vanuatu ratified the Convention on Biological diversity (UNCBD) in 1993. The NSBAP details the national action plans and strategies to address this convention. VCAP II is aligned to the NSBAP.

Climate change will significantly reduce the capacity of Vanuatu to pursue a sustainable development and achieve the Millennium Development Goals. In consistency with the LDCF eligibility criteria, the project supports the implementation of some of the most immediate adaptation priorities identified in Vanuatu's NAPA. The project recognizes that adaptation and development are closely linked which is why the project adopts a programmatic approach and addresses adaptation in relation to other interlinked human induced stressors reducing climate resilience. A participatory approach will be used to enhance local ownership, promote public awareness, and capacity building. The proposal has been prepared with the full involvement of relevant stakeholders

The project is aligned (refer to Table A in Part I) with corresponding outcomes, outputs and activities as indicated in Table B: Indicative Project Description Summary and in section 1A-3: proposed alternative scenario.

- BD-1-1 Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors
- BD-1-5 Mainstream biodiversity across sectors as well as landscapes and seascapes through Inclusive conservation
- LD-1-1 Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)

- LD 4-5 Create enabling environments to support scaling up and mainstreaming of SLM and LDN
- CCA-1 Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level
- CCA-3: Integrate climate change adaptation into relevant policies, plans and associated processes

1A-5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;

Vanuatu is classified as a least-developed country, thus is in need of critical support to assist communities adapt to climate change. The baseline will be existing government and community initiatives to undertake conservation, land management which will contribute to enhancing resilience to address climate change adaptation. It is clear from VCAP I that communities are already experiencing what could be considered as climate related impacts that these were likely to become worse under the CC scenarios. Given the limited level of government resources available for building resilience to CC the specific activities identified VCAP II support are clearly focused on directly providing adaption solutions for communities at the village level. The LDCF and GEFTF support is considered as crucial to securing livelihood assets to build resilience to CC and to contribute to biodiversity conservation.

VCAP II will also build upon and support government efforts for road and other infrastructure construction and maintenance through a range of integrated activities including erosion control and supporting climate proofing of investments by providing incremental funding for construction that integrates future climate change projections (e.g. providing larger drains for extreme rainfall events, and ensuring river banks are stabilized). In terms of delivery of infrastructure, V-CAP will ensure road maintenance is able to address severe rainfall events, erosion and poor water management which are more damaging to roads. Thus, VCAP II will work with those agents delivering “hard” solutions such as the Public Works Department and provide incremental support through the provision of softer “natural” infrastructure solutions to maintain the roads.

1A-6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and

**Global environmental benefits resulting from GEF’s investments in biodiversity** conservation will contribute through the conservation of small island unique biodiversity. These islands of Vanuatu house a very high level of endemism of fauna and flora species. The East Melanesian hotspot analysis concluded that of endemic mammals – 51% were threatened; endemic birds - 23% threatened and 11 % of endemic amphibians threatened. VCAP II will protect Vanuatu’s biodiversity to generate global environmental benefits. It will address conservation of globally significant biodiversity including the Pentecost Palm and threatened species of flying foxes. It will mobilize the creation of Protected Areas in Vanuatu. The NBSAP listed many protected areas to be created. However, these are only on paper. This mobilization of additional effort to establish and improve protected area management effectiveness will contribute to Vanuatu’s national target of 10% coverage of terrestrial areas and 17% in the marine systems by 2030. This will contribute to the Aichi Target for Protected Areas in Vanuatu. The establishment of additional protected areas will contribute to the total global Protected Area estate. The indicative area coverage of work in biodiversity is reflected in the Core Indicators.

**Global environmental benefits resulting from GEF’s focus on land degradation** will contribute to the target of improved provision of agro-ecosystem and forest ecosystem goods and services. It will result in better management of degraded landscapes and will contribute to the generation of ecosystem services that will range in the fragile island ecosystems from the tops of mountains to the coast. Better land practices will mean that communities develop more efficient farming that requires less land. This will ensure additional land in the protected area and forested area estate. The indicative area coverage of work in addressing land degradation is reflected in the Core Indicators.

**Adaptation benefits** - Globally there exists an urgent requirement to develop more coordinated and integrated approaches to addressing climate change adaptation in Vanuatu. Vanuatu comprises over 80 islands, of which 68 are inhabited, and has a population of around 266,555 people (2016 Government of Vanuatu). These climate risks to the people of Vanuatu are immense. According to the Commonwealth Vulnerability Index, Vanuatu is one of the world's most vulnerable country due to its high exposure to natural disasters, scattered island geography, narrow economic base, rudimentary communication and transportation networks, and limited capacity to cope with disasters including climate change. Adaptation benefits will accrue through this project via both the on-the-ground results in relation to climate change adaptation by delivering coordinated locally driven approaches to climate change adaptation. Structure will be established at the community level to address climate change adaptation. These community level structures will be integrated into planning at the Area Council, Provincial and National Levels. This enhanced approach will ensure that Vanuatu is in the position to contribute to global adaptation efforts in sectors such as land management, disaster preparedness, water security and development of climate resilient approaches to agriculture.

Significantly, VCAP II will strengthen the ability of an integrated approach to address climate change adaptation and biodiversity conservation. This will lead to mainstreaming of these approaches in national and local development planning. Such approaches are necessary to ensure appropriate synergies among the work of various sector agencies, between the national government, Area Councils and communities. These investments combine with those of development partners and donors will build island sustainability and resilience.

1A-7) innovation, sustainability and potential for scaling up.

VCAP II is a follow-up project upon the request of the government. This request is anchored on two aspects. The first is the innovative implementation arrangement whereby every national government agency involved in project implementation has been provided a coordinator to enable them to deliver on their respective responsibilities. At the local level, the close involvement of Area Councils have been instrumental in facilitating the involvement of communities. These will be continued and scaled-up in VCAP II. On the more substantive aspects, the concrete CC adaptation interventions have been widely appreciated by the communities and Area Councils as these have improved access to their isolated locations with the climate proofing of public conveyance infrastructure. The soft approaches related to the management of fisheries, forests, agriculture and other sectors have supported livelihoods and improved well-being among community residents. These will also be continued and replicated in VCAP II.

In addition to the above, VCAP II will make possible a broader integrated approach with the blending of funds from the GEF TF and LDCF. The conservation of biodiversity and sustainable land management which will bring in global environmental benefits will also result in significant (ecosystem-based) adaptation co-benefits. Where it is possible to implement the different activities in each focal area in the same site, some sort of multiplier effect could be achieved as these activities will have mutually-reinforcing impacts.

A key underlying principle in the delivery of VCAP II will be to build on existing coping strategies of rural communities who have a long history of responding to geological and climate variability and change, with varying success. These short-term coping strategies form the basis of successful long-term adaptation strategies. However, care needs to be taken as some of these traditional coping strategies could prove to be unsustainable over time as climate change progresses leading to a greater risk of maladaptation. Seeking refuge in a safe evacuation center in times of cyclones could be considered as a short-term coping mechanism. When the occurrence of cyclones becomes more frequent due to climate change, affected households may find it more beneficial to relocate closer to evacuation centers. The clustering of houses around an evacuation center has been observed in some Pacific Island Countries such as Fiji.

Innovative approaches and new technologies, along with careful monitoring of the effectiveness of strategies in view of changing circumstances is needed to ensure these adaptation strategies remain appropriate. Rural communities are therefore the key actors for implementing adaptation strategies and hard-won lessons can be learned, communicated and fed into adaptation decision making at higher levels to benefit the nation.

In addition, VCAP II will build upon the donor funded projects being implemented in rural communities aimed at addressing the effects of climate change which are delivered by both government, non-state agencies and other development partners. Frequently these initiatives take the form of “pilots” or “demonstration projects” which are useful in addressing climate change related challenges at community level. As such, VCAP II provides a pivotal opportunity to upscale successful pilots for deployment in targeted communities.

Similarly, in VCAP II will build upon DRR planning processes that have been piloted and will broaden these initiatives to ensure the communities are aware of disaster plans and that these plans are regularly reviewed, updated and able to be implemented as needed in response to a situation requiring its implementation.

VCAP II will develop and deliver a targeted and useful communication program to ensure the engagement of the wider community and additional partners. Innovative approaches will be needed to deliver this program. It is important that this communication program is innovative and delivers materials that are socially appropriate for Vanuatu. The long-term nature of the challenges of climate change need to be emphasized and empowering communities in partnership with governments and other development partners will be a key element in this process.

As indicated above, the innovative approaches are being continued and replicated in this project. It is expected that further lessons will come about in VCAP II that would be useful in other projects and in other locations not only in LDCs but in SIDS.

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[1] Based on: (a) the impact of external shocks over which an affected country has little or no control and (b) the resilience of a country to withstand and recover from such shocks.

[2] Risk Governance Assessment Report, of the Project titled “Strengthening Climate and Disaster Risk Governance in Vanuatu”, UNDP, Ministry of Climate Change, Draft Report November 2013.

[3] VNSO – International arrival statistics December 2018

[4] Risk Pacific Catastrophe Risk Assessment and Financing Initiative

## 1b. Project Map and Coordinates

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

The project will undertake activities in priority sites in all six-provinces of Vanuatu. Refer to Figure 1 where the KBAs are indicated which are the likely areas to be covered by the project, particularly under the BD/LD focal areas. During the prioritization exercise that was done with stakeholders in the week of 28 October 2019, there was agreement on the priority sites in each of the 6 provinces as indicated in Table 1 above. The priority sites, however are preliminary and will be revisited during the PPG phase that will start with an inception workshop involving a wider group of stakeholders. The importance of the preliminary prioritization is to inform the stakeholders about the need for a process following on a set of criteria described above. (Refer to criteria described in subsection on Component 1.) During the PPG when ground work would have been conducted, a high resolution map for each site will be prepared and submitted at CEO ER.

## 2. Stakeholders

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

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities

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.**

The Ministry of Climate Change has been responsible for coordination of the inputs into the development of VCAP II. The National Advisory Board (NAB) takes the lead role in the coordination of climate change adaptation programmes in country. With the current institutional structure in place, the present members who form the NAB have provided initial technical guidance in the development of this VCAP II.

In addition, the NAB provides a mechanism for cooperation with civil society organisations through cooperation with Vanuatu Climate Adaptation network (VCAN). VCAN has a range of partners including Oxfam, CARE International in Vanuatu, Save the Children, Vanuatu Red Cross Society, Vanuatu Rural Development Training Centres Association, SPC/GIZ, Vanuatu Humanitarian Team (VHT). All of these agencies cooperated in various ways with VCAP I. It is proposed that these agencies will be further consulted in the project preparation phase of VCAP II. In addition, the project preparation phase of VCAP II will work together with the Vanuatu Association of NGOs (VANGO).

In addition, indigenous peoples and local communities were important stakeholders in VCAP I and were a major focus of the projects approach and delivery. This will continue in VCAP Phase II.

The private sector will be further consulted during the PPG. Of particular interest here are the island contractors that will be engaged in the delivery of the 'hard' climate-proofing interventions. In the process of scoping and designing the interventions, they will be brought in through PWD and the Area Councils to provide inputs in design and implementation on the ground. Their inputs in estimating the incremental costs due to climate change will be useful in finalizing the scope of the project. This process though will be guided by a professional engineer working for the project during the PPG.



### 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).**

The project will strive to promote gender equality in both planning and execution of the proposed components to ensure that men and women benefit equally from the targeted interventions. On-the-ground adaptation activities in component 1, 2 & 4 will actively encourage the participation of women to incorporate into planning their particular situation and role in coastal resource management. Policy-oriented activities in component 4 will account for different vulnerabilities according to gender, culture and other characteristics that influence people's capacity to prepare for and respond to climate-related disasters. Component 2 & 4 will have to consider that access to information and early warning may vary between groups. Gender will be incorporated as an explicit variable for review in monitoring and evaluation.

Gender will be a specific focus of VCAP II. The gender inclusion plan developed as part of VCAP I will be reviewed in the project preparation period. Lessons learnt will be incorporated into the design of the full project.

**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; Yes**

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

**generating socio-economic benefits or services for women.**

**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.**

There will be a role for the engagement of the private sector in VCAP II. This will build upon the engagement of “island contractors” in VCAP I. these “island contractors” are local companies established to support efforts towards construction and maintenance of roads and infrastructure towards climate proofing. They were used in VCAP I. They are trained by PWD and development partners to fulfil specific development needs in Vnautu. They are licensed and registered. Refer to Section 2 above on the subject of island contractors.

## 5. Risks

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)

The following table details the risks faced by the project, the risk level, and the mitigation measures that will be put in place to mitigate risks:

Risk	Rating	Mitigation
Limited capacity in government agencies to implement the project and sustain project outcomes	M	Capacity building is one of the project components. This would cover capacity building of government partners and communities in all aspects of the project and post-project activities. Ownership of the project by the partners will be ensured by letting them take the lead with assistance from the project team. Technical assistance will be carefully used to build rather than substitute for capacity. A coordinated approach by the implementing partner with other agencies involved to leverage on training opportunities and resources available.
Lack of data to design adaptation measures	L	The project includes a component to strengthen data capture and management as well as vulnerability/risk assessments. Further, the PPG phase will include data collection and consultations that will form the basis for design of the adaptation measures.
Weak coordination and communication amongst project partners may impede project progress	M	The project will build upon coordination mechanism amongst partners through the NAB providing mechanisms for seeking their inputs at all levels (project steering committee, project site committees, etc.). A Project Implementation Unit will be established to oversee the whole operations & management of the project. The project will be coordinated through the NAB which has an appropriate mandate for coordination and resource deployment.
Participation by communities may not come at a level necessary to ensure project success	L	As the project outputs and outcomes will benefit communities directly, it is expected that cooperation will be at the highest level. Participatory approaches, capacity building and communications will build strong ownership by communities. The project will also explore in-kind inputs from communities, where feasible. Detailed baseline studies prior to engagement of communities will be undertaken to understand the community well and in doing so tailor a workable approach to their active participation.
Gender inequality may impede project progress and achievements	L	The project will continuously promote the participation of women in the project and ensure that a gender perspective is integrated into planning and execution of the project. This will be addressed in the project preparation phase.

Large tracts of land under customary ownership could be an impediment to CC-A if landowners do not cooperate.	M	The process of formulating and implementing the project will be participatory and include a series of consultations with rural communities, including with landowners. The benefits from CC adaptation will be emphasized with landowners.
Climate change risks	L	Project will explicitly consider this as it is about adaptation to CC impacts
Political instability	L	The Project to engage with implementing partners at national level to the level of technical staff, directors and director generals in project implementation. Project management will encourage the cooperation of the various ministries to buy in where necessary to have high-level support.

## 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.**

The primary coordination mechanism has been established through the National Advisory Board for climate change (NAB). This has strengthened the governance structure over CC adaptation, DRM and DRR initiatives in the country. The NAB is chaired by the Directors General of the Ministry of Climate Change & the Prime Minister's Office. Members are senior-level representatives from sectoral government agencies, CSO representatives, and technical advisors.

The Ministry of Climate Change Adaptation (MCCA), Meteorology & Geo-Hazards, Energy, Environment and National Disaster Management Office. This Ministry draws together key agencies working directly on environment, climate change adaptation and mitigation. The Director of Department of Environment is the GEF Focal Point and is also on the NAB. This will facilitate coordination with other GEF financed projects and other initiatives in Vanuatu.

The secretariat of NAB is based in the Department of Climate Change based at the Ministry. Vanuatu's National Advisory Board on Climate Change & Disaster Risk Reduction.

As indicated above, there is a high degree of commitment across Vanuatu's 12 ministries to integrate climate change issues into national planning documents and sector plans.

The Ministry of Climate Change Adaptation, Meteorology & Geo-Hazards, Energy, Environment and National Disaster Management Office will be responsible for project implementation. The specific roles of each agency will be refined during the project preparation phase.

The specific approach to project monitoring and evaluation will draw upon the lessons learnt from VCAP I. The results of the terminal evaluation will provide a number of recommendations for VCAP II. These will form the basis of the specific approach. One approach incorporated into this PIF was the allocation of additional resources to communication of community approaches to climate change adaptation and awareness raising.

Several projects funded by the GEF and other donors are mentioned in long subsection describing the 'baseline scenario'. The GEF projects include the national STAR R2R project and the medium size GEF6 project implemented by FAO, the national demonstration site which is part of the regional R2R project being implemented by UNDP, the ECARE project being prepared by IUCN, among others.

## 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

Plan	Consistency
"Vanuatu 2030" is the National Sustainable Development Plan (NSDP) for the period 2016 to 2030.	<p>This plan seeks to further extend the linkages between resources, policy and planning to the people.</p> <p>Environment is one of the three pillars as part of the NSDP. This environment pillar has five goals and 29 policy objectives with 62 indicators and 64 targets. V-CAP II is aligned to address the Environment Goals 2,4 and 5 as outlined below. Environment goal 3 – Climate and disaster resilience - A strong and resilient nation in the face of climate change and disaster risks posed by natural and man-made hazards</p> <p>ENV 3.1 Institutionalise climate change and disaster risk governance, and build institutional capacity and awareness</p> <p>ENV 3.2 Improve monitoring and early warning systems</p> <p>ENV 3.3 Strengthen post-disaster systems in planning, preparedness, response and recovery</p> <p>ENV 3.4 Promote and ensure strengthened resilience and adaptive capacity to climate related, natural and man-made hazards</p> <p>ENV 3.5 Access available financing for climate change adaptation and disaster risk management. In addition, Environment Goal 4 on Natural Resource Management and Environment will contribute to</p> <p>ENC 4.1 Strengthen local authorities and municipal planning authorities to enact and enforce land use planning laws and regulations</p> <p>ENV 4.2 Protect vulnerable forests, watersheds, catchments and freshwater resources, including community water sources</p> <p>ENV 4.3 Prevent land degradation and downstream environmental damage from mineral resource extraction</p> <p>ENV 4.4 Promote the sustainable development of the fisheries sector that values the protection and conservation of marine and freshwater resources</p> <p>ENV 4.5 Reduce and prevent the degradation and erosion of foreshore and coastal areas</p> <p>ENV 4.6 Reduce deforestation and ensure rehabilitation and reforestation is commonplace</p> <p>ENV 4.7 Build capacity and support local communities to manage natural resources. In addition, Goal 5 on Ecosystems and biodiversity will be implemented</p> <p>ENV 5.1 Protect biodiversity and ecosystems and their significant role in our culture, society and environment</p> <p>ENV 5.2 Create and manage conservation and protected areas</p> <p>ENV 5.3 Support local conservation and protection of endangered, threatened or endemic species and ecosystems including through traditional knowledge and practices</p> <p>ENV 5.4 Protect our borders and environment through effective customs and biosecurity services</p> <p>ENV 5.5 Increase awareness on biodiversity conservation and environmental protection issues across government and publicly</p> <p>ENV 5.6 Enhance environmental monitoring, evaluation and research with relevant, open and transparent data sharing</p>

	among relevant agencies
National Bio Strategy Action Plan (NBSAP) - 2018-2030	<p>This VCAP II will support the delivery of the NBSAP, in particular contribute to:</p> <ul style="list-style-type: none"> <li>· Strategic Area 1: Conservation Area Management (terrestrial and marine)– increase the area of representative coverage of Protected Areas (PAs) in Vanuatu in the form of community conservation areas (CCAs);</li> <li>· Strategic Area 2: Forest and inland water ecosystem conservation and management</li> <li>· Strategic Area 3: Coastal and marine ecosystems conservation and management (CME)</li> <li>· Strategic Area 5: Management of invasive alien species (MIAS)</li> <li>·</li> </ul>
National Adaptation Programme of Action (NAPA).	<p>The project will explicitly address four of eleven priorities identified in the NAPA including: 1) community-based marine resource management, 2) integrated coastal zone management, 3) Land use planning and management; and 4) mainstreaming climate change into policy and national planning processes. The NAPA places particular emphasis on the need for community-based resource management, embracing both traditional and modern practices and enhancing the resilience of vulnerable communities.</p> <p>To address these priorities, the project will focus on adaptation options outlined in the NAPA including: i) development of provincial / local adaptation and ICM plans, ii) climate proofing of infrastructure design and development planning, iii) development of an efficient early warning system, iv) Landslides associated with prolonged and intense rainfall, iv) awareness raising and capacity building, and v) coastal re-vegetation and rehabilitation.</p>
National Action Program (NAP) to address land degradation and mitigate the effects of drought	<p>The Republic of Vanuatu became a Party to the UNCCD in 1999. The NAP reflects the Government of Vanuatu's commitment to addressing land degradation and drought. VCAP II will explicitly address the following priority actions from the NAP. These include: 2.2) Demonstration activities in each province demonstrating good land-use practices; 2.3) education and awareness; 3.1) Access needs and develop programs for strengthening capacity at the community level in addressing vulnerability to negative effects of droughts and climate variability in their community; 3.2) Develop programs to strengthen village and community leadership and networks in drought and climate variability.</p>

## 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.**

The primary knowledge management mechanism will be through the coordination mechanism of the National Advisory Board for climate change (NAB). This will be achieved through the following approaches:

- Utilising the knowledge management and coordination provided by the NAB;
- Mainstreaming project approaches into the approaches of the line implementing partners and agencies; and
- Publishing key knowledge generated and findings NAB knowledge sharing portal - <https://www.nab.vu>

The specific approach to knowledge management in VCAP II will draw upon the lessons learnt from VCAP I. The results of the terminal evaluation will provide a number of recommendations for VCAP II. These will form the basis of the specific knowledge management approach. One approach incorporated into this PIF is to build upon sharing the approaches and lessons learnt from all the projects being implemented in cooperation with the NAB. This will build upon and enhance the knowledge management approaches of key ministries and line agencies.

Other avenues for knowledge management within the country and outside the country will be explored during the PPG. It is recognized that national capacities are generally limited both in terms of hardware and software to manage the wealth of information that the project has generated and in producing knowledge products. In VCAP1, partnerships with NGOs became necessary to address the challenges. This will be continued in VCAP II although more lasting options will be prioritized. Such options would have to build local capacity of individuals or firms through partnerships with more experience foreign counterparts.



**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).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Donna Kalfatak	Director, Department of Environment	Ministry of Climate Change Geo-Hazard, Meteorology, Energy and Environment	9/26/2019

# ANNEX A: Project Map and Geographic Coordinates

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

## PROGRAM/PROJECT MAP AND GEOGRAPHIC COORDINATES





| Source: Perry-Castañeda Library Map Collection, available from [https://www.lib.utexas.edu/maps/australia/vanuatu\\_rel98.jpg](https://www.lib.utexas.edu/maps/australia/vanuatu_rel98.jpg).