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NATIONAL ADVISORY BOARD
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2017



TAFEA Provincial Disaster Response & Climate Change Management Plan



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The Tafea Provincial Disaster Response and Climate Change Management Plan was developed with support from CARE International in Vanuatu with funding from the European Union through the European Commission’s Humanitarian Aid and Civil protection Department (ECHO), the Australian Government and the Australian Public, and the United States Agency for International Development through the Pacific-American Climate Fund.

This document covers humanitarian aid activities implemented with financial assistance of the European Union, the Australian Government and the United States of America. The views expressed herein should not be taken, in any way, to reflect the official opinion of the donors, and they are not responsible for any use that may be made of the information it contains.

PLAN AUTHORIZATION

This Plan has been prepared by TAFEA Provincial Government Councils in pursuance of Section 11(1) of the National Disaster Act of 2000 and the National Climate Change & Disaster Risk Reduction Policy.

ENDORSED BY:

Date: / / 2017

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This Plan is approved in accordance with Section 11(2) of the National Disaster Act 2000 and is in-line with the National Climate Change & Disaster Risk Reduction Policy 2015-2030.

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PREFACE

Disaster Risk Reduction together with the management of disasters and adaptation to and mitigation of Climate is a dynamic process. In order to adequately respond to disasters, there must be a comprehensive and coordinated approach between national, provincial and community levels. This plan has been developed to provide guidelines on how to manage different risks in the province, taking into account the effects of the climate change that increase the strength of the hazard and potential impacts of future disasters.

This is the first booklet on Provincial Disaster Response & Climate Change management plan that was developed to address and provide guidelines on how to manage different hazards in the province.

This Provincial Disaster & Climate Change Management Plan provides directive to all agencies on the conduct of Disaster Preparedness and Emergency operations. This management plan has been formulated in compliance with **Section 9 Part 3 of National Disaster Act N0.31 of 2000 Section 11 subsection 5, and aligned with the National Climate Change & Disaster Risk Reduction Policy 2015-2030, Section 7.1.4.** (Annex 1). The planning approach contained within focuses on a comprehensive hazard and disaster management strategy which clearly identifies and documents the essential organizational and procedural ingredients for effective prevention of, response to and recovery from disasters.

The effectiveness of this document will depend on the ability of organizations and departments to understand its components, and also implement actions in accordance with the procedures listed and assigned disaster roles and responsibilities within their means of resources when need be. The affected communities are expected to produce supporting Community Disaster and Climate Change management plans in accordance with the Provincial Disaster and Climate Change Management plan.

This document is subject to review based on experience of hazards and lesson learned from managing all hazards including those associated with Climate Change.

This plan is valid for 5 years from the date of approval by the Director of the National Disaster Management Office and the Vanuatu Meteorology and Geohazards Department. The documents annexed to the Provincial Disaster Response and Climate Change Management Plan (PDRCCM) should be updated every year.

Mrs Ketty Napwatt

Secretary General – **TAFEA** Provincial Government

LIST OF ABBREVIATIONS

ACS	Area Council Secretary
CCA	Climate Change Adaptation
CDCCC	Community Disaster & Climate Change Committee
CHARM	Comprehensive Hazard & Risk Management
CRP	Community Response Plan
DGMWR	Department of Geology, Mines & Water Resources
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
EOC	Emergency Operation Centre
EWS	Early Warning System
ICA	Initial Community Assessment
IEC	Information Education and Communication
NDMO	National Disaster Management Office
PDCCC	Provincial Disaster & Climate Change Committee
PDO	Provincial Disaster Officer
PDRCCM	Provincial Disaster Response and Climate Change Management Plan
PEOC	Provincial Emergency Operation Centre
SG	Secretary General
SITREP	Situation Report
SOP	Standard Operating Procedure
TOR	Terms of Reference
VHT	Vanuatu Humanitarian Team
VMGD	Vanuatu Meteorology and Geohazard Department
VRCS	Vanuatu Red Cross Society

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SECTION 1. STRATEGY & SCENERIO BUILDING

1. Introduction

1.1. Mission Statement

The TAFEA Provincial Council realises the value of disaster planning in ensuring that the economic, social and cultural wellbeing of the community is provided for. As such the Council has made a commitment to increasing the awareness and preparedness levels of the TAFEA province to respond to natural events. This will be accomplished through the activities outlined in this plan. This plan is a requirement of the National Disaster Act No.31 of 2000 Section 11 subsection 1 (Annex 2) and its development has been planned in the National Disaster Management Office (NDMO) Strategy 2016-2020 (Annex 3).

This Provincial Disaster Response and Climate Change Management Plan (PDRCCM) fits into the National Disaster Plan (2010) as mentioned in section 3.10 (Annex 4). The National Disaster Plan describes the communication links between the provincial and the national levels, especially for early warning systems, Emergency Operational Centres (EOC) activation, assessment reporting and distribution processes.

1.2. Purpose, Scope and Objectives

This plan has been developed to assist the Provincial Disaster and Climate Change Committees (PDCCC) to coordinate Disaster Risk Management work. As described in the National Disaster Plan, PDCCC should “[...] ensure risk reduction is part and parcel of Provincial sustainable development plans”. That means that disaster preparedness has to be mainstreamed in the 5-year provincial development plan in every sector.

The PDRP is a general document presenting a multi-hazard risk approach. When a Province has to face an exceptional risk that, though unlikely, would have catastrophic consequences, a contingency plan has to be developed in addition of the PDRP and annexed to it.

Following the recommendation of the National Disaster Plan, the PDRCCM Plan is focused on response. The response phase described in the present plan covers early warning, damage assessment and reporting, response (relief distribution...), and early recovery phases. The long-term recovery plan that could be needed in case of a major disaster would have to be specific, and is not addressed here. This document will be developed when the situation requires it.

Standard Operating Procedures (SOPs) are annexes to the PDRP, to guide the PDCCC during the response. These SOPs are developed at national level to ensure the consistency of the action on the whole territory.

The Provincial Disaster Response Plan takes into account the existence and/or the development of Community Disaster Plan integrating the Community Response Plan (CRP) in the definition of the provincial response options. The CDPs are developed in the main disaster prone areas by the Community Disaster and Climate Change Committee (CDCCC) with the support of DRM stakeholders. During emergency the CRPs are activated in coordination with the PDRP.

The objectives of the Provincial Disaster Response Plan are:

- Reduce loss of life due to hazards
- To enable effective community-based climate change adaptation
- To develop disaster scenarios according to the threats existing in the province.
- To set response options according to the scenarios developed.
- To adapt and formalise at provincial level the national procedures in term of communication and coordination (Early warning system, EOC, assessment, logistic etc.).
- To plan the mobilisation of resources in preparation of disaster emergency.

1.3. Methodology

The TAFEA PDRCCM Plan was developed through a participatory approach by consulting the PDCCC members, the Area Council Secretaries (ACS) and Community Disaster and Climate Change Committee (CDCCC) representatives from each island in TAFEA to ensure the ownership of the document and its consistency with the provincial capacities.

The development of the PDRCCM was a process supervised by NDMO, PDCCC and DRM stakeholders. It is based on an initial workshop including:

- Training: The PDCCC members are trained on their roles and responsibilities, SOPs on early warning system, coordination of the Provincial Emergency Operation Center (PEOC), damage and need assessments etc.
- Consultation: A consultation with the PDCCC is organised to define the disaster scenarios, the response options adapted to provincial context, and develop a response preparedness plan.

Following the consultation, the PDRP was then compiled, tested and evaluated through a Simulation Exercise (SimEx), to be adjusted and finalised. The final edition is endorsed by the PDCCC chairman and approved by both directors from NDMO and Vanuatu Meteorology and Geohazard Department (VMGD).

The TAFEA plan was then strengthened and gained further input from an additional workshop, which was attended, by CDCCC representatives and the ACSs from each island, PDCCC members, the TAFEA Provincial Disaster Office (PDO) and SG. The workshop reviewed EOC, roles and responsibilities, standardised NDMO initial community assessment training, and training on the inclusion of essential crosscutting themes of child protection in emergencies, disability inclusion, climate change awareness, and gender and protection. The workshop was complemented by two mini simulation exercises (cyclone and volcanic hazards).

The plan has to be updated at least once a year to ensure that some annexes such the contact list, the SOPs, the communication trees are correct.

The plan has to be fully reviewed every 5 years to ensure its consistency with the provincial capacities and the national legislation. New consultation workshop and simulation exercise have to be organised in this timeframe.

2. Situational Overview

TAFEA Province consists of five islands, Tanna, Aneityum, Futuna, Erromango and Aniwa, hence the initials giving it the name TAFEA. The Province is categorised as one of Vanuatu's most vulnerable because it is prone to droughts, volcanic eruptions, earthquakes, tsunamis, flooding, landslides, fires and cyclones. All islands in TAFEA are also experiencing the impacts of climate change.

The province has a population of around 38,911 people, with detailed demographic figures in *annex 5*, and an area of 1,628 km. The main island, though second to Erromango in area, is Tanna, containing 80 per cent of the province's population. TAFEA has 12 Area Secretary Administrative Divisions (Tanna-7, Erromango-2, Aniwa-1, Futuna-1 and Aneityum-1), with the administrative centre of TAFEA Province being in Isangel, West Tanna.

The main economic activities within TAFEA Province include tourism, sandalwood logging, and cash crops including coffee and coconuts. Subsistence farming is the sole method of livelihood for 90 per cent of the population.

Due to the physical and geographical differences of each island as well as, population size and access to resources, each island's capacity and vulnerability to hazards is different. However, cyclones, drought and manmade disputes such as land, community, family and tribal disputes are common and affect all islands within TAFEA. Climate Change also impacts TAFEA as a whole and effecting seasonal weather patterns causing them to become more extreme, with decreased rainfall during the dry season, and increased rainfall and extreme storms during the wet season requiring the communities to adopt food and water security management actions.

Tanna (Provincial Head Quarters)

Tanna is the administrative centre of TAFEA with the **largest population in the province, 32,207**. Geographically the island is second largest in TAFEA with a total area of 550 square kilometres. The highest point of Tanna is 1,084 metres, which is the summit of Mount Tukosmera.

The Lenakel-Isangel area is serviced by Unelco, which has **power lines** running from the Whitegrass Area and Airport all the way to the end of Isangel. Tanna has **telecommunication** tower though service is not always reliable. Tanna's **7 Area Secretary Council offices**, which have access to HF Radios.

Whitegrass International Airport is the main airport in Tanna, receiving flights every day. The majority of flights to the outer islands of province must pass through Tanna first. Tanna has a main road leading from the Airport down the west coast to Lenakel-Isangel with further roads criss-crossing the island east to west.

The island has a well-equipped **hospital** in Lenakel as well as, aid posts, health clinics and dispensaries. However, aid posts can be under staffed and understocked.

The **National Bank of Vanuatu** has a branch in Lenakel that is open 5 days a week, closed weekends.

Tanna has an active **Volcano** located on the southeast of the island, Mount Yasur. Currently, the volcano averages an active level of 2 however, it is not uncommon for the activity level rise to a level 3. Volcanic ash is a consistent problem causing health issues of the residence that reside in Whitesands. It also affects the communities' crops and water. All residence in Tanna are at risk of and have experienced throughout history, **droughts and earthquakes**, residences that reside close to the low lying coast lines

are vulnerable to **Tsunamis and landslides** as well. **Flooding** also occurs often in Tanna with Middle bush being the most at risk area.

Bushfires are also a risk in Tanna. Fire Services are based in the Whitegrass International Airport however, they need additional training and appropriate equipment to be prepared to fight fire, mitigate the effects of fire and rescue victims.

Aniwa

Aniwa is a coral island and the smallest island in TAFEA. It is located 24 km to the northeast of Tanna and is only 42 metres above sea level. It has an **airport** that receives flights twice a week and has one road, however, flights are prone to cancellations due to poor weather or other issues. Also when wet the road does not function. There are 3 communities on Aniwa, Isavai, Ikaukau and Imatu, with a joint **population of 420**.

Due to the islands size and metres above seas level, Aniwa is at **high risk of tsunamis**. The island also relies on rainwater harvesting for the vast majority of its drinking water thus it is very vulnerable to drought.

In terms of **telecommunications**, Aniwa relies on the telecommunication tower in Tanna for phone reception. Reception is unreliable and only limited to specific spots on the island. The Area Secretary has access to HF radio.

The **National Bank of Vanuatu** has a small branch in Aniwa.

Health services in Aniwa are restricted to a small health clinic, which is at times unreliable and under staffed. However, basic first aid training was provided to all CDCCC members within each community by CARE and Red Cross at the end of 2016.

Futuna

Futuna is the eastern most island in Vanuatu with a total area of 11 square kilometres and a reaching height of 666 m. The **population of Futuna is 633**.

The island has an **airport** on the northeast of the island called Futuna Airport, which receives 2 flights a week, however this is subject to weather conditions. **The island has no roads and telecommunications are limited**.

Health services are restricted a dispensary close to the airport and 2 aid posts. However, at times they are unreliable and under staffed.

The **National Bank of Vanuatu** has a small branch in Futuna.

The communities on the coast are at **high risk of tsunami, landslides, earthquakes and flooding**, and due to the majority of the population relying on subsistence farming and rain water harvesting the communities are very **vulnerable to drought**. **Bushfires** are also a risk as the island is covered in dense forest and there are no formal fire services.

Erromango

Erromango is the fourth largest island in Vanuatu and the largest island in the TAFEA province with a total area of 891.9 square kilometres, with the highest point being Mount Santop at 886 meters. The **total population on the island is 2,109**.

Telecommunications coverage in Erromango is limited to few areas where the towers are located and the radio signal can reach, North Erromango and 3 communities (Dillon's Bay, Happyland and Port Lucy) in the South have access. The Area Secretary Council offices in Ipota and Dillons Bay have access to HF

radio. The communities of South River, Pongkils Bay and Antiock and their surrounding areas have very little to no access to telecommunications.

The island has **two airports** one in Dillon’s Bay in the west and one in Ipota in the east, which receives flights twice a week, however, flights are prone to cancellations due to poor weather or other issues. There are only two roads in Erromango, one from the airport to the community in Dillon’s Bay and the other goes from Dillon’s bay to the telecommunication tower. There are **no roads between communities** or to travel around or through the island, so many use small boats to travel to the villages that line the outside of the island and then walk inwards however, weather can often delay travel.

The National Bank of Vanuatu is located in Dillon’s Bay and Ipota.

Health services are restricted to 2 aid posts in the outer communities and in a dispensary in Dillon’s Bay in the South and 2 aid posts in the outer communities and a dispensary in Ipota in the North however; they are unreliable and under staffed. Basic First Aid training was conducted with all CDCCC members on the island by CARE and Red Cross in November 2016.

The communities on the coast are at **high risk of tsunami, flooding and landslides**, and due to the majority of the population subsistence farming and rainwater harvesting the communities are very **vulnerable to drought. Bush fires** are also a risk as the island is covered in dense forest and there are no formal fire services.

Aneityum

Aneityum is the southernmost island of Vanuatu with a total area of 159.2 square kilometres and a **total population of 1433**. The island has an **airport** known as Anatom Airport, which located on Inyeuc Island (Mystery island) a small island off the southwest coast, which receives 2 flights per week. Flights are prone to cancellations due to poor weather or other issues. There are no roads and travelling around and through the island so it takes time and is subject to weather conditions.

There is **telecommunications** coverage by Digicel and TVL however, it is limited to few areas where the towers are located and the radio signal can reach. The area secretary office has access to HF radio.

Health services are restricted to an aid post in Anpekch and a dispensary in Aneighowat. However, they are unreliable and under staffed.

The communities on the coast are at high risk of **tsunami, landslides, earthquakes and flooding**, and due to the majority of the population relying on subsistence farming and rain water harvesting the communities are very vulnerable to **drought. Bush fires are** also a risk as the island is covered in dense forest and there are no formal fire services on the island. **Mystery island is a cruise ship-docking** site and is a large source of income for the islands population; a disaster would prevent the ships visit, which would impact the community’s livelihoods.

3. Hazard Risk & Vulnerability Profile

3.1. Historic Disaster Timeline

TAFEA Province has been rated as the most disaster prone province in Vanuatu due to the geographical background, isolation, remoteness of villages, terrain and limited resources that make it difficult to counter disaster situations in a timely manner. In order to improve preparedness and response it is important to understand the natural hazards that have occurred in the past and how they impacted the communities, environment, economy and social services.

The table below summarizes the previous disasters that occurred in the province. The columns provide the following information's for each hazard:

- **Description of the hazard:** Describe type of hazard, intensity, date & location
- **Damage and loss:** Provide description and figures as much as possible on the following elements: population impacted, damages on individual proprieties and infrastructures, impacts on livelihood and economic sectors...
- **Response:** What actions have been taken during and after the disaster?

Description of the hazard	Damage and loss	Response
Cyclone		
2016- Tanna/Futuna (TC Winston)	<ul style="list-style-type: none"> - <i>Damage to gardens</i> - <i>Cumulative impacts around Mt. Yasur (Sulphur depression)</i> - <i>Widespread damage to shelter, infrastructure, crops and water systems</i> - <i>Death/health impacts</i> - <i>Widespread damage to livelihood assets including boats, canoes and livestock</i> 	<ul style="list-style-type: none"> - <i>Reported through to NDMO,</i>
2015- All TAFEA Islands (TC Pam)	<ul style="list-style-type: none"> - <i>Extensive/ widespread damage to shelter, infrastructure, gardens and water systems</i> - <i>Death/health impacts</i> - <i>Widespread damage to livelihood assets including boats, canoes and livestock</i> 	<ul style="list-style-type: none"> - <i>International and national agencies assisted with emergency distributions and extensive recovery with communities</i>
2011- Cyclone Atu and Vania	<ul style="list-style-type: none"> - <i>widespread damage to subsistence food and cash crops that could cause serious food and income shortages 3 – 7 mths</i> - <i>poor water, sanitation and hygiene conditions and damage to water infrastructure</i> - <i>widespread gastro and respiratory health issues with</i> 	

	<ul style="list-style-type: none"> <i>limited access to medications and limited monitoring of health cases</i> - <i>Damage to traditional- housing.</i> 	
2007- Futuna (TC Gene)	<ul style="list-style-type: none"> - <i>Death</i> - <i>Damage to shelter</i> - <i>Flash flooding and landslides damaging gardens/crops</i> 	<ul style="list-style-type: none"> · <i>Government assistance with support from communities and churches</i>
1987-All TAFEA Islands (TC Uma)		<ul style="list-style-type: none"> · <i>Government and international assistance with relief supplies given out</i>
1972-All TAFEA Islands		<ul style="list-style-type: none"> - <i>Condominium Governments assisted response led by communities</i>

Severe weather/Flooding/Landslide

2015- Erromango	<ul style="list-style-type: none"> - <i>Damage to gardens (Ipota)</i> - <i>Damage to houses (Ipota)</i> 	<ul style="list-style-type: none"> - <i>Community Response</i>
2010- Tanna (Central)	<ul style="list-style-type: none"> - <i>Damage to crops/gardens</i> - <i>Damage to houses/school</i> 	<ul style="list-style-type: none"> - <i>No coordinated response</i>
2004- Aniwa	<ul style="list-style-type: none"> - <i>Damage to gardens</i> - <i>Damage to houses</i> 	<ul style="list-style-type: none"> - <i>No coordinated response</i>
2003- Tanna (South, South –East)	<ul style="list-style-type: none"> - <i>Landslides damaging gardens, impacting estuaries and coastal fishing</i> 	<ul style="list-style-type: none"> - <i>No coordinated response</i>
2000- Tanna (South- East)	<ul style="list-style-type: none"> - <i>Lake Siwi emptied and flooded downstream villages (Sulphur Bay)</i> - <i>Damage to crops/gardens</i> - <i>Damage to infrastructure</i> - <i>Death/Health impacts</i> - <i>Damage to reef/fisheries</i> 	<ul style="list-style-type: none"> - <i>No coordinated response</i>
1987-All TAFEA Islands	<ul style="list-style-type: none"> - <i>Damage to houses/schools</i> 	<ul style="list-style-type: none"> - <i>Government-led response with assistance from NGO's</i>

Earthquake/ Tsunami

2014- Erromango/Aneityum	<ul style="list-style-type: none"> - <i>Tsunami damaged boats/canoes and the reef</i> - <i>Coastal erosion</i> - <i>Saltwater inundation of groundwater</i> 	<ul style="list-style-type: none"> - <i>No warning given</i>
2009- Erromango	<ul style="list-style-type: none"> - <i>Coastal erosion</i> - <i>Damage to reef</i> 	<ul style="list-style-type: none"> - <i>Community response</i>
2002- Aniwa	<ul style="list-style-type: none"> - <i>Damage to boats/canoes</i> - <i>Impact on gardens</i> 	<ul style="list-style-type: none"> - <i>No coordinated response</i>
1992- Tanna/Aniwa	<ul style="list-style-type: none"> - <i>Earthquake caused landslides and damage to gardens</i> 	<ul style="list-style-type: none"> - <i>Government led response</i>
Coastal erosion		
Fire		
Drought		
2015/6-All TAFEA Islands	<ul style="list-style-type: none"> - <i>Shortage of food/water</i> - <i>Impact on livelihoods assets including crops and livestock</i> - <i>Impact on fish stocks</i> - <i>Death/ health impact</i> 	<ul style="list-style-type: none"> - <i>Government and international assistance for emergency water supply</i>
2006-Aniwa/Tanna	<ul style="list-style-type: none"> - <i>Shortage of food/water</i> - <i>Health impacts</i> 	<ul style="list-style-type: none"> - <i>Government and community led response</i>
1991/2-All TAFEA Islands	<ul style="list-style-type: none"> - <i>Shortage of food/water</i> - <i>Bushfires</i> 	<ul style="list-style-type: none"> - <i>Small Government-led response including awareness</i>
Accident (search and rescue)		
Health (Epidemic)		
2016-2017 Dengue Fever	<ul style="list-style-type: none"> - <i>Impacts to health</i> 	<ul style="list-style-type: none"> - <i>Awareness campaigns and education of the population how to avoid and treat Dengue</i>
2015- Malaria (as a result of cyclone Pam)	<ul style="list-style-type: none"> - <i>Impacts to health/ Injury/death</i> 	

Volcano		
Mt Yasur- Tanna (Ongoing Ashfall/continual activity)	<ul style="list-style-type: none"> - Impacts to crops/gardens - Impacts to water supplies - Impacts to roads & other infrastructure - Impacts to shelter - Impacts to health/ Injury/death - Impacts to livestock - Cumulative impacts from other disasters 	<ul style="list-style-type: none"> - NDMO/VMGD monitor volcanic activity and impacts caused to communities - NGO's assistance with livelihoods programs - CDC/Area Council/TAFEA Provincial Government communication/assistance - Health posts/hospital
Civil Unrest		
Other Disaster;		
Invasive Species; Wild pigs & rats- Erromango/Aniwa (Ongoing)	<ul style="list-style-type: none"> - Damage to gardens/crops 	<ul style="list-style-type: none"> - No coordinated response
2015-Pest Infestation (Post TC Pam)	<ul style="list-style-type: none"> - Damage to gardens/crops - Shortage of food/health impacts 	<ul style="list-style-type: none"> - Government/NGO basic assessment conducted

(Produced with the assistance of PDC, Area Council Secretaries and Women’s Representatives)

Analysis:

The PDCCC, ACS and CDCCC and the people in Tafea are familiar with and able to manage a partial response to cyclones, drought and small-scale hazards. They also have developed different coping mechanism for different hazards at both a community and a provincial level. As an example in 2015/2016 El Nino induced drought, communities engaged in transportation of water in between areas, water saving techniques, food sharing and food preservation techniques, and in mitigation activities resulting from community action plan. The Tafea Province has recently developed a Cyclone Response plan and Provincial El Nino Response plan that were both used to respond to these hazards in the last 3 years. However, other hazards that do not occur as often as cyclones and not as recent as the El Nino induced drought of 2015-16, they lack the preparation and experience to guide a coordinated response. With the impacts of climate change only increasing, and increasing the strength and likelihood of large scale hazards other than cyclones to affect the province a lot needs to be done to fill this capacity gap.

All major communities in the outer islands of Tafea and many communities in Tanna have well developed and functioning CDCCC’s which have the capacity to conduct an initial response and call for assistance and communicate with the Province and NDMO through the standardised communicating structure. Through continuing training and education around disasters and disaster risk reduction their capacity to respond to different hazard that threaten their community will improve however, their lack of access to the necessary resources needed to respond to medium to large scale hazards and consecutive small-scale hazards greatly affects their capacity to mitigate the effects.

ACSs are also well developed throughout the Province and very capable however, more resources and training needs to be provided by the Province in order for ACS to reach their full potential and create that vital link between the communities and the Province.

3.2. Hazard Profiles

This subsection gives an overview of the existing hazard in the province that could be a threat for the population or the economic activities. The description is based on the scientist and social knowledge of each hazard.

Cyclone

Vanuatu is located within the South Pacific cyclone belt. Every year Vanuatu receives minor to major cyclone activity that causes a lot of damage to communities, environment, economy and social services delivery. The cyclone season officially begins in November of each year and continues through to April. However, cyclones can also form outside of the period indicated, particularly as climate change influences regional climatological patterns. Vanuatu averages 2-3 cyclones per season. The cost of cyclone rehabilitation programs is increasing and sets back our economic growth and stability. All islands in TAFEA are vulnerable to cyclones.

Storm surge also associated with cyclones can trigger flooding and landslides which, pose a significant risk to communities living in coastal low-lying areas throughout the country and Tafea.

Some of the damages that can be incurred from a cyclone include: loss of basic Public Services, damage to essential infrastructure (hospitals, schools and roads etc.), impacts on livelihoods (destruction of root crops, food gardens, fruit trees), and impacts on health (injuries, illness and death) as well as, destroys essential water services and housing.

Severe weather / Flooding / Landslide

Many communities in Tafea are located near riverbanks and along the coastline in low-lying areas, which are prone to flooding. These villages are vulnerable every year when there is a cyclone or heavy rainfall. With Climate Change causing a rise in sea level, the severity and occurrence of flooding in these areas is set to increase.

Floods can potentially destroy gardens, houses, small boats, personal belongings, and are a risk to people as high river levels cause infrastructure damage to bridges and roads. With a growing population and increased population density the threat of damage or injury increases yearly.

Earthquake / Tsunami

Earthquake poses a high, but infrequent risk to TAFEA Province. Due to the style of buildings in Tafea and across Vanuatu the seismic movement of ground caused by an earthquake does not pose the major threat (though still poses a very serious threat to the communities), the greatest risk from a large earthquake is when it results in a **Tsunami**. Thus, highly populated low-lying coastal areas are the most vulnerable. Aniwa, is particularly at risk as it a low-lying coral island with its highest point being only 42metres above sea level.

Apart from general earthquake damage and tsunamis, landslides can occur which can damage gardens, roads and bridges, as well as communities.

Volcano

Vanuatu sits within the so called “the rim of fire”. Some of the islands of Vanuatu are at high risk from volcanic impact. There are seven active volcanoes running from the Northern to Southern part of the country including Mt Yasur on Tanna.

Mt Yasur is the only active volcano in TAFEA. The present volcanic activity on Tanna is restricted to the small Yasur scoria cone in the southeastern part of the island. Yasur is a permanently active volcanic cone, 365 m in altitude, with a base about 1.5 km wide. This is the youngest of several small volcanoes, which occupy the Siwi area (among them the Ombu). Particularly intense activity was reported in 1974, 1975 and in 1977. Activity is again intense since the beginning of the year 1994.

The volcano poses different risks to the communities on Tanna:

- Volcanic Ash-fall.
- Volcanic Acid Rain
- Volcanic Lava Flow
- Volcanic Sulphur Gas
- Volcanic Mud Flow

The major threat linked to this volcano is the fall of ashes and acid rains on the White Sands area, in the NW of the cone. An automatic alert station, with satellite transmission up to Vila, watches the level of seismic-volcanic activity. However, the entire Siwi area, is very prone to strong seismic activity and ground motions and where a great caldera formed a few tens of thousands of years ago, should be considered as a hazardous zone.¹

Volcanic risks are continually affecting livelihood and services of all communities in the eastern site. It is a high priority for the Government, Province, and Communities concerned to work together in order to develop mitigation strategies to reduce volcanic risks.

Coastal erosion

The problems being identified by the population of Tafea as a result of coastal erosion are coral reefs being washed out, degradation of sand from coastal areas that is moving inland.

Coastal erosion is also causing public infrastructure wash off which is affecting roads and buildings that are built near the coast.

Fire

House fires and bushfires are common in TAFEA, especially in the islands with dense forests (Tanna, Erromango, Futuna and Aneityum). During dry season and in times of drought the risk and severity of fires increases, as fires often occur when the weather is very hot and dry. The higher the temperature the more likely it is that a fire will start and continue to burn. Fires can start from human activity and/or from the weather, for example lightning. As climate change causes the average temperature in TAFEA to increase, with longer dry seasons and an increase in severity of thunderstorms, the vulnerability to large fires rises.

Fire can lead to a fast on-set disaster that can spread very rapidly and affect large numbers of the population very quickly. As there is only one formal fire service based in Whitegrass International Airport, Tanna, the population of TAFEA has a low capacity to respond and mitigate its effects and thus, is at high risk.

Fires can destroy livelihoods, burning crops and gardens and destroying houses, as well as causing severe injuries and deaths from burns and smoke inhalation. Large fires also destroy essential public infrastructure for example, bridges, power lines, hospitals, airports, water sources/storages and schools.

Drought

¹ <http://www.geohazards.gov.vu/index.php/volcanoes/tanna>

Drought is a major concern for the communities of the TAFEA Province. *El Nino patterns cause widespread water shortages.* Conditions normally lead to lower production of vegetables, root crops and water shortages causing health problems due to unbalanced and inadequate diet, and sanitation problems.

The islands of TAFEA are extremely vulnerable to the effects of drought in particular, food insecurity and a loss of livelihoods as subsistence farming is the sole method of livelihoods for 90 per cent of the population. As the main water source comes from rainwater harvesting in many islands in particular, Aniwa this also further increases their vulnerability to drought. Drought can cause many schools to close as they cannot continue due to food shortages and, pupils and teachers are unable to attend class due to having to locate other food and water sources.

Climate Change is and will continue to cause longer dry seasons and more severe El Nino patterns which will increase the number and severity of drought and El Niño induced droughts.

Climate Change

Climate Change in Vanuatu clearly poses an acute danger to low-lying islands of TAFEA Province such as Aniwa, Futuna and Aneityum, whose long-term viability is threatened but also higher islands where impacts on agriculture and fisheries threaten long-term viability.

Seasonal weather is already becoming unpredictable and more extreme (El Nino and La Nina, and more severe storm surges). Sea level is rising by over 6mm per year, ocean pH is dropping causing damage to coral reefs and other marine life, and coral bleaching is regularly affecting coral reefs. There has been an increase in people being poisoned by fish that inhabit reefs that have been damaged by climate change (ocean acidification and coral bleaching).

With the majority of the islands populations living directly off their land, the most crucial question surrounding climate change in Tafea is its effect on food and water security. Climate Change has already begun to reduce agricultural yields through heat stress, changes in rainfall, greater pest activity and coastal erosion.

Accident (search and rescue, Boat Capsizing, Air Craft Accident, Marine Oil Spill, Industrial etc.)

Industrial Accident: Tanna is developing at a high rate. However, while safety precautions are high, the potential of an accident involving explosive chemicals and fuel is high at this stage. The town is beginning to become more crowded, with people, buildings, and an increased number of vehicles on our roads. The potential for ‘man-made’ industrial type accidents or disasters is increasing and as a result the risk factor is high especially in Lenekel-Isangel.

Marine Oil Spill: Lenekel wharf receives many boats, as well as many other smaller ports around the Outer Islands. Many cruise ships dock at Aneityum, with many other boats, ships, oil tankers, cargo ships entering TAFEA’s waters thereby posing a risk of marine oil spills.

Air Craft Accident: The possibility of an aircraft accident at the airport, or elsewhere is high, due to conditions of the airports. Whitegrass Airport on Tanna receives a great deal of plane traffic compared to other areas and its condition and lack of any facilities is a safety hazard, especially in the case that an accident should happen. Airport Management has established plans for the airport precinct; these plans do not extend beyond that area. Airports limit Vanuatu, Air Vanuatu, NDMO, search and rescue team are responsible and will respond to an air craft accident outside the airport.

Search and Rescue: Search and Rescue is carried out by the communities and is co-ordinated by the Community Disaster and Climate Change Committees (CDCCC). Should it be necessary, teams from VMF or the Search and Rescue team could be called upon.

Boat Capsizing: With the increase of motor boat travel, but no increased awareness of safety precautions, boat capsizing in TAFEA Outer Islands is a serious threat, and many resources are spent on search and rescue.

Health (Epidemic/Exotic Disease)

Exotic Disease/ Epidemic

It is important that safety regulations are observed at all times to ensure, livestock export trade is disease free. An outbreak of an exotic animal disease could cripple the Vanuatu economy. Therefore, all steps must be taken to prevent this from occurring. The Agriculture Department and Live Stock Department are lead agencies in developing an Animal Exotic Disaster Response Plan.

The people of Vanuatu are also exposed to modern transmitted viruses and pathogens. The Department of Health are responsible for the monitoring, detection and treatment of any outbreaks. Due to the high travel needs of our people and the tourist trade, the risk of introduced diseases is high.

Civil unrest

For the purpose of this disaster plan, civil unrest, also known as civil disorder, will be used to describe violence or unrest that is caused by a group of people. It includes violence caused by manmade disputes over land, between community members, between different communities, violent protests, in families and also tribal disputes. The civil unrest can include weapons (e.g. bush knives, miscellaneous objects and guns etc.) Or just physical violence between a group/s of people.

Civil unrest is common and affects all islands within TAFEA.

3.3. Disaster Scenarios

This subsection describes the disaster scenarios that could potentially occur in the province. They are established by the PDCCC according to the historical events and the hazard profile of the province.

For each hazard different kind disaster scenarios can be considered. They are defined by the strength of the hazard, the level of loss & damage and the response capacities available.

Three levels of disaster scenarios are considered:

- **BEST - CASE SCENARIO**
 - Limited impact (1 village) - few damages
 - The community can recover by itself in few weeks
- **LIKELY - CASE SCENARIO**
 - Significant impact (one island or part of it) – Impacts on several sectors like livelihood or/and infrastructures.
 - Communities require support from the province and might recover in few months
- **WORST - CASE SCENARIO**
 - Severe impact (full province) – Impacts livelihood and economic sectors, major damages and losses on infrastructure.
 - Communities require support from the national and international stakeholders and might recover in years.

For each scenario, the following information is provided:

- **Hazard strength:** Category, strength of the hazard, area of impact, timing of the hazard (quick or slow onset)
- **Damage and losses:** Damage, figure of population/ number of community / area affected
- **Sector impacted:** eq. Health, water and sanitation, livelihood, agriculture, education...

Scenario	Hazard strength	Damage and loss	Sector impacted
Cyclone			
<i>Best-case</i>	<ul style="list-style-type: none"> ● Category 1 Cyclone Gale force 90-125 km/h Twigs break off trees. Slight structural damage occurs – roofing dislodged, larger branches break off. Garden crop damage 	<ul style="list-style-type: none"> ● Minor isolated damage to part of the province- Agriculture, water supply, health and infrastructure- that can be addressed and repaired by the community themselves. ● Quick recovery 	<ul style="list-style-type: none"> ● Community ● CDCCC ● ACS ● PDCCC
<i>Likely-case</i>	<ul style="list-style-type: none"> ● Category 2-3 Cyclone Storm force- destructive hurricane force winds 165-224 km/h Considerable roof and structural damage, some 	<ul style="list-style-type: none"> ● Half of the province affected- Small to mild damage to shelter, education, water supply, agriculture, shelter and infrastructure, minor health impacts, no deaths 	<ul style="list-style-type: none"> ● Community ● CDCCC ● ACS ● PDCCC ● Dept of Agriculture, Water, Health, DWA, PWD, NDMO

	<p>thatch houses destroyed. Trees uprooted, heavy damage to some crops. Power failures likely.</p>	<ul style="list-style-type: none"> • Quick recovery 	
<i>Worst-case</i>	<ul style="list-style-type: none"> • Category 4-5 Cyclone Very destructive-catastrophic hurricane force winds 225 km/h-more than 280km/h Significant roofing loss and structural damage. Many thatch houses destroyed and blown away. Dangerous airborne debris. Widespread power failures and telecommunication down. 	<ul style="list-style-type: none"> • Extreme dangerous with widespread destruction to entire province and all sectors • Displaced people needing food, water and temporary shelter • Causing severe health impacts with injuries, illness and deaths. • Long-term recovery required. 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Police/ national military • National and international level (NGO, donors, military forces)
Earthquake / Tsunami			
<i>Best-case</i>	<p>Small local earthquake. 4- 5 magnitude</p> <ul style="list-style-type: none"> • Moderate shaking/small surge in sea levels 	<ul style="list-style-type: none"> • Minor/ isolated damages affecting some communities and affects to water, infrastructure, shelter and agriculture. • Quick recovery 	<ul style="list-style-type: none"> • Community • ACS • PDCCC
<i>Likely-case</i>	<p>Strong earthquake 5.1-6.9 magnitude</p> <ul style="list-style-type: none"> • Strong shaking/ significant surge in sea levels/possible landslide 	<ul style="list-style-type: none"> • Damage to infrastructure, shelter, health, agriculture, education and livelihoods • Some coastal properties inundated by water 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Dept of Agriculture, Water, Health, DWA, PWD, NDMO
<i>Worst-case</i>	<p>Major local earthquake 7.0-8.0 or greater magnitude</p> <ul style="list-style-type: none"> • Extreme shaking/ causing a very large tsunami extreme surge in sea levels 	<ul style="list-style-type: none"> • Full province affected • Widespread damage to infrastructure, shelter, education, water, health, agriculture and education and livelihoods • Coastal communities completely wiped out by tsunami • Mass evacuation & temporary shelter required • Causing severe health impacts with injuries, illness and deaths. 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Police/national military • Dept of Agriculture, Water, Health, DWA, PWD, NDMO • National and international level (NGO, donors, military forces)

		<ul style="list-style-type: none"> • Long-term recovery required. 	
Severe weather / Flooding / Landslide			
<i>Best-case</i>	<ul style="list-style-type: none"> • Annual Heavy rain • Isolated flood/landslide 	<ul style="list-style-type: none"> • Small damage to crops and water supply systems • Small damage to shelter and infrastructure • Quick recovery 	<ul style="list-style-type: none"> • Community • ACS • PDCCC
<i>Likely-case</i>	<ul style="list-style-type: none"> • Exceptional heavy rain • Moderate flood/landslide 	<ul style="list-style-type: none"> • Damage to health, education, food security and livelihoods, shelter, WASH • Isolated evacuation and temporary shelter required 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Dept of Agriculture, Water, Health, DWA, PWD, NDMO
<i>Worst-case</i>	<ul style="list-style-type: none"> • Exceptional heavy rain for a long period of time • Extreme flood/landslide 	<ul style="list-style-type: none"> • Widespread damage to crops and water supply systems • Widespread damage to shelter and infrastructure • Isolated communities cut off by waters/landslide for extensive periods of time • Mass evacuation and temporary shelter required • Long term recovery 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Police/ national military • National and international level (NGO, donors, military forces)
Drought			
<i>Best-case</i>	<ul style="list-style-type: none"> • Abnormally dry - Short term dryness 1-2 months • SPI1.0-1.49 Water storage developing or imminent. 	<ul style="list-style-type: none"> • Short term dryness slowing planting, growth of crops and gardens. Small impact to water supply. • Fire risk above average • Coming out of the drought there are small lingering water deficits. 	<ul style="list-style-type: none"> • Community • CDCCC • PDCCC
<i>Likely-case</i>	<ul style="list-style-type: none"> • Moderate Drought and Severe Drought 2-5 months • SPI 1.5-1.99 Water storages across TAFEA very common. 	<ul style="list-style-type: none"> • Significant impact to crops, gardens, livestock and water supplies. • Loss of livelihoods • Fire risk high 	<ul style="list-style-type: none"> • Community • CDC • PDCCC • Dept of Agriculture and Livestock

<p><i>Worst-case</i></p>	<ul style="list-style-type: none"> • Extreme Drought and Exceptional Drought 6 months - 2 years • SPI 2< <p>Water supply insufficient to meet the population of TAFEA needs and that of the ecosystem creating a water emergency.</p>	<ul style="list-style-type: none"> • Extreme loss of crops, livestock and widespread and extreme depletion of water supplies • Loss of health and loss of lives • Loss of livelihoods • Increase violence and crime • Internal displacement • Large and long lasting economic damage. • Fire risk very high • Large scale environmental damage to supporting ecosystems that will take years to recover • Long term response and recovery 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Police/ national military • National and international level (NGO, donors, military forces)
<p>Fire</p>			
<p><i>Best-case</i></p>	<ul style="list-style-type: none"> • Isolated domestic fire 	<ul style="list-style-type: none"> • Minimal loss/damage to shelter and infrastructure 	<ul style="list-style-type: none"> • CDCCC • Community • ACS
<p><i>Likely-case</i></p>	<ul style="list-style-type: none"> • Significant fire- large domestic fire affecting more than 1 household 	<ul style="list-style-type: none"> • Significant loss/damage to shelter and infrastructure • Isolated impacts to crops and livestock • Isolated evacuation and temporary shelter 	<ul style="list-style-type: none"> • Community • CDC • PDCCC
<p><i>Worst-case</i></p>	<ul style="list-style-type: none"> • Extreme widespread bushfire 	<ul style="list-style-type: none"> • Extreme loss/damage to shelter and infrastructure • Extensive impacts to crops and livestock. • Loss of livelihoods • Mass evacuation and temporary shelter • Death and injuries 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Police • National and international level (NGO, donors, military forces)
<p>Accident (Search & Rescue, etc.)</p>			
<p><i>Best-case</i></p>	<ul style="list-style-type: none"> • Isolated accident 	<ul style="list-style-type: none"> • Small amount of people affected, quick rescue/containment phase • No deaths 	<ul style="list-style-type: none"> • CDCs are aware and respond • First aid response • Timely response • Rescue boat available (if necessary)
<p><i>Likely-case</i></p>	<ul style="list-style-type: none"> • Significant accident 	<ul style="list-style-type: none"> • large amount people affected 	<ul style="list-style-type: none"> • Community • CDCCC • ACS

		<ul style="list-style-type: none"> • Serious injuries and a possible death • significant rescue/containment phase 	<ul style="list-style-type: none"> • PDCCC • Police
<i>Worst-case</i>	<ul style="list-style-type: none"> • Extreme accident 	<ul style="list-style-type: none"> • large amount of people affected • Serious injuries and multiple deaths • Possible missing persons • extreme rescue/containment phase 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDC • Police • National and international level (NGO, donors, military forces)
Health (Epidemic)			
<i>Best-case</i>	<ul style="list-style-type: none"> • Isolated health outbreak 	<ul style="list-style-type: none"> • Small amount of people with illness/disease, no deaths. • Affects to health, education and water supplies • Able to contain it e.g. malaria or dengue 	<ul style="list-style-type: none"> • Health centres • Education Dept. • CDCCC • ACS
<i>Likely-case</i>	<ul style="list-style-type: none"> • Significant health outbreak 	<ul style="list-style-type: none"> • Significant amount of people with illness/disease • low casualty rate • just able to be contained • Economic loss and livelihoods • Affects to education and water supplies 	<ul style="list-style-type: none"> • Health Dept. • Provincial Govt • Education Dept. • PDCCC • CDCCC • Community
<i>Worst-case</i>	<ul style="list-style-type: none"> • Extreme health outbreak 	<ul style="list-style-type: none"> • High casualty rate • Not able to be contained • Large amount of people with illness/disease • Large loss to the economy and livelihoods • Impact to education and water supplies 	<ul style="list-style-type: none"> • National and international response • Health Dept. • Provincial Govt • Education Dept. • PDCCC • CDCCC • Community
Volcano			
<i>Best-case</i>	<ul style="list-style-type: none"> • Level 1 alert- Signs of Volcanic unrest 	<ul style="list-style-type: none"> • Active, ash fall • Impact to crops around volcano affecting livelihoods and food security, health and water supplies 	<ul style="list-style-type: none"> • Community • CDCCC • ACS

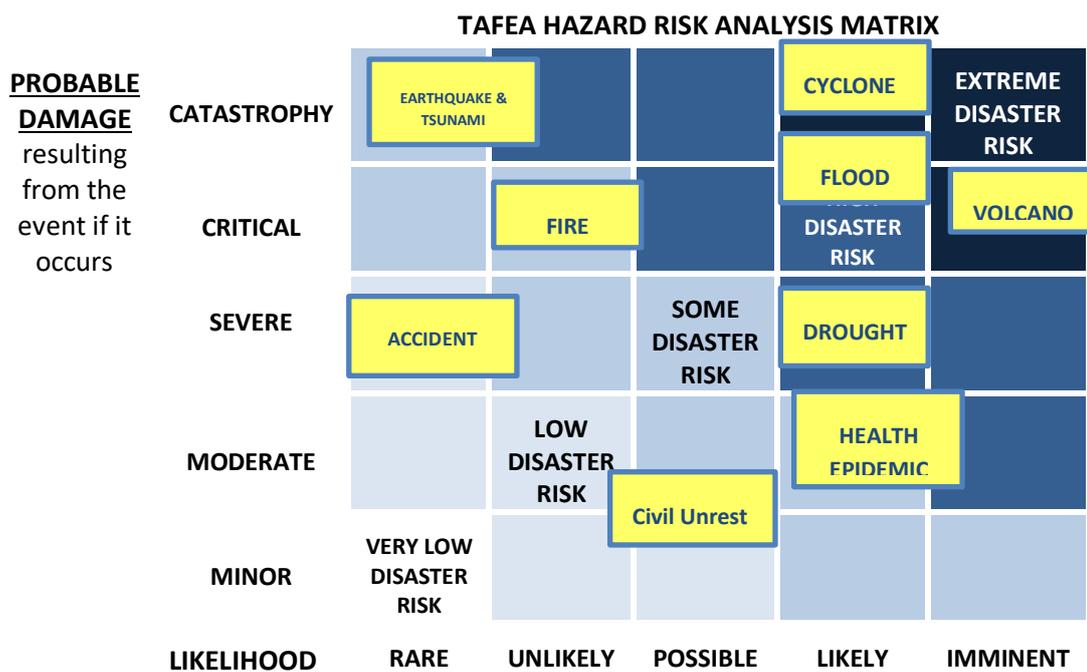
<i>Likely-case</i>	<ul style="list-style-type: none"> • Level 2-3 alert- major unrest and/or minor eruption 	<ul style="list-style-type: none"> • Very active, heavy ash fall, projectiles warning • Food security and water security issues around volcano • Health issues from ash fall (e.g. Asthma and diarrhoea) 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDC
<i>Worst-case</i>	<ul style="list-style-type: none"> • Level 4-5 alert- Moderate - Very large eruption <p>Full eruption and explosion, lava flow, numerous projectiles- with Tanna the worst affected causing the east side of the island (possibly the whole island) uninhabitable. Outer islands impacted by thick volcanic ash, sulphur gas and acid rain.</p>	<ul style="list-style-type: none"> • Death and major injuries and illnesses • Mass evacuation & temporary-long term shelter required • All sectors affected with widespread food security and water security issues • Loss of livelihoods. • Irreversible damage to the agriculture and environment. 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Police/ national military • National and international level (NGO, donors, military forces)
Civil unrest/disturbance			
<i>Best-case</i>	<p>Small civil disturbance (e.g. land or resources dispute, family dispute, fight for authority) between a small number of community members/ small group of people.</p>	<ul style="list-style-type: none"> • Minor injuries and distress reported by a small number of community members. • Community members and chief able to end the fight and address the disagreement using none violent means 	<ul style="list-style-type: none"> • Community • CDCCC • Chief • ACS
<i>Likely-case</i>	<p>Significant civil unrest (E.g. land or resources dispute, family dispute, fight for authority) involving and affecting the whole community.</p>	<ul style="list-style-type: none"> • Significant amount of people with major injuries, which require medical assistance. • Community require assistance as they are unable to contain and control, or resolve the conflict. • Small economic loss and livelihoods • Affects peoples access to education and water supplies • Increased reports of GBV, sexual assault and 	<ul style="list-style-type: none"> • Community • CDCCC • Chief • ACS • Police • PDCCC • Dept of health • Gender and Protection working group or equivalent provincial dept.

		community members report feeling unsafe.	
<i>Worst-case</i>	<p>Large scale civil unrest (e.g. conflict or riot) involving multiple different communities and large groups of people armed with weapons (bush knives, guns etc.)</p>	<ul style="list-style-type: none"> • Death and major injuries and illnesses • Provincial authorities unable to stem the violence • Mass evacuation & temporary-long term shelter required • All sectors affected with widespread food security and water security issues • Loss of livelihoods. • Increased reports of GBV, sexual assault and community members report feeling significantly distressed and unsafe. 	<ul style="list-style-type: none"> • Community • CDCCC • ACS • PDCCC • Police • NDMO • National military forces • International level assistance (NGO, donors, military forces)

3.4. Risk Matrix

The risk matrix shows how each hazard scenario sits in regards to likely impacts caused (probable damage level) against the frequency of the hazard occurring.

Below is a matrix mapping the different hazards in the Province. From the matrix, we can gauge the hazard that pose an extreme risk and that we need to spend time preparing for and those that pose a very low risk, hazards that can still occur but for which we only spend minimal time and resources planning for. This gives us an idea of the hazards that potentially cause most damages and losses. Contingency plan could also be developed in case of high or exceptional hazard.



DEFINITION of LIKELIHOOD terms for use in this exercise.....

RARE	Very unusual event not expected to occur more frequently than once in 500 years (such as meteorite strike or massive tsunami in some areas)
UNLIKELY	Unusual event not expected to occur more frequently than once in 100 years (Massive earthquake in some areas)
POSSIBLE	Occasional event expected to occur once in every 20 years (super cyclone)
LIKELY	Regular event expected to occur at least once in every 10 years (named cyclone or flooding)
IMMINENT	Scientifically predicted or expected to occur within 1- 5 years, (dam failure) months (some landslides, volcanic eruption) or even days (named cyclone tracking warning).

DEFINITION of PROBABLE DAMAGE terms for use in this exercise.....

MINOR	No casualties, infrastructure not seriously affected, light impact on gardens, commerce and normal activities only slightly disrupted
MODERATE	Few casualties, infrastructure slightly damaged resulting in loss of basic services for less than one week. Normal activities disrupted for less than one week.
SEVERE	Several casualties, damaged infrastructure requiring significant assistance to repair, loss of some services for up to one month.
CRITICAL	Tens of casualties, severely damaged infrastructure, and housing, major disruption of basic services for up to 6 months. Businesses, government, and community activities are seriously disrupted causing massive displacement of population.
CATASTROPHY	Hundreds of casualties, widespread destruction of housing, infrastructure, government and private business systems and services. Loss or disruption of basic services may last more than one year leading to massive displacement or even abandonment of affected areas.

3.5. Vulnerability, Multi-hazard and Disaster Risk mapping

The disaster risk mapping gives a spatial overview of the population and infrastructure exposure to a multi hazard risk indicator. The disaster risk map is built during the PDRP workshop with the knowledge of the PDCCC and not on scientific data. It is decision aid tool for PDCCC to analyse a situation during an emergency. It is empiric and should not be used for other purpose such as development of projects or activities.

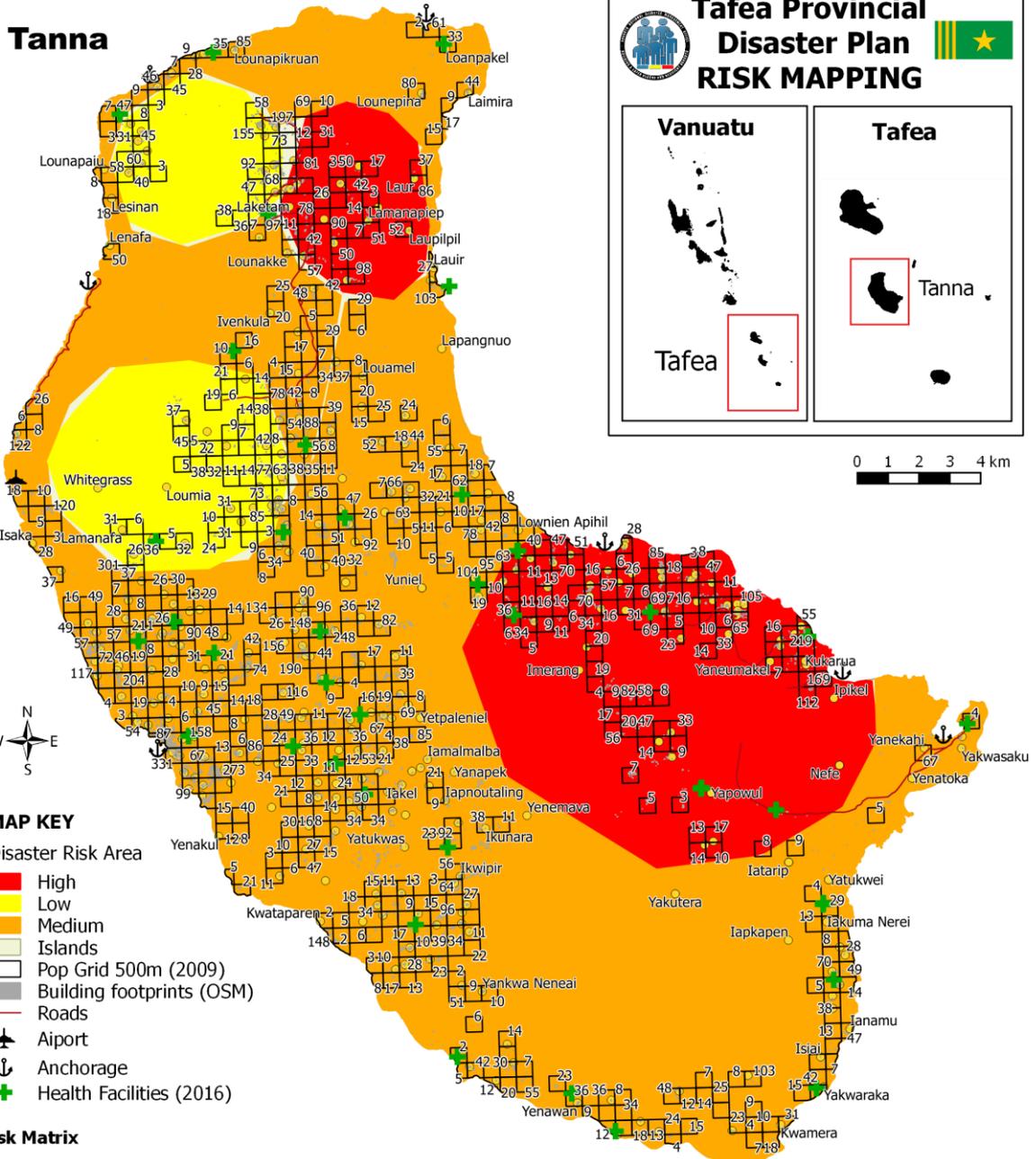
The multi hazard risk indicator is based on analysis of the vulnerability and the multi- hazard exposure. This analysis is the result of the following equation:

$$\text{Disaster Risk} = \text{Vulnerability} \times \text{hazard}$$

The variable levels are determined by spatial criteria as follow:

- **Vulnerability:** Access to services (education, health, shipping, etc.), infrastructure (communication, transport, etc.), density of the population (it increases the number of vulnerable people).
- **Multi-hazard exposure:** Intensity and frequency of hazard (based on historical data), number of hazard.

		Multi-hazard exposure		
		Low	Medium	High
Vulnerability	High			High risk of disaster
	Medium		Medium risk of disaster	
	Low	Low risk of disaster		



MAP KEY

Disaster Risk Area

- High
- Low
- Medium
- Islands
- Pop Grid 500m (2009)
- Building footprints (OSM)
- Roads
- ✈ Airport
- ⚓ Anchorage
- + Health Facilities (2016)

Risk Matrix

Hazard	Low	Medium	High
High	Low risk of disaster	High risk of disaster	High risk of disaster
Medium	Low risk of disaster	Medium risk of disaster	High risk of disaster
Low	Low risk of disaster	Medium risk of disaster	Medium risk of disaster

1. Layer hazard exposure
in 3 colours follow the past disaster and the expect disaster scenario (follow the risk matrix to evaluated the rank of the hazard exposure)

- Yellow : low exposure
- Orange : Medium exposure
- Red: High exp

2. Layer vulnerability
in 3 colours follow the population (high population = high risk of casualties), access to communication, transport, services...

- Yellow : low vulnerability
- Orange : Medium vulnerability
- Red: High vulnerability

3. Layer RISK = Vulnerability x Exposure
in 3 colours follow the population (Follow the mapping risk matrix)

- Yellow : low vulnerability
- Orange : Medium vulnerability
- Red: High vulnerability

Tafea Provincial Disaster Plan

RISK MAPPING

Vanuatu

Tafea

Tafea

Tanna

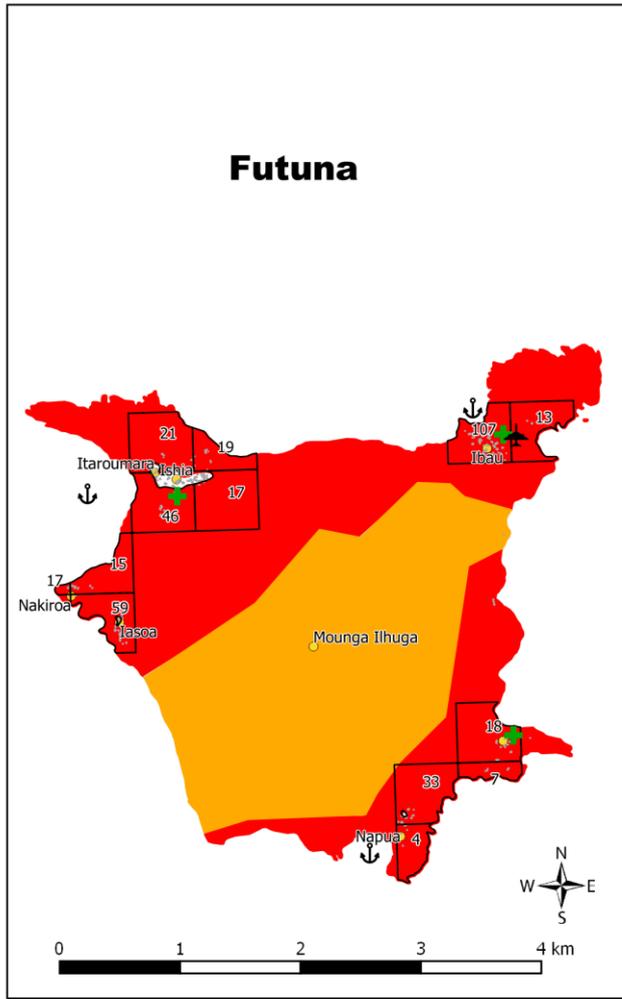
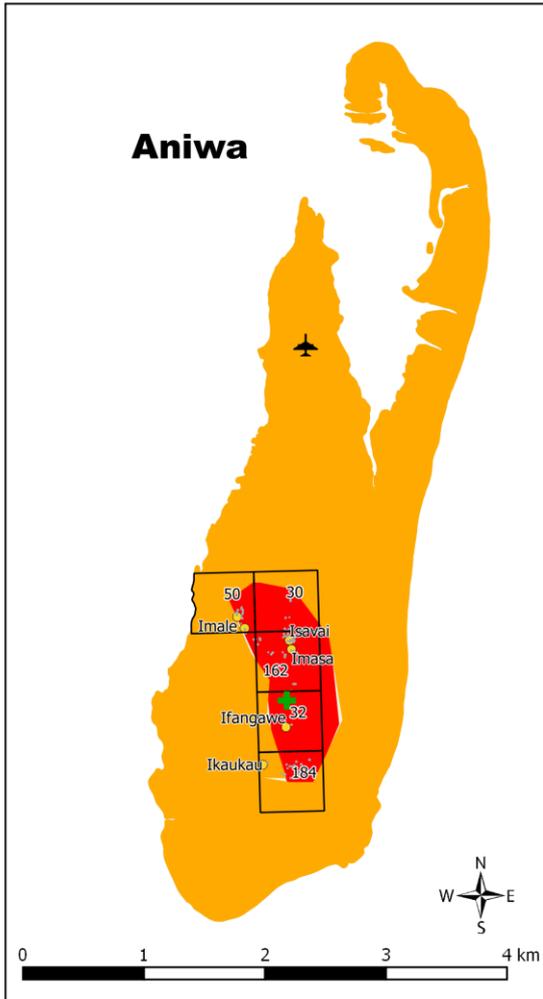
0 1 2 3 4 km



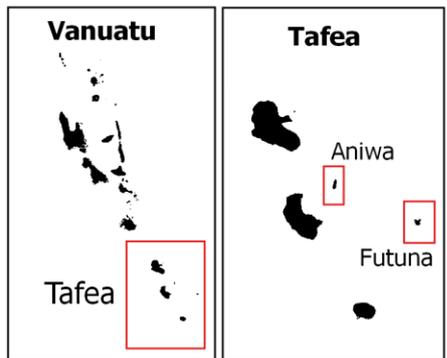
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Notice

This risk mapping was done during the Shefa provincial disaster plan workshop held at Shefa provincial head quarter in Port Vila, the 11th-17th November 2016 . It has been done by the Provincial Disaster Committee (PDC) members and Area Council Secretary (ACS) with the support of Oxfam and National Disaster Management Office (NDMO). This map is based on field experience and the perception of the workshop participants.



Tafea Provincial Disaster Plan RISK MAPPING



care

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MAP KEY

- Disaster Risk Area
 - High
 - Low
 - Medium
 - Islands
 - Pop Grid 500m (2009)
- Building footprints (OSM)
- Roads
- Aiport
- Anchorage
- Health Facilities (2016)

Notice

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Risk Matrix

Hazard Vulnerability	Low	Medium	High
High	Orange	Red	High risk of disaster
Medium	Yellow	Medium risk of disaster	Red
Low	Low risk of disaster	Yellow	Orange

1. Layer hazard exposure
in 3 colours follow the past disaster and the expect disaster scenario (follow the risk matrix to evaluated the rank of the hazard exposure)

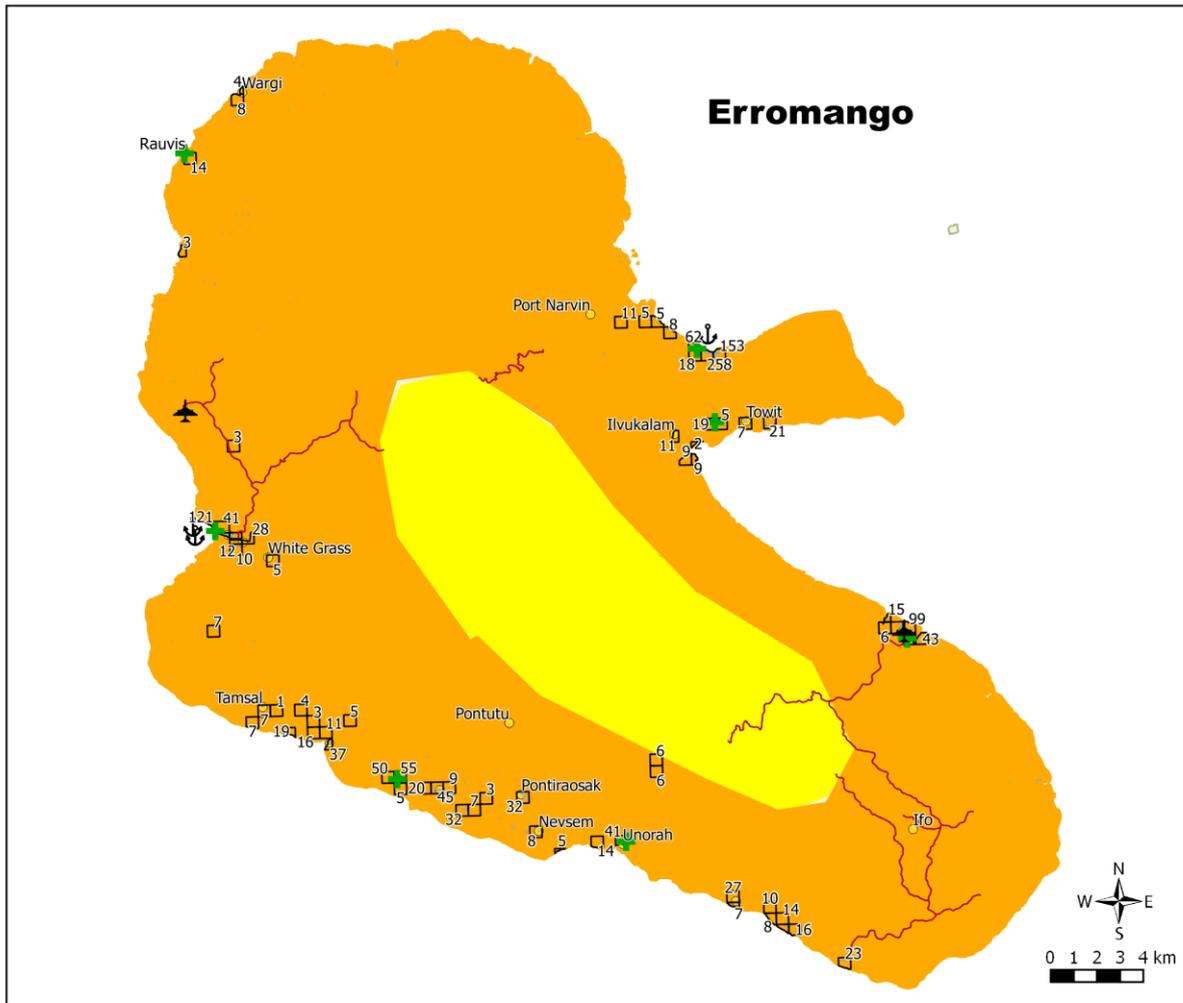
- Yellow : low exposure
- Orange : Medium exposure
- Red: High exp

2. Layer vulnerability
in 3 colours follow the population (high population = high risk of casualties), access to communication, transport, services...

- Yellow : low vulnerability
- Orange : Medium vulnerability
- Red: High vulnerability

3. Layer RISK = Vulnerability x Exposure
in 3 colours follow the population (Follow the mapping risk matrix)

- Yellow : low vulnerability
- Orange : Medium vulnerability
- Red: High vulnerability



Tafea Provincial Disaster Plan RISK MAPPING

Vanuatu

Tafea

Erromango

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MAP KEY

- Disaster Risk Area
 - High (Red)
 - Low (Yellow)
 - Medium (Orange)
 - Islands (Light Green)
 - Pop Grid 500m (2009) (White)
- Building footprints (OSM) (Grey)
- Roads (Red line)
- Aiport (Airplane icon)
- Anchorage (Anchor icon)
- Health Facilities (2016) (Green cross icon)

Notice

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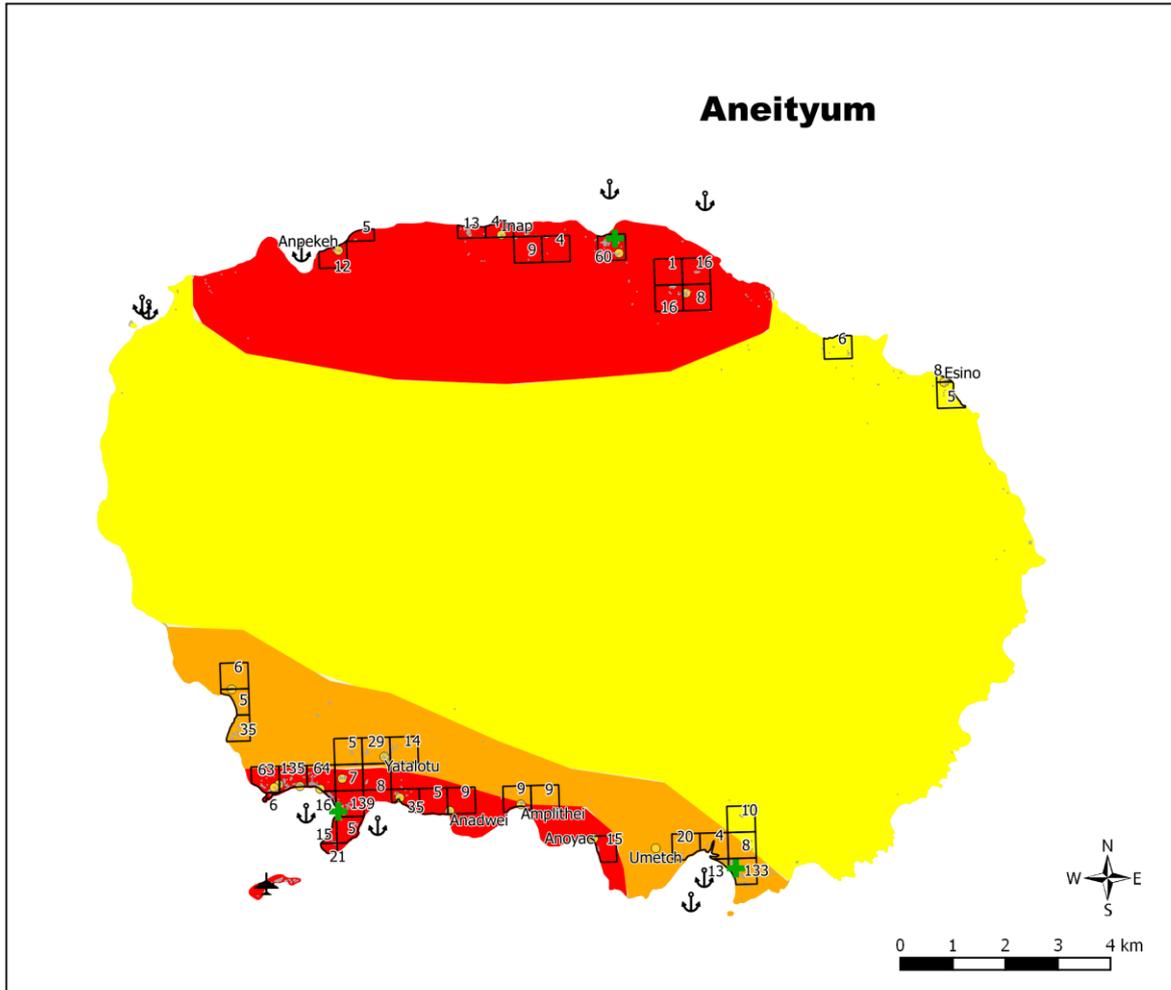
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3. Layer RISK = Vulnerability x Exposure
in 3 colours follow the population (Follow the mapping risk matrix)

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Tafea Provincial Disaster Plan RISK MAPPING

Vanuatu

Tafea

Aneityum

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MAP KEY

Disaster Risk Area

- High
- Low
- Medium
- Islands
- Pop Grid 500m (2009)

- Building footprints (OSM)
- Roads
- Aiport
- Anchorage
- Health Facilities (2016)

Notice

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3. Layer RISK = Vulnerability x Exposure
in 3 colours follow the population (Follow the mapping risk matrix)

- Yellow : low vulnerability
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- Red: High vulnerability

(All maps produced with the assistance of PDCCC, Area Council Secretaries and Women’s Representatives)

4. Potential Humanitarian Consequences

This section deals with different planning assumptions/ disaster scenarios and the associated impacts in terms of figures and caseload, taking into consideration vulnerable groups, and how they would be affected.

4.1. Disaster triggers

Natural hazards such as heavy rainfalls, seasonal periods of drought and earthquakes are common throughout Vanuatu. For thousands of years, people have learned to live with them and to cope with their impacts.

It is only when people are unable to cope with a hazard or continue with high risk practices in hazard areas, and need outside help, that it becomes a disaster.

The magnitude, or size, of a disaster depends on three factors:

1. The strength, or intensity, of the hazard.
2. The exposure of the community to the hazard, for example, for how long the hazard occurs, or whether the community is situated close to the hazard.
3. The vulnerability of the community. This means the extent to which the community cannot cope with the impacts of the hazard.

The intensity of the disaster, the exposure and vulnerability of the communities are three factors that, together, may trigger a disaster.

The table below summarises the main trigger per hazard and indicated the linked SOP that should be activated.

Hazard	Trigger	Linked SOP
Cyclone	<ul style="list-style-type: none"> • VMGD and NDMO have informed the PDO officer of a developing low depression possible cyclone. • Cyclone category (Upper Cat 2) • Cyclone track on the tracking map (Less than 100 km) • Cyclone warning blue alert for TAFEA issued by VMGD and NDMO • Cyclone warning yellow alert issued by VMGD and NDMO • Cyclone warning RED alert issued by VMGD and NDMO 	<ul style="list-style-type: none"> - Coordination meeting (PDO/SG) - Preparation of EOC - Activate province emergency operation centre (PEOC) on advice from NDMO director -Information Dissemination <ul style="list-style-type: none"> • Line Departments (PDC Members) –Working groups for each sector departments. • Provincial office staffs • Identification of EOC’s • Conduct area secretaries/ CDCCC • Communication Management (Phone Calls) First Situation Report #(SITREP) Blue alert: -Activate EOC -Communication Management (ACS/CDC) <ul style="list-style-type: none"> • Both ways send and receive -Advices on preparation

		<p>-EOC Coordination meeting continues with updates from communities. Situation report #2 (SITREP) Yellow Alert:</p> <ul style="list-style-type: none"> - EOC coordination meeting continues and identify risk areas. (operation) - Communication still continues (advice to evacuate) - Site visit to check EOC’s to deliver advice. <p>Situation report #3 (SITREP) Red Alert:</p> <ul style="list-style-type: none"> -Continue Communication (AES/CDCCC) NDMO (Advisor) -Collect information from area Secretary/CDCCCs through Phone calls <ul style="list-style-type: none"> ● -SITREP #4 (Update NDMO)
<p>Severe weather / Flooding / Landslide</p>	<ul style="list-style-type: none"> ● METEO LA-NINA / Severe weather warning affecting the TAFEA province issued by VMGD and NDMO. ● Natural signs ● First community assessment report 	<ul style="list-style-type: none"> - Coordination meeting (PDO/SG) - Preparation of provincial EOC - Activate operation centre (EOC) according to advice from NDMO director -Information Dissemination (this process happens throughout) <ul style="list-style-type: none"> ● Line Departments (PDC Members) –Working groups for each sector departments. ● Provincial office staffs ● Conduct area secretaries/ CDC ● Communication Management (Phone Calls) ● Situation Report #(SITREP)
<p>Earthquake/ Tsunami</p>	<ul style="list-style-type: none"> ● Earthquake occurred at a magnitude 6.5 or higher that has caused a Tsunami alert issued by VMGD and NDMO ● Natural signs ● First community assessment report 	<p>Activate tsunami evacuation according to advice from NDMO director</p> <p>Coordination meeting (PDO/SG)</p> <ul style="list-style-type: none"> - Activate emergency operation centre (EOC) <p>Coordinate evacuation</p> <ul style="list-style-type: none"> -Communicate with area Secretary/CDCCCs/ NDMO and VMGD through Phone calls, -SITREP
<p>Volcano</p>	<ul style="list-style-type: none"> ● Once VMGD issues warning to NDMO, NDMO issue warning of volcanic activity on level 3 and above to TAFEA ● Natural signs 	<ul style="list-style-type: none"> - Coordination meeting (PDO/SG) - Preparation of EOC -Prepare for volcanic eruptions -evacuation plans in place - Activation of operation centre (EOC) according to advice from NDMO and only after large eruption or a level 4 activity level.

		<p>-Information Dissemination (ongoing throughout process)</p> <ul style="list-style-type: none"> • Line Departments (PDC Members) –Working groups for each sector departments. • Provincial office staffs • Identification of EOC’s • Conduct affected area secretaries/ CDCCC • Communication Management (Phone Calls) • Assessment of the affected communities (communities closest to the Volcano- Whitesands)
<p>Drought</p>	<ul style="list-style-type: none"> • Strong El Nino system declared by VMGD • Natural signs • Initial community assessment form and technical assessment completed that shows severe food insecurity and water shortages due to a lack of rainfall across the province. 	<p>Coordination meeting (PDO/SG)</p> <ul style="list-style-type: none"> - Preparation of PEOC - Activation operation centre (PEOC) on advice from NDMO director <p>-Information Dissemination</p> <ul style="list-style-type: none"> • Line Departments (PDCCC Members) –Working groups for each sector departments. • Provincial office staffs • Identification of EOC’s • Contact affected area secretaries/ CDCCC • Communication Management (Phone Calls) • Contact and liaise with NDMO/FAO/water • Working group/ relevant departments at the provincial level are sent out to affected areas and island act as technical advisors
<p>Fire</p>	<ul style="list-style-type: none"> • Natural Signs • Reports and calls for emergency assistance from CDCCC, Chief, and ACS to control and respond to a bushfire or a large fire threatening a large numbers that the community are unable to extinguish. • First community assessment report 	<p>Coordination meeting (PDO/SG)</p> <ul style="list-style-type: none"> - Activate emergency operation centre (EOC) <p>Coordinate with Fire Brigade and Police and NDMO</p> <ul style="list-style-type: none"> - Coordinate evacuation if needed <p>-Communicate with Area Secretary/CDCCCs/ NDMO and VMGD through Phone calls,</p> <p>-SITREP</p>
<p>Civil unrest</p>	<ul style="list-style-type: none"> • Reports and calls for assistance from CDCCC, Chief, and ACS to control and contain the violence. 	<ul style="list-style-type: none"> - Coordination meeting (PDO/SG) - Coordinate with Police -Prepare for possible escalation with evacuation plans in place - Activation of operation centre (EOC) according to advice from

NDMO and reports from CDCCC, ACS and Police.

-Information Dissemination (ongoing throughout process)

- Line Departments (PDC Members) –Working groups for each sector departments.
- Provincial office staffs
- Identification of EOC's
- Conduct affected area secretaries/ CDCCC
- Communication Management (Phone Calls)

Assessment of the affected communities.

4.2. Population at risk

Men and women work together to raise their families, produce food, generate income and shape their community. But they often perform different daily activities to meet these goals. We need to recognize the different roles and needs of men and women, as this helps us to understand their different vulnerability to hazards and climate change. Women are general more at risk than men due to their traditionally lower position in society in comparison to men and their role of looking after their children and other family members. This means that in times of disasters women often put others needs ahead of their own and have less input in essential decisions that affect their lives. Pregnant and lactating women are at even higher risk during disasters because of their greater nutritional needs and the health complications that can occur throughout a pregnancy.

Babies and infants are also vulnerable to hazards and climate change. International standards consider children up to the age of 5 as infants. As they are depend on their parents to carry them to safety, and are more susceptible to diseases such as diarrhoea, malaria and dengue that can be present in times of disaster. They also need more nutritious foods, as they are also more susceptible to severe nutritional deficiencies such as, malnutrition. Infants and babies are also at a higher risk to protection issues such as violence and neglect that arise in times of disaster as they are dependent on others and are unable to defend themselves.

School children are also vulnerable; as they are depend on their parents to direct them to safety and response to their needs in a disaster, putting them at great risk of serious protection issues. Their risk substantially increases if separated from their family or guardian. They are also more susceptible to diseases such as diarrhoea, malaria and dengue that can present in times of disaster and need more nutritious foods, as they are also more susceptible to severe nutrition deficiencies such as, malnutrition. However, when educated on how to response to different hazards and when involved in the disaster response children's vulnerability is drastically decreased and they can assist in the response. They can move quickly and before the arrival of a hazard they can help to promote awareness, distribute warnings, organise evacuations and prepare safe houses. As well as, assist parents in looking after babies, infants and the elderly. They can also assist their community in disaster recovery.

Elderly people and people with a serious illness or injury are more likely to suffer from the effects of age and ill health, for example may have difficulty moving around, and are at greater risk from the effects of disasters and climate change. When an earthquake, a tsunami, a landslide, a flood or another rapid-onset hazard occurs, they may not be able run to a safe place, and/or they may be left behind. After a cyclone or during a flood, they are more vulnerable to water-borne and vector-borne diseases, and their recovery time is likely to be prolonged. If there are extreme temperatures or droughts, they are more likely to suffer from dehydration and heat stress. People with disabilities are also more vulnerable to hazards and climate change impacts. Those with physical or vision impairments which affect their mobility may require extra time to move from place to place, and may rely on the support of another person to get to safety. During evacuation, assistive devices such as wheelchairs, walking sticks, prosthetic limbs or glasses might be damaged, lost or left behind. This can impact heavily on the ability of people with mobility-related disabilities, who were moving around independently prior to the disaster, to participate in response efforts. Deaf people and people with intellectual disabilities may not receive communication regarding an approaching hazard in a way they can understand; likewise people with vision impairment may not be able to read text messages which provide warnings and advice. People with disabilities often experience stigma, or are kept at home under protective care of their families, resulting in limited opportunities to participate in family or community-level disaster risk reduction education and decision-making, which can increase their risk to the effects of hazards. Disasters also increase the risk of injuries

amongst populations, and have a significant psycho-social effect, which can increase the incidence of disability. People and communities that are not prepared and or have not been educated about different hazards and the impacts of climate change and how to prepare, respond and mitigate their effects are also at a higher risk.

Hazard	Population exposed	Vulnerable people
Cyclone	<ul style="list-style-type: none"> • Coastal areas • Low land areas (inland) • Close to river • High land/hill • Boat/Ship • People with old or traditional houses/not resilient houses • People living in extremely remote areas where there is no communication means (radios, phones, etc.) and thus no information coming in or out. 	<ul style="list-style-type: none"> • People with disabilities, children, babies and infants, women, pregnant women, elderly, sick and injured persons that are not able to get to a safe house and are highly susceptible to illnesses. • Widespread, can impact all of the TAFEA Island communities, such as Cyclone Pam did.
Severe weather / Flooding / Landslide	Communities that live alongside rivers, or on a floodplain. And for landslides, people directly below an unstable cliff/mountain side.	<ul style="list-style-type: none"> • Those who are unable to move urgently; elderly, people with disabilities, pregnant women, or women with baby.
Earthquake/ Tsunami	The flat low-lying coastal communities.	<ul style="list-style-type: none"> • Those who are unable to move urgently; elderly, people with disabilities, pregnant women, or women with baby
Volcano	Mainly areas to the NW of Mt. Yasur in Tanna, who receive constant ash fall from the predominant SE winds. However for an eruption, all communities around the base of the volcano and between the coast.	<ul style="list-style-type: none"> • Those unable to relocate away from the volcano at urgent notice. • Children, babies and infants, sick persons, pregnant and lactating women, people with disabilities and elderly are more affected by the ash fall.
Drought	Drought can affected all communities however; people whose livelihoods rely on subsistence farming, rainwater harvesting and cash crops that are vulnerable to drought make up the majority of the impacted population.	<ul style="list-style-type: none"> • Those who don't have access to alternative supplies of water and food supply other than subsistence farming, cash crops and rainwater harvesting. • Elderly, injured or ill persons and PLWD as they may not be able to seek out an alternative water supply and food sources. • Children, pregnant and lactating women, people with disabilities, ill and injured persons and the elderly need more nutrition food and are more susceptible to diseases that may present from

		alternative food and water sources.
Health Epidemic	A health epidemic can spread quickly at times, especially from human to human. So large communities, schools and markets where contact is more common.	<ul style="list-style-type: none"> • Children and infants, elderly and people with a pre-existing illness, as their immune systems are either still developing (children) and/or are weaker due to their health condition (elderly and people with an illness)
Accident	Accidents more commonly occur in places of congestion, or people that operate or spend a lot of time around heavy machinery on land or out at sea. So the busy seaports, airports and roads are the key locations, Lenakel, Tanna is particular vulnerable.	<ul style="list-style-type: none"> • Accidents more commonly affect young adults for example, young men as they are more likely to be working with and exposed to heavy machinery etc. • They are also more likely to partake in more risky activities. However, children are quite commonly involved as well.
Fire	<ul style="list-style-type: none"> • Kitchen and sleeping houses built with local materials • Semi-permanent and permanent buildings • People surrounded by bush (gardens, forests,) • Near private fuel station • Near airport fuel supply • Gas cookers • Power lines • Communities that are impacted by drought, where the vegetation has dried out in such a way making them in susceptible to bushfire. 	<ul style="list-style-type: none"> • Those who are unable to move urgently; elderly, people with disabilities, sick and injured persons, pregnant women, or women with baby. Also those people who have respiratory issues due to smoke.
Civil unrest	<ul style="list-style-type: none"> • Physical conflicts and disputes can escalate quickly especially in areas where there are a large number of people living in close proximity to one another. • Conflicts and physical violence more commonly involve males and young men as they are more likely resort to violence and partake in more risky activities. 	<ul style="list-style-type: none"> • When violence breaks out men that are involved in the conflict are more likely to target other men as they are pose the greatest physical threat. • Females, in particular young women. • People with disabilities, children, babies and infants, women, pregnant women, elderly, sick and injured persons, that are not able to get to/access a safe house/safe space away from the violence.

4.3. Cross-cutting issues

For each sector impacted, some other related sectors could be impacted directly or indirectly by the consequences of a disaster. The table below lists examples of the main crosscutting issues that can appear after a disaster and that implicate different sectors.

Impacted sector	Other related sectors	Examples
Water and sanitation	Health	<ul style="list-style-type: none"> • Lack of effective, disability-accessible and operational water and sanitation services, and the lack of safe water sources increase the likelihood of diseases, (water borne and viral) because of the use of alternative unclean water supplies. • Bad hygiene as there isn't enough water to wash body, hands, clothes and dishes etc. which leads to illness/diseases • Serious nutritional deficiency due to unsuccessful crops because of a lack of water.
	Education	<ul style="list-style-type: none"> • Lack of water or damaged water systems may force children to spend their days collecting water for their families instead of attending school. • Increase in illness and fatigue so children and teachers may not have the strength or be well enough to attend school. • No water facilities at school and no proper sanitation facility available may cause the school to close. • School closed • Affect academic performance
	Protection and Gender	<ul style="list-style-type: none"> • Seeking alternative water can lead to violence and/or unsafe journeys for women and children especially young women/girls. • Vulnerable people, in particular older people and people with disabilities, may not be able to access the alternative water supplies. • Increase in conflict between community members, with land owners (for water sources), etc.
	Food security and livelihoods	<ul style="list-style-type: none"> • Food shortages- without adequate water crops and gardens will not grow. • Loss of livelihoods as 90% of TAFEA relies on subsistence farming which is seriously impacted by the availability of water.
Health	Education	<ul style="list-style-type: none"> • Children and teachers are unable to attend school when sick. • School closure • Poor academic performance • Contagious diseases can spread quickly in schools between children.
	Food security & livelihood	<ul style="list-style-type: none"> • If the community members get sick or has a serious injury and are unable to work and provide food for their families their livelihoods and food security is seriously impacted.
	Water and Sanitation	<ul style="list-style-type: none"> • If there is a high prevalence of illnesses and/or disease than water and sanitation is both essential in containing it and affected, if the people are becoming sick from the water source (water borne illness)

Education	Gender and Protection	<ul style="list-style-type: none"> • People that are unwell may be dependent on others to provide them with food and water which increases their vulnerability to exploitation, abuse (physical and mental) and neglect. • People with disabilities which affect their swallowing, such as cerebral palsy, are at risk of malnutrition and death once appropriate food supply diminishes. • If the man of the house is sick or dies than a women headed households are at a greater risk of violence and may be unable to access essential services.
	Gender and Protection	<ul style="list-style-type: none"> • Children and people with disabilities, especially children and women, are more vulnerable to protection issues as they are out of their regular routine and may not have a save space to go after a disaster. • If the schools are used for evacuation centres and are overcrowded, negative social issues can arise. As they can be very unsafe. • Children are missing out on their essential education that is shaping their future, and children and adults with a lower level of education are more at risk to protection and gender issues.
	Shelter	<ul style="list-style-type: none"> • School building destroyed or damaged • Need tents to have classrooms • Dormitory blown off • Schools become evacuation centres for long periods of time
	Food security and livelihoods	<ul style="list-style-type: none"> • Without adequate and sustainable food supply children and teachers may need to spend their days locating food instead of attending school • Accessible toilets which are a long way away present a safety risk for women, children and people with disabilities. • Attending food on an inadequate diet will affect academic performance and attendance
	Water and sanitation	<ul style="list-style-type: none"> • If a community does have access adequate water school may close as children and teachers may have to spend their days look for and collecting water from alternative water sources
	Health	<ul style="list-style-type: none"> • Sick teachers and students cannot attend school • Overcrowded evacuation centre can cause diseases and illness
Food Security & Livelihoods	Health	<ul style="list-style-type: none"> • Lack of adequate and nutritious food affects people’s health. • A lack of food can cause people to eat unfamiliar food, which can make them sick. • Food is expired/rotten, people can get sick: diarrhoea, vomiting
	Water and Sanitation	<ul style="list-style-type: none"> • Lack of water and damaged water facilities will affect the community’s ability to grow essential food crops that their food security and livelihoods depend on.
	Protection/gender	<ul style="list-style-type: none"> • Lack of food security and livelihoods can cause increases in violence (stealing, fights, family and gender based violence etc.)

	Education	<ul style="list-style-type: none"> • When a family's food security and livelihoods are affected children and teachers may be required to help support their families and thus, would not be attending school. • Children do not have enough energy or are not well enough to attend school. • School may be forced to close • Families may not be able to afford school fees • Poor academic results.
Shelter	Health	<ul style="list-style-type: none"> • Inadequate shelter and overcrowding of evacuation centres can cause illness and injury, as well as foster diseases. • Poor sanitation • Limited or no health services
	Water and Sanitation	<ul style="list-style-type: none"> • Shelter does not have adequate water facilities or is situated a long way from access to water. • Shelter does not have toilets or bathing facilities or not enough facilities.
	Education	<ul style="list-style-type: none"> • Use of school as an evacuation centre for long periods of time. • Damaged schools buildings/learning materials will delay the start of school
	Protection / gender	<ul style="list-style-type: none"> • Without adequate shelter that is secure and safe (no lights at night, inadequate facilities (women and men share a toilet), no privacy) the risks of gender and protection issues increases, particular for women and girls. • Inaccessible shelters, or shelters with inaccessible WASH facilities may exclude people with disabilities. • Overcrowded shelters can cause violence and social conflicts.
	Food security and livelihoods	<ul style="list-style-type: none"> • Housing destroyed and community members in temporary shelters away from their source of food and livelihoods. • Damage to kitchen, unable to prepare food properly or different types of food.
Communication / Infrastructure	Health	<ul style="list-style-type: none"> • Without essential communication services and functioning essential infrastructure such as health clinics and hospitals, people with severe illness and injuries may not receive the medical treatment that they need. • Lack of life saving medical supplies
	Education	<ul style="list-style-type: none"> • Affects school administration and operations • School closed due to infrastructure damaged
	Water and Sanitation	<ul style="list-style-type: none"> • Damage of large public water supplies means a lack of water for community members.
	Food security and Livelihoods	<ul style="list-style-type: none"> • Shortage of market supplies (affects inhabitants who do not have gardens) • Shortage of food supplies if the community cannot import and export food and other essential items due to flights cancelled, no trucks or boat services.
	Protection / gender	<ul style="list-style-type: none"> • Without essential communication services and functioning essential infrastructure such as lights around community areas and houses the risks of gender and protection issues increases, particular for women and girls.

		<ul style="list-style-type: none"> • Cannot report incidents • Communication modalities which exclude people with hearing or vision impairments result in their exclusion from the provision or reporting of information.
Protection / gender	Health	<ul style="list-style-type: none"> • Violent conflicts can occur due to overcrowded evacuation centres or a lack of food and water supplies which causing injuries, deaths and gender based violence • Sexual abuse increase in times of disaster • Neglect of children, elderly, PLWD and dependants can seriously affect their health
	Water and Sanitation	<ul style="list-style-type: none"> • Vulnerable people may be forced to collect water from unfamiliar and unsafe places at long distances. • Vulnerable people, such as PLWD, elderly or people that are ill may not be able to collect their own water and take care of their own hygiene which puts them at greater risk of neglect and abuse • Lack of water supplies can cause violence and community conflict
	Shelter	<ul style="list-style-type: none"> • Without adequate shelter that is secure and safe the risks of gender and protection issues increases, particular for women and girls. • Evacuation centres and temporary shelters may not be accessible for people with disabilities.
	Education	<ul style="list-style-type: none"> • Children that are affected by serious gender and protection issues (physical and sexual abuse, neglect, exploitation) may not be able or not want to attend school. • Trauma resulting from the disaster may cause the child to not want to attend school and/or impact their academic results • Poor academic results • Family may force their children to work and not allow their children to attend school
	Food Security & Livelihoods	<ul style="list-style-type: none"> • Lack of access of food and loss of livelihoods increases violence (community conflicts, fights over food and theft) • Unequal distribution and access to adequate food • Single headed households particular women headed households, elderly and PLWD are vulnerable and may not be able to access food or the services they need to create a sustainable livelihood

SECTION 2. OPERATION & RESPONSE PLANNING

The section 2 presents the strategy and the operational aspects of disaster response by defining the following elements:

- Identification of priority needs to determine the response options.
- Definition of decision making and coordination procedures, specifying the membership, the roles and the processes linked to the different coordination bodies. The communication and reporting mechanisms described provide a framework for the implementation of the operations.
- Description of procedures according to the different phases of the response: early warning system, damage and need assessment, evacuation, distribution, lifeline services.

5. Priority Needs & Response Options

Based on the scenarios & potential humanitarian consequences, the table below identifies by sector (e.g. WASH, health, education, etc.) what are the:

- **Priority needs** that might arise after a disaster: *items, resources that might be needed by the population.*
- **Response options** that the province will address to these needs during emergency phase: *Operational material available, prepositioned stock to be distributed, stakeholders in capacity to support the response.*

The table considers the priority needs and response options for the three kinds of scenarios defined according to the response capacity of the administrative level:

- **Best – case scenario:** isolated damages - can be managed at the community or area council level.
- **Likely – case scenario:** part of the province is affected – the disaster can be managed at the provincial level or with small support (some resources) from the national level.
- **Worst – case scenario:** the whole province is affected – the impact of the disaster requires national or international support to organise the response.

Sector of intervention	Priority Needs	Response Options
Water and sanitation		
<i>Best-case</i> Small damage to infrastructure	<ul style="list-style-type: none"> • Clean and adequate supply of water (drinking, cooking, swimming) 	<ul style="list-style-type: none"> • Province recommends local plumbers at the community level able to fix infrastructure • H2S water quality testing done by water committees supported by the ACS and province • Awareness and assessments from CDCCs, water committees and ACS

		<ul style="list-style-type: none"> • Materials and labour • Province to coordinate with community and ACS • The Water Working group/ relevant provincial dept. advises, assists and monitors the situation
<p>Likely-case</p> <p>Medium damage to infrastructure and low water storage levels</p>	<ul style="list-style-type: none"> • Clean and adequate supply of water (drinking, cooking, swimming) 	<ul style="list-style-type: none"> • Awareness and assessments from CDCCs, water committees and ACS coordinating with province • Distribution of Jerry Cans, water purification tablets, hygiene kits • Water Restrictions • Water pipes and tanks • Provincial plumber • Emergency water trucking • PDCCC to coordinate and request assistance from national govt. and prepositions NGOs if needed • The Water Working group/ relevant provincial and national dept. advises, assists and monitors the situation
<p>Worst-case</p> <p>High damage to infrastructure</p> <p>Water storage levels critical</p>	<ul style="list-style-type: none"> • Clean and adequate supply of water (drinking, cooking, swimming) • Good sanitation • Good hygiene 	<ul style="list-style-type: none"> • Emergency Desalination • Emergency Water Treatment • Distribution of Jerry Cans, Water purification tablets • Water pipes and tanks • Emergency water trucking • Possible relocation • Hygiene kits • The Water Working group/ relevant provincial and national dept. advises, assists and monitors the situation • Coordinate with NDMO, WASH cluster and water dept. for outside assistance, foreign aid and technical assessment (VHT, NGOs, International NGOS and governments)
<p>Health</p>		
<p>Best-case</p> <p>Slight damage on aid post building</p>	<ul style="list-style-type: none"> • Water, food, heal minor injuries and minor medication 	<ul style="list-style-type: none"> • Community First Aiders able to treat • Local health facility able to cope • Slight damage on aid post building

Some injuries and water-related illnesses		<ul style="list-style-type: none"> • Health Working Group/ relevant provincial dept. advises, assists and monitors the situation
<p><i>Likely-case</i></p> <p>Small health epidemic</p> <p>Significant injuries</p> <p>Significant water-related illnesses</p>	<ul style="list-style-type: none"> • Medication • Heal significant injuries and illness • Non-food items • Water food • Water filters • LL Net (mosquito nets) 	<ul style="list-style-type: none"> • Referred on to Lenakel Hospital for treatment or Medivac to Port Vila • Field clinic set up to treat or isolate patients • Hygiene kits • Emergency water and sanitation set up • Health Working Group/ relevant provincial and national dept. advises, assists and monitors the situation
<p><i>Worst-case</i></p> <p>Large health epidemic, with lots of significant injures and possible deaths</p>	<ul style="list-style-type: none"> • Medication in all health facilities and additional health facilities • Water and food • Human resources • Search and rescue 	<ul style="list-style-type: none"> • Outside health services assistance required to provide treatment and medical supplies • Multiple field clinic set up to treat or isolate patients • Possible relocation or worse affected communities organised by province with support or NDMO, MoH and foreign aid • Hygiene kits • Health Working Group/ relevant provincial and national dept. advises, assists and monitors the situation • Coordinate with NDMO, Health cluster and MoH for outside assistance, foreign aid and technical assessment (VHT, NGOs, International NGOS and governments)
Education		
<p><i>Best-case</i></p> <p>Small damage to school infrastructure</p>	<ul style="list-style-type: none"> • Temporary shelter • Local material • Water 	<ul style="list-style-type: none"> • Community able to source local materials to fix damage with community work and fundraising • CDC and ACS with support from PDC if requested • Education Working Group/ relevant provincial dept. advises, assists and monitors the situation.
<p><i>Likely-case</i></p> <p>Medium damage to school infrastructure</p>	<ul style="list-style-type: none"> • Temporary shelter • Water • Assessment • School material/supplies 	<ul style="list-style-type: none"> • Able to use pre-positioned supplies from the PDCCC to temporarily fix problem • PDCCC able to coordinate with Ministry to repair damage. • Relevant clusters and national level advise and supports province

		<ul style="list-style-type: none"> • Education Working Group/ relevant provincial and national dept. advises, assists and monitors the situation
<p>Worst-case</p> <p>Closure of school due to lack of food, water or damage to infrastructure</p> <p>Loss or damage to key resources</p>	<ul style="list-style-type: none"> • Temporary shelter + learning space • Water tanks • Food supplied • Non-food items • Temporary health facilities in school • School material/supplies 	<ul style="list-style-type: none"> • Outside assistance required for food and water distributions (VHT, NGOs) • Outside assistance required to fix damaged infrastructure • School kits/stationary • Temporary shelter required for school to resume as soon as possible (tents) • Education Working Grouping/ relevant provincial and national dept. advises, assists and monitors is the situation • Coordinate with NDMO, relevant clusters and MoE for outside assistance, foreign aid and technical assessment (VHT, NGOs, International NGOS and governments)
<p>Food Security & Livelihoods</p>		
<p>Best-case</p> <p>Pest/disease outbreak, species specific</p> <p>Small-scale community food security issue</p>	<ul style="list-style-type: none"> • Awareness and education • Planting materials • Strings/hooks • Seedlings 	<ul style="list-style-type: none"> • Community pest management practices • Community supported food sharing • Seedling distribution • Food Security & Livelihoods working group/ relevant provincial dept. advises, assists and monitors the situation • Education of communities on resilient farming techniques and additional livelihood options
<p>Likely-case</p> <p>Pest/disease outbreak, numerous species affected</p> <p>Medium-scale community food security issue</p>	<ul style="list-style-type: none"> • Local food • Vegetable seeds • Forestry seedlings • Planting tools • Livestock tools (stables, etc.) • Transports (fuel) • Food conservation 	<ul style="list-style-type: none"> • Pest/disease assessment conducted by MALFFB • Distribution of local seed stock from TAFEA DARD • PDCCC led community food distribution from local communities • Food Security & Livelihoods working group/ relevant provincial and national dept. advises, assists and monitors the situation
<p>Worst-case</p> <p>Widespread food shortages and damage to crops</p>	<ul style="list-style-type: none"> • Food conservation • Agriculture: food, planting materials, vegetables, seeds, tools and materials. 	<ul style="list-style-type: none"> • Outside assistance required to mitigate pest/disease outbreak • Outside assistance for emergency food distributions (VHT, NGOS)

	<ul style="list-style-type: none"> • Fish: strings/hooks, tilapia fish, boat, fishing rings, canoes, tools and materials • Forestry: seedling/seeds, tools and materials • Livestock: animals, tools and materials • Transport/fuel 	<ul style="list-style-type: none"> • Outside assistance for emergency seed, livestock, planting stock and tools (VHT, NGOS) • Coordinate with govt and private sector for transport (shipment, freight etc.) of food • Food Security & Livelihoods working group/ relevant provincial and national dept. advises, assists and monitors the situation • Coordinate with NDMO, food security and livelihoods clusters and DARD for outside assistance, foreign aid and technical assessment (VHT, NGOs, International NGOS and governments)
Shelter		
<p><i>Best-case</i></p> <p>Minimal damage to structures</p>	<ul style="list-style-type: none"> • Local materials and non-food items • Move to safe place/family house 	<ul style="list-style-type: none"> • Able to build back quickly using locally sourced material • Chief/other community leaders • Community work lead by CDC + ACS • The Shelter Working Group/ relevant provincial dept. advises, assists and monitors the situation
<p><i>Likely-case</i></p> <p>Significant damage to some structures</p>	<ul style="list-style-type: none"> • NFI (shelter tool kit + tarpaulin) • Transport means and fuel • Tents and safe spaces • Temporary essential public infrastructure 	<ul style="list-style-type: none"> • Province and National able to distribute emergency pre-positioned tarps • Province and National coordinate small-scale evacuation and temporary housing required • Province and National to set up temporary essential public infrastructure • Technical assessment (NDMO) • The Shelter Working Group/ relevant provincial and national dept. advises, assists and monitors the situation
<p><i>Worst-case</i></p> <p>Extreme widespread damage</p>	<ul style="list-style-type: none"> • Large scale evacuation and relocation • NFI (shelter tool kit + tarpaulin) • Transport means and fuel • Tents and safe spaces • Temporary essential public infrastructure 	<ul style="list-style-type: none"> • Outside assistance with emergency distributions of tarps and other building materials (VHT, NGOS, INGOS, military) • Emergency evacuation and need for temporary/longer term shelter developed with outside assistance (VHT, NGOS, INGOS, military) • Technical assessment • Recovery Plan

		<ul style="list-style-type: none"> • The Shelter Working Group/ relevant provincial and national dept. advises, assists and monitors the situation • Coordinate with NDMO, shelter clusters and relevant govt. dept for outside assistance, foreign aid and technical assessment (VHT, NGOs, International NGOS and governments)
Communication / Infrastructure		
<p>Best-case</p> <p>Minor damage to roads, ports, airports, power and telecommunications</p>	<ul style="list-style-type: none"> • Tools and materials • Road/Airport/Wharf/Radio maintenance (cut grass, prune trees, good care, small repairs) • Improvement works (e.g. build path) • Periodic maintenance (gravelling road and reshaping, repairs) 	<ul style="list-style-type: none"> • Community able to cope, or repair using locally available materials • Communication and Infrastructure/ relevant provincial dept. advises and assists if requested by community
<p>Likely-case</p> <p>Significant damage to roads, ports, airports, power and telecommunications</p>	<ul style="list-style-type: none"> • Re-establish communications (HF Radio or phone network) /fixing • Clear road and footpaths (trees, branches, etc.) • Tools, fuel, mechanical equipment and materials to repair infrastructure • Human resources to assist with rebuild and repairs 	<ul style="list-style-type: none"> • Province and TAFEA Government partners able to repair • Coordinate and work with private sector partners and technical works (TVL or Digicel technical workers, UNELCO) • Able to use pre-positioned supplies to temporarily fix problem • Communication and Infrastructure/ relevant provincial and national dept. advises, assists and monitors the situation
<p>Worst-case</p> <p>Extreme damage to roads, bridges, ports, airports, power and telecommunications</p>	<ul style="list-style-type: none"> • Rebuild (HF radios, airplane, airport, towers, etc.) • Rebuild/fix essential public infrastructure (power, airports, ports) • Clear road and footpaths (trees, branches, etc.) and rebuild/fix bridges. 	<ul style="list-style-type: none"> • Outside assistance required to repair/fix damaged key infrastructure assets (Private sector, NGOS, INGOS, military) • Communication and Infrastructure working group/ relevant provincial and national dept. advises, assists and monitors the situation • Coordinate with NDMO, relevant govt. dept for outside assistance, foreign aid and technical assessment (VHT, NGOs, International NGOS and governments, private sector)
Gender and Protection		
<p>Best-case</p>	<ul style="list-style-type: none"> • Awareness and education 	<ul style="list-style-type: none"> • CDC and community leaders awareness • Ensure there are strong systems in place managing reported cases (Community

<p>Low increase in gender and protection issues as a result of the disaster, in particular, gender-based violence, theft and other acts of criminality.</p>	<ul style="list-style-type: none"> • Security of individual or community property • Fair support • Privacy ensured 	<p>Response Plan, Counselling at the community level)</p> <ul style="list-style-type: none"> • Community manage environmental risk factors that increase risk are managed and mitigated e.g. Lights around essential public infrastructures, evacuation centres, and separate female and male toilets. • Advocacy/ education programs for the community. • Gender and Protection working group / relevant provincial dept. advises, assists and monitors the situation
<p>Likely-case</p> <p>A mild to moderate increase in gender and protection issues as a result of the disaster, in particular, gender-based violence, theft and other acts of criminality.</p>	<ul style="list-style-type: none"> • Security and protection of individual and community property • Privacy and safe spaces • Mental support and reporting services • Medical services for injuries 	<ul style="list-style-type: none"> • Provide safe spaces for vulnerable groups • Manage environmental factors that increase risk are managed and mitigated e.g. Lights around essential public infrastructures, evacuation centres, and separate female and male toilets. • Ensure distribution of food and emergency supplies are fair and are enough for the whole community • Province to provide services (counselling and medical services) • Police to enforce order and justice • Technical assessment. • Province to request for assistance from relevant govt. department and gender and protection cluster • Gender and Protection working group/ relevant provincial and national dept. advises, assists and monitors the situation
<p>Worst-case</p> <p>Very high levels of violence (gender-based violence, theft, community conflicts and riots) Trauma and fear in combination with serious injuries/health impacts and deaths caused by violence.</p>	<ul style="list-style-type: none"> • Security and protection of individual and community property • Privacy and safe spaces • Mental support and reporting services (counselling) • Medical services for injuries • Police and military assistance to control the violence 	<ul style="list-style-type: none"> • Outside assistance required to help stem violence (police and military) • Emergency gender and protection measures to be included in all aspects of the disaster response. • Provide safe spaces for vulnerable groups • Manage environmental factors that increase risk are managed and mitigated e.g. Lights around essential public infrastructures, evacuation centres, and separate female and male toilets. • Ensure distribution of food and emergency supplies are fair and are enough for the whole community • Increase medical supplies and assistance • Possible evacuations of vulnerable persons • Technical assessment (Gender and Protection cluster) • Gender and Protection working group/ relevant provincial and national dept.

		<p>advises, assists and monitors the situation</p> <ul style="list-style-type: none">• Coordinate with NDMO, gender and protection cluster and relevant govt. dept for outside assistance, foreign aid and technical assessment (VHT, NGOs, International NGOS and governments, private sector)
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Decision Making & Coordination

This part describes the decision-making and coordination mechanisms to manage an emergency. It details the PDCCC and Provincial Emergency Operation Center (PEOC) membership as well as procedure for PEOC activation and agencies functions. Standard Operating Procedures (SOPs) annexed give additional information on roles and responsibilities of each stakeholder.

5.1. PDCCC Roles and Membership

The PDCCC roles are described in the Terms of Reference (TOR) of the PDCCC (Annex 6). The PDCCC shall comprise the following province authorities and officers established in the province:

	Name	Department	Contact	Location
SG/ PDCCC Chairman	Ketty Napwatt	Secretary General	knapwatt@vanuatu.gov.vu	Tanna
PDCCC Member	David Tovovor	Assistant Secretary General	7730605	Tanna
PDCCC Member	Daniel Samson	Provincial Disaster Officer	7742766/ 5500167 tafeadisasterofficer@gmail.com	Tanna
PDCCC Member	Moise Kuau	FSB	7772510	Tanna
PDCCC Member	Iau Tuan	Department of Customs/ Tafea	7778615	Tanna
PDCCC Member	Kaloca W	Child protection unit/ Tafea	7799036	Tanna
PDCCC Member	Willie Kapalu	Immigration	7112468	Tanna
PDCCC Member	Marie Manu	Education Trainer , Education	7742812	Tanna
PDCCC Member	Simon Saika	Health manager	7108280	Tanna
PDCCC Member	Smith Pakaosongi	Administration, Coop Department	7100928	Tanna
PDCCC Member	Jean Juliano	Public Works Department	7114526	Tanna
PDCCC Member	Freeman kulu	LTMC		Tanna
PDCCC Member	Joseph Joel	Rural water supply	7799660 jjoseph@vanuatu.gov.vu	Tanna
PDCCC Member	Simon. Naupa	Forrest Officer Dept. Forestry	7304173 snaupa@vanuatu.gov.vu	Tanna
PDCCC Member	Sam Naliko	AAO, Dept of Agriculture	7763689 snaiu@vanuatu.gov.vu	Tanna

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PDCCC Member	Slyvain Tangabu	Tafea Tourism office	7780259	Tanna
PDCCC Member	Rex Ravai	Tafea Police commander	7793083	Tanna
PDCCC Member	Seth Kaurua	Customary Land tribunal	7774471	Tanna
PDCCC Member	Sam Harrison	Correctional service	7115724	Tanna
PDCCC Member	Beverly kanas	Court House		Tanna
PDCCC Member	Tom Kiry	Fisheries	7795169	Tanna
PDCCC Member	Ancel Nalau	Civil Status	7756353	Tanna
PDCCC Member	Thomas Iaru	Lives stock	5445460	Tanna
PDCCC Member	Wendy Tomasi	Woman Desk officer	5668243	Tanna
Area Council Secretary	Hendry Saute	West Tanna	7311634	Tanna
Area Council Secretary	Lui Alick	South west Tanna		Tanna
Area Council Secretary	Noel Noar	South Tanna	7756009	Tanna
Area Council Secretary	David Ali	North Tanna	7102743	Tanna
Area Council Secretary	Rassai Jeffeth	South east Tanna	7793688	Tanna
Area Council Secretary	Noel Ielu	North East Tanna	7757760	Tanna
Area Council Secretary	John Noclam	Central Tanna	7756403	Tanna
Area Council Secretary	Reuben Neriam	Anietym	7718542	Anietym
Area Council Secretary	Remmy Nambil	Northern Ward	7334210	Erromango
Area Council Secretary	Thomasi sembeth	Southern Ward	7790072	Erromango
Area Council Secretary	Lenon Nauka	Aniwa	7109989	Aniwa
Area Council Secretary	Toka Iatipu	Futuna	7785492	Futuna

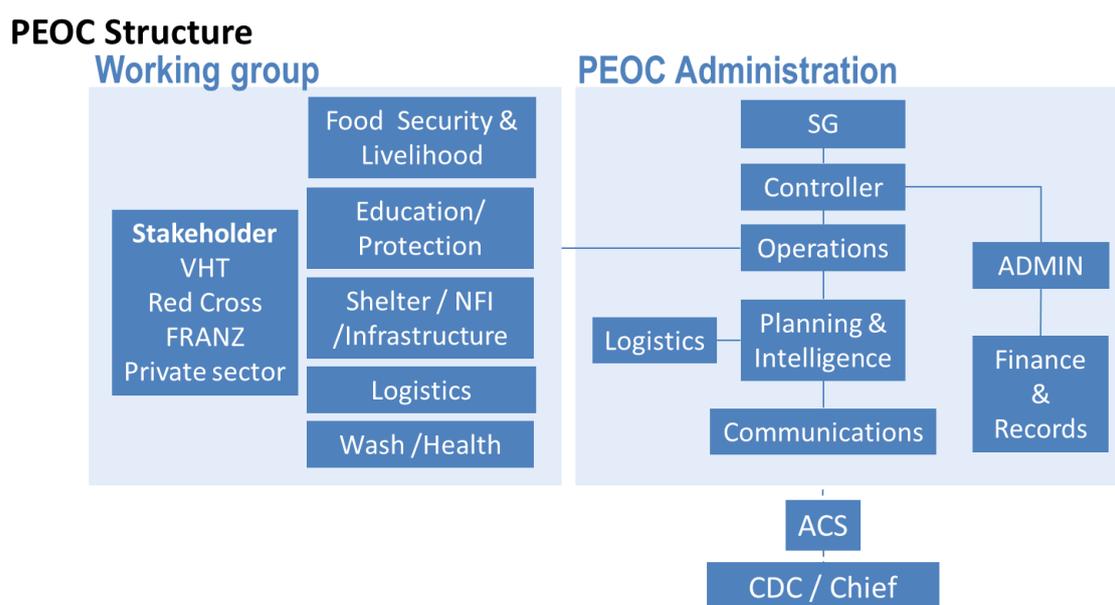
5.2. PEOC

The Provincial Emergency Operations Centre (PEOC) is the main body of the emergency, response and early recovery coordination system. The PEOC has a dedicated working room located in the provincial headquarter office to organise its meetings. The PEOC roles are executed by the PDCCC under direct leadership of the Secretary General of the province:

- Communication
- Controller
- Operation
- Intelligence and Planning
- Logistics
- Finance and Records
- General Support & Administration
- Working Group

PEOC roles are detailed in the PEOC SOP's (Annex 7).

The roles are organised according to the following PEOC structure chart:



The PEOC provides centralized directions and controls for the following tasks:

- Communications and warnings
- Coordinate damage and need assessments operations
- Preparation of consolidated assessment reports and Situation Reports (SITREP)
- Maintenance of operational information and maps
- The coordination of all governmental departments, non-governmental organisations, private sectors and donors assistance.
- Logistic arrangement of relief supplies receipts and distributions as approved by National Disaster Committee.

PEOC is activated in case of emergency, once a warning or a first information report is received. Once activated, the PEOC operational manager will organise a duty roster to ensure that the PEOC is running round the clock.

The PEOC has 4 levels of activation:

- **Stage 1: Readiness**
This will initiate preparation for the PEOC after receiving information from the NDMO or other emergency services.
- **Stage 2: Standby**
This warning will initiate manning of the PEOC by skeleton staff on a part time basis.
- **Stage 3: Activation**
Issued when an emergency or disaster has occurred and full activation of the PEOC on a part time basis.
- **Stage 4: Stand down**
This will initiate termination of the PEOC and the recovery and rehabilitation activities can be implemented under normal procedures.

The PDCCC stays operational throughout the year working on extended preparedness activities such as data management, awareness and training, which is essential for the PEOC to be ready and efficient for crisis situations.

Refer to the Standard Operating Procedures PEOC SOP's (*Annex 7 PEOC SOP*) for more details.

5.3. Agencies Functions & Accountability

The agencies involved in the disaster management at the provincial level are the PDCCC and other stakeholders such as the Vanuatu Red Cross Society, Vanuatu Humanitarian Team (VHT) members and private companies. They coordinate their support at provincial level by sectoral working groups.

Please see *annex 22* for location of VHT members and their operations with Vanuatu.

The tasks of the stakeholders in disaster management at the provincial level are listed in the following table:

Stakeholders	Tasks
Provincial Secretary General/ TAFEA Provincial Government Council	<ul style="list-style-type: none"> The Secretary General of the province is responsible to the Director of NDMO and the Provincial Council for the coordination, development and implementation of DRM at the provincial level; He/she is to provide advice to the Director of the NDMO and the Provincial Council on all matters relating to DRM.
Provincial Disaster Officer (PDO) Provincial Disaster Climate Change Committee (PDCCC) Provincial Emergency Operation Centre (PEOC)	<p><u>Response</u></p> <ul style="list-style-type: none"> Conduct provincial coordination meetings Collate Initial Community Assessments Update Logistic Capacity Assist to coordinate relief distribution (including recording & beneficiary lists) Provide updated information to NDMO <p><u>Recovery</u></p> <ul style="list-style-type: none"> Monitor recovery process and report back to NDMO Advocate for planning for better preparedness Communicate to community level on action of national governments
Area Council Secretaries (ACS)	<p>Each Area Council has a responsibility to:</p> <ul style="list-style-type: none"> Receive and confirm incident messages and assessments; To pass community information, assessments and situation reports to the PEOC; To pass information received from the PEOC to the CDCCC's
Community Disaster & Climate Change Committees (CDCCC)	<p>Each Community should have a CDCCC who has a responsibility to:</p> <ul style="list-style-type: none"> Receive incident messages and pass on to their Area Secretary; To pass on information from the Area Secretary to the public; Ensure that people are ready to evacuate at short notice, if necessary; Maintain a register of displaced people. Provide initial damage assessment to the ACS
Department of Agriculture and Livestock	<ul style="list-style-type: none"> Responsible for advising on planning for emergency food redistribution (from unaffected areas), harvest and use for affected areas; Advise on what crops should be planted to ensure greatest resilience during disaster periods; Assessment of agriculture crops, livestock damage and food needs;

	<ul style="list-style-type: none"> · Provide seeds for early recovery; · Be the primary agency responsible for pest attacks or animal based epidemics.
Department of Finance	<ul style="list-style-type: none"> · Arrange necessary funds and manage the accounts;
Department of Public Works	<ul style="list-style-type: none"> · Responsible for arranging transport for urgent evacuation needs; · Planning for provision of vehicles and repairing roads and access routes rapidly; · Identify safer alternative access routes due to damage; · Provide necessary equipment for search and rescue; · Support urgent reconstruction and rehabilitation needs. · Assessment of infrastructure and public buildings
Department of Public Health	<ul style="list-style-type: none"> · Health officers and nurses should report to their own posts initially after a disaster. If these posts are not usable then they should report to their Area Secretary; · Once an overview has been obtained, health officers and nurses may be asked to assist in other ways and should anticipate that this request may be made; · Be the primary agency responsible for biological disasters and epidemics; · Assist with first aid, health and medical care, ambulance arrangements and with preventive steps for other diseases; · Record of the deceased, and follow the SOP for debris and carcass disposal, <i>see annex _</i>; · Possible set up of mobile clinics with medical supplies; · In the case of a major disaster and mass evacuation, assist with the public health measures of temporary shelters including: the sanitary disposal of human waste and refuse, control of infectious diseases and adequate food and water supplies; · Control and disposal of dangerous chemicals; · Regularly inform the members of PDCCC and TAFEA Provincial Council on the state of public health within TAFEA Province.
Department of Geology Mines and Water Resources	<p>In a major disaster the following measures around the safety of water may be required:</p> <ul style="list-style-type: none"> · Purification of water; · Maintain accessibility to sufficient clean water for all communities; · Assess and identify state of water sources; · Provide technical advice around emergency water supplies to PDCCC and the TAFEA Provincial Council;
Department of Education	<ul style="list-style-type: none"> · Conduct assessment of physical damage and provide list of schools that are safe for use as evacuation centres; · Deploy temporary learning spaces as required.
Department of Women Affairs	<ul style="list-style-type: none"> · This shall be particularly for relation to welfare, relief distribution and shelter where women will be expected to taking leading decision making roles;

	<ul style="list-style-type: none"> Initially, focused on medical and shelter needs for displaced people. These people will need water, food and temporary accommodation, clothing, personal services and registration; Provide support and counselling services to the community; Ensure the stakeholders know how to refer 'at risk' persons on to health services as required.
Department of Information, Culture and Tourism	<ul style="list-style-type: none"> Communicate warnings to the public, relay announcements; telecast special programmes for information and actions.
Police	<ul style="list-style-type: none"> Participate in the dissemination of warning messages; Maintain law and order; Take all measures within their power and authority to protect life and property; Facilitate the movement of rescue, medical and other essential services; Arrange for the identification of the dead; Carry out all duties in a way that does not cause undue panic for the population; Provide assistance for immediate relief supplies distribution; The co-ordination of all non-declared emergencies is lead by PDO, PDCCC and with the authorisation of Secretary General (SG) unless the SG has requested lead by a different agency or department. The National Disaster Plan and Police plans for Disaster Management detail further specific responsibilities for roles and powers of the police, <i>annex_</i>
Vanuatu Mobile Force (VMF)	<p>Should the VMF be available, they could assist by:</p> <ul style="list-style-type: none"> Assisting in setting up and manning radio networks; Assisting with any evacuation, including evacuee camp construction, security and assistance with transport; Assist with distributions; Assisting with search and rescue operations.
VHT/ Vanuatu Red Cross	<p>VHT members may undertake DRM activities at the provincial level including the provision of relief and recovery support during and after a disaster event.</p> <p>These agencies are encouraged to work within the framework of this plan to provide for effective integration of their activities. They are to assist with:</p> <ul style="list-style-type: none"> Assessments Logistics support Shelter & Non Food Items Clothing First Aid Volunteering support

(Produced with the assistance of PDCCC, Area Council Secretaries and Women’s Representatives)

In accordance with the policies, concept and principles set out in this plan, all stakeholders and sector agencies are required to prepare for and manage the impacts of disaster and continue to provide services during and following disasters. They are also required to address the risks they face and avoid or mitigate risk-contributing activities within their sector.

6. Communication & Reporting

Disasters create special demands for communication. In case of severe or widespread incidents, usual communication systems may be of no use to meet these demands by failing completely or partially.

If there is an event that requires Emergency Management, the primary communication system will be the public telephone / fax system and internet connection. The HF radio links with the ACS or directly with Community Disaster and Climate Change Committee (CDCCC) is used for area with no network.

Public Information is the deliberate, planned and sustained effort to establish and maintain mutual understanding between those managing the disaster and the community. In the event of an imminent or declared State of Local Emergency, an immediate requirement is to establish communications with the community by using local radio stations, and maintain that contact.

Establishing immediate communications with the community depends on the post event ability of the broadcasting system equipment and operators to cope with the situation. ACS will assist in the provision of public information. Media releases relating to the Emergency Management organization need to be authorized by the Secretary General (SG) unless otherwise delegated by the SG.

The information flow between the administrative level follow the bellow’s chart:



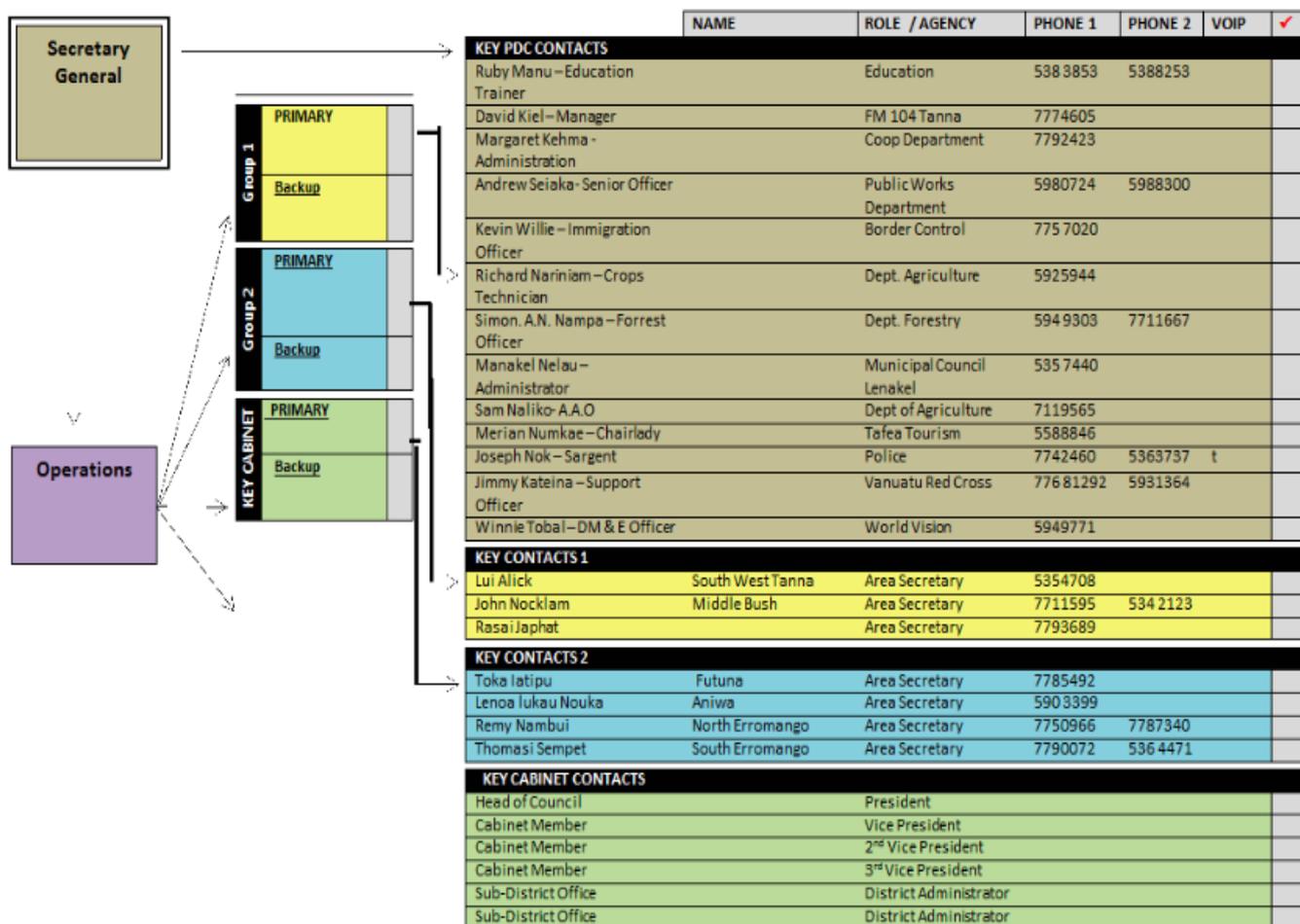
However other communication channels could be used according to the specific need of the different emergency phase:

- **Early Warnings and information** from the NDMO and VMGD related to potential hazards need to be considered by PDCCC before being sent from the Province Office to Area Councils community level through all networks available. Each working group is responsible to relay the information and appropriate advice to its respective network follow the communications tree below.
- **PEOC activation:** A PDCCC internal communication tree exists (Annex 8) to facilitate the information flow within the PDCCC, especially for the PEOC activation.
- **First community assessment** uses the normal communication tree. The CDCCC members are responsible for collecting accurate information on hazard threats and damages in the “First community assessment form” and to share it with the Area Secretaries. Area Councils Secretaries are responsible to collect “First community assessment forms” and share them with the PDCCC. The PDCCC compiles the Provincial initial assessment information in a report addressed to NDMO.

- **Technical assessment:** During Technical assessment, the technical assessment team works directly on the field with ACS and CDCCC and reports to the PDCCC that compiles and send the Provincial technical report to NDMO.
- **Response and recovery operations:** The PDCCC collects the response operation update from the stakeholders through a coordination meeting and is responsible for sending situation reports(SITREP) to NDMO

A contact list including the key contacts is updated on a regular basis and tested at least once a year. (Annex 9 PDCCC & Key Stakeholder Contact List)

PEOC ACTIVATION: KEY STAKEHOLDER COMMUNICATIONS TREE	OBJECTIVE: TO QUICKLY INFORM KEY PEOPLE THAT THE PDCC IS ACTIVATED – OVERVIEW: (1) The SG phones the 'Operations Manager' and 'Key PDC Contacts'. The Operations Manager then contacts ALL province staff. (2) The PDC staff members listed as 'PRIMARY' phone ALL 'key contacts' listed in the box corresponding to their name. (3) If a 'Primary' staff member cannot be reached, the Operations Manager should inform the 'BACKUP' staff member to phone these 'key contacts'. (4) ✓ Tick off each person once contact has been made. Report to the SG with this list showing those who have been contacted.
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7. Response Systems & Procedures

This section summarises the process and procedure to be implemented during an emergency response.

The response system includes the components described in the chart below and these procedures are detailed in the following part.



The SOPs or guidelines are annexed to the PDRP plan (when they are available) to provide detailed information's about the procedure mentioned above. The SOPs are developed at the national level and are likely to be adjusted following the lessons learned of each emergency.

The standard formats used during operation and mentioned in this section are also annexed and have to be updated following NDMO requirements.

7.1. Early Warning Systems

The hazard monitoring and early warning systems are supervised by the VMGD.

There are different levels of information communicated by the VMGD according to the hazard and the timing of the potential impact. Base on the VMGD information's, NDMO formulates recommendations for the emergency management.

The different alerts are summarised in the table below:

Hazard	Alert code	Means	Diffusion media	Responsible
Cyclone	Information	There is a cyclone or a tropical low forecast to reach Vanuatu boundary within 2 days.	mail list, SMS, Radio, Television, Website.	VMGD
	Advisory	There is a cyclone or a tropical low forecast to reach Vanuatu boundary within 1-5 days.		
	Warning	A day- 2 days before a cyclone reach Vanuatu land		
	Warning Blue alert	A days before a cyclone reach Vanuatu land Preparedness phase	SMS, Radio, Television	NDMO
	Warning Yellow alert	Half day before a cyclone reach Vanuatu land Evacuation phase		
	Warning Red alert	Cyclone is striking. Containment phase		
Heavy rain Rough sea Flood Drought Landslide	Warning	Be prepared for this hazard	mail list, Radio, Television Website.	VMGD
Earthquake / Tsunami	Information	A earthquake happen without tsunami	SMS, Radio, Television, Website, email list	VMGD
	Advisory	A small tsunami could happen.		
	Warning	Go quickly on a high place		
Volcano	Level 0	Normal	SMS, Radio, Television, Website, email list	VMGD
	Level 1	Signs of volcanic unrest		
	Level 2	Major unrest		
	Level 3	Minor eruption		
	Level 4	Moderate eruption		
	Level 5	Very large eruption		

7.2. Damage and needs assessment systems

The damage and need assessment is operated when the scale of a hazard overwhelms the capacity of response of the affected communities. The assessment is realised to prepare the response activities. Depending on the magnitude of the disaster, two different types of assessment could be carried out:

■ Initial community assessment

It is the minimum standardised assessment report that should be done if the community needs support. It is under the responsibility of the CDCCC and the chief together (or if a community does not have both of these, ACS or a person trained in the initial assessment form from outside of the community or from within the CDCCC can assist) to do this assessment within three days (72 hours) after the disaster event, using the standard form developed for this purpose (Annex 10 & 11). From the information collected a quick report should be texted or communicated through phone call to ACS or the Province, which contains the answer to only essential questions that the NDMO needs to know as soon as possible.

The full assessment report is sent in first instance to the ACS for verification, then to the PDCCC. The PDCCC are responsible to compile the whole information of the province in to a database, analysing it and producing the first assessment report to send to the NDMO in the first 72 hours after a disaster. This report will describe the damages existing in the province per sector and formulate recommendations. The recommendations could list some response options and/or ask from further technical assessment to address specific needs.

■ Technical assessment

This assessment is required if are specific damages and needs assessed during the first phase that are severe and specific to particular sector and need further assessments completed. In this case, a team is deployed on the field to gather technical information to be able to formulate responses to the disaster impact.

The team is composed of provincial senior level officers specialized in sectors (such as health, water supply or shelter engineering, communication, etc.) according to the specific needs identified in the different areas. The team could also involve officers from national or international organisations as counterparts of the provincial officers. The ACS coordinates the technical assessment team on the field and put them in direct contact with the CDCCC (or the chief if there are no CDCCCs).

Each team will develop a technical assessment report. The general Technical assessment gathering all the information collected on the field is submitted to the NDMO. The Technical assessment report should contain the following basic elements or activities:

- Human and material damages
- Resources availability and local response capacities
- Options for relief assistance and recovery
- Needs for national / international assistance

■ Quick response teams

The quick response teams are specialized personnel who are sent to reduce the number of lives impacted. To ensure that the quick response to urgent needs is not delayed, a

comprehensive assessment has to be completed as soon as possible. The following teams must be sent to disaster sites or disaster affected areas as early as possible:

- First Aid Team
- Search and Rescue Team

7.3. Evacuation, Temporary shelter, Long Term Displacement

Due to a disaster a population could be displaced for short, mid or long term. The movement are usually recommended and supported by the authorities. The Mass evacuation guideline (Annex 12) details the standards applicable in Vanuatu. There are different kinds of displacement that could happen during and after a disaster: There are a number of facilities that have been identified as possible emergency accommodation within TAFEA, please see the lists in *annex 13*.

■ Evacuation

The evacuation is the action to move to a safer place during the time of the hazard striking. The need for evacuate a population to safe places will be determined after consideration by the PDCCC, using the information provided by the NDMO. For the most part, evacuations will only take place where there is a threat of volcanic eruption, tsunami or cyclone. There are facilities that have been identified for emergency accommodation, please see the resource list in list of evacuation centre/temporary shelter (Annex 13).

■ Temporary shelter

The temporary shelters are the locations used by the people that have seen their houses destroyed or their house is deemed too unsafe to return as a result of a disaster event. It is a short-term solution that lasts during the reconstruction time of the houses. The temporary shelters could be organised in existing buildings (church, schools, community hall...) or supported by the distribution of shelter kits for self-constructions. The province has to support the ACS and CDCCC to ensure that a minimum of standards are provided to people living in temporary shelters (like access to water and sanitation etc.).

■ Long term displacement

Long term displacement could happen after major disaster event when the level of risk becomes too heavy to allow the community to resettle in the same place. In this case, land conflicts could happen and the provincial authorities and the chiefs would have to work together to find solution.

Mt. Yasur in Whitesand, Tanna poses the real threat of causing long term displacement for communities in Whitesands. The Province has recognised this threat and is currently creating a specific contingency plan which includes a relocation plan. When created, it will be annexed to the PDRCCM plan.

7.4. Distributions & Logistics

Emergency procurement of essential supplies is critical when dealing with an emergency. All goods and services purchased by the TAFEA on behalf of the SG and required for emergency purposes will be managed by the TAFEA Province Finance Officer. The SG has limited financial authority and can delegate financial authority to PEOC personnel on an "as and when needed" basis. On reaching the financial limit a request is made to the NDMO for the handing over of financial responsibility.

Suppliers of goods and services purchased or requisitioned during an emergency are entitled to have their invoices or claims paid without undue delay, provided that the claim details are correct and the costs are reasonable. It shall be the responsibility of the TAFEA Provincial Council to ensure that claims made to it by suppliers are paid either directly or through arrangements with the NDMO.

Costs incurred by government departments and statutory bodies in fulfilling their normal functions are met by those organizations. Should government departments, state owned enterprises or statutory corporations be used in any way other than performing their normal functions, they may charge for this service.

Supplies borrowed or requisitioned from other persons or organizations will be returned to the respective owners. Supplies drawn from Council stocks or purchased against the Council shall be returned to stores or disposed of as deemed fit. Any supplies surplus to those supplied by the National Disaster Management Office shall be deemed to be the property of the NDMO.

Should unwanted, unsolicited supplies be sent to TAFEA Province, these shall, if necessary, be returned by the same means. The TAFEA Provincial Council will not accept responsibility for unsolicited supplies either in TAFEA nor while in transit to or from TAFEA.

The standard operating procedures for distribution and warehousing are included as *annex 25*.

7.5. Life Line Services

Large scale hazards such as, cyclones, earthquakes, flood, tsunami, fires have the potential to affect the lifeline services (e.g. telecommunications, water, power, airport, and roads) throughout TAFEA. However, some hazards have more affect on life lines than others and some will depend on where the hazard occurred and its strength.

An earthquake will severely affect life lines either through damage to the systems or by overloading them. It is likely that there will be disruption to roads, water supply and electricity, infrastructure, supplies (food and water). Since it is not practical to evacuate large portions of the population because of a life line failure, people are expected to provide welfare for themselves by stockpiling necessary supplies to carry them through this period.

Volcanic eruption may affect life lines depending on its nature; even a moderate eruption or one from another area may cause pollution to water supplies, damage to crops and livestock and affect the power supplies. Many communities (East Tanna) use solar power for their electricity and this would be affected, as it would be covered in heavy ash fall.

A large scale Tsunami and flooding in the province would affect electricity, bridges, human lives, crops and the road in Aniwa and the two main roads in Tanna (main road in town and the road to

the airport). Also these hazards will damage water transport (small banana boats), which is many communities for example communities in Erromango, rely heavily on water transport for survival.

Large category cyclones will severely affect life lines through damage or pollution, telecommunication will go down if tower is damaged, roads will be block and essential forms of transport such plane and boat may be temporary unavailable due to damages.

Fires will affect lifeline services that are made out of flammable materials and are located in dense forest areas.



SECTION 3. ADMINISTRATION & RESOURCE MOBILIZATION

This section deals with roll out process and resource mobilization plan, which are essential to carry out the tasks described in the plan and ensure its sustainability.

8. Response Preparedness

The response preparedness is crucial to ensure that the plan is updated, reviewed and utilised by the relevant PDCCC members.

8.1. Provincial Disaster Response Plan Review

The PDRP has to be tested and evaluated on a regular basis through simulation exercise. The plan has to be updated at least once a year to ensure that some element such the contact lists, the SOPs, the communication trees are still valid.

The plan has to be fully reviewed every 5 years to ensure its consistency with the provincial capacities and the national legislation. New consultation workshop and simulation exercise have to be organised in this timeframe.

Proposals for amendment or addition to the contents of this plan should be forwarded to:

- **The Secretary General**

<i>Name</i>	<i>Contact</i>
<i>Mrs. Ketty Napwatt</i>	<i>Phone: 88700</i>
<i>The Secretary General</i>	<i>Mobile:</i>
<i>TAFEA Provincial Government Council</i>	<i>Email: knapwatt@vanuatu.gov.vu</i>

- **Provincial Government Council**

<i>Name</i>	<i>Contact</i>

There may be additional hazard specific plans, i.e. Mt. Yasur Volcano (working progress) and cyclone response plan (annex 16) and drought response plan (annex 17), if required to complement this document.

8.2. Simulation Activities

Disaster exercises and simulations are an important part of assessing response capabilities and the effectiveness of the existing plans. These should be carried out every 1-year at a minimum, unless specific aspects of the plan have been updated and / or there is a requirement to test the plan sooner. Please see SimEx guidelines (annex 14) for more information on how to conduct a simulation activity.

A simulation that informed the plans creation and gained input from Tafea CDCCCs, ACS and PDCCC was conducted in October 10th-14th 2016 with support from CARE International in Vanuatu with funding from the European Union through the European Commission’s Humanitarian Aid and Civil protection Department (ECHO), the Australian Government and the Australian Public, and the United States Agency for International Development through the Pacific-American Climate Fund.



(CDCCC reps, ACS, PDCCC participants from PDRCCM Plan workshop Oct 2016)

Planning & Capacity Building

Disaster preparedness planning comprises all activities that can be done for risk reduction. Such activities that need to be undertaken by each department should be identified and compiled. These activities can be planned after ascertaining the condition and status of infrastructure, equipment and human resources at the disposal of each department.

The activities may include the creation of any new infrastructure facility for risk reduction, repair, retrofitting or upgrading of existing infrastructures procurement, hiring, or repairing of equipment recruitment, hiring, and training or volunteers or specialized human resources and preparation and dissemination of awareness raising and training materials focusing various target groups.

The Community-based Disaster Risk Reduction (CB-DRR) Handbook (annex 15) released by the NDMO is a standardised manual with training materials on how to set up CDCCC, how to conduct a community profile and assessment, as well as, how CDCCC can educate and facilitate awareness session within their community. This CB-DRR Handbook should be consulted when conducting DRR preparedness work in the communities.

Agency	Actions
Provincial Secretary General/PDO TAFEA Provincial Government Council/ PDCCC	<ul style="list-style-type: none"> · Run a simulation to test and update the plan involving the PDCCC, ACS and CDCCC and promoting the importance of the PDRCCM Plan · Create and finalise working groups · Update population data · Update contact lists and registers · Finalise hazard risk mapping · Evacuation and relocation plans and simulations conducted for Whitesand communities in response to Mt. Yasur · Contingency plan for Mt. Yasur · Develop SitReps and Response Plans for each different hazard · Update register for evacuation centre · Conduct and facilitate training with CDCCC for initial community assessment using the NDMOs standard assessment form. · Setup CDCCCs and provide TOR training to new CDCCC · Strengthen capacity of ACS (information management, human resources, access to resources through trainings and support) · Strengthen coordination structure between PDCCC-ACS-CDCCC · Revitalising the community radio project (all materials have been received) · Strengthen coordination and inclusion of women, youth and disabled persons’ organisations and Provincial Disability Officer/Provincial Disability Committee in PDCCC decision making
Area Council Secretaries (ACS)	<ul style="list-style-type: none"> · Assist in developing CDCCC’s and Community Action & Response Plans for each community · Work with each community to understand their roles and responsibilities during a disaster · Coordinate with Province to ensure clear lines of communication are development and functional. · Work with CDCCC’s and PDO to ensure that CDCCC members and the Chief in the community are trained to conduct initial community assessment using the NDMOs standard assessment form. · Strengthen own capacity by working with the Province to improve information management, human resources and access to resources.
Community Disaster & Climate Change Committees (CDCCC)	<ul style="list-style-type: none"> · Prepare Community Action & Response Plans that address the needs and risks of different groups in the community in preparedness and response including the elderly, women, youth and people with disabilities

	<ul style="list-style-type: none"> Coordinate community preparedness activities and actions Develop clear lines of communications that are accessible to everyone in the community Work with ACS and PDO to ensure that CDCCC members and the Chief in the community are trained to conduct initial community assessment using the NDMOs standard assessment form.
Department of Agriculture and Livestock	<ul style="list-style-type: none"> Develop food security measures, including emergency seed stocks, resilient crop varieties and supplies Work with communities to develop resilient agriculture and livestock practices, as well as provide technical assistance and IEC materials. Work with VHT members, Rural Training Centres & TVET to develop trainings and materials Assist the Provincial government to address the impacts of Mt. Yasur (consistent ash fall) on the livelihoods and production of food on the communities in Whitesands. Sign MOU with NGOs Write plans for communities' disaster response and recovery that address the needs, risks and livelihoods of different groups in the community in preparedness and response including the elderly, women, youth and people with disabilities.
Department of Forestry	<ul style="list-style-type: none"> Protect forests in water catchment areas (replant) in cooperation and coordinate with communities Replant trees in coastal areas, degraded land/forest areas in cooperation and coordinate with communities Plant wind breaks around gardens and communities in cooperation and coordinate with communities Promote and create awareness around sustainable forest management practices, traditional and non-traditional.
Department of Fisheries	<ul style="list-style-type: none"> Promote and create inclusive awareness around sustainable and fair fishing practices (traditional and non-traditional) and distribution of sea resources Work with department of Health to raise awareness and trainings addressing 'fish poisoning' (Ciguatera)
Department of Finance	<ul style="list-style-type: none"> To cost scenarios and ensure systems are in place for disaster budgeting and rapid funding release/disaster fund
Department of Public Works	<ul style="list-style-type: none"> Maintain safe and accessible infrastructure networks to prevent accidents from occurring and enabling evacuation for all Plan for future impacts from disasters before construction begins Advocate for safer and accessible building construction
Department of Health	<ul style="list-style-type: none"> Maintain monitoring of key health indicators Assist with updating volunteer/first aid register Continued health education key messages; nutrition, water safety and sanitation Promote accessible and inclusive messages and service provision on sexual and reproductive health Promote disability accessible and inclusive health services, including rehabilitation to address needs for assistive devices in TAFEA
Department of Geology Mines and Water Resources	<ul style="list-style-type: none"> Mapping all water access points across TAFEA to assess water and sanitation requirements Work with stakeholders to address accessible water and sanitation requirements Develop further trainings on water maintenance and water quality testing Support Community led Water Committees to develop inclusive Drinking Water Safety & Security Plans Long term impact analysis of Mt. Yasur on the Whitesand communities and management plan created. Possibly work with GIZ.
Department of Education	<ul style="list-style-type: none"> Develop curriculum and support training on Disaster Risk Preparedness and Climate Change Adaptation in schools

	<ul style="list-style-type: none"> • Support School Disaster Committees • Fit schools with accessible early warning systems (EWS) • Regular evacuation drills for different hazards, cyclone, earthquake, volcanic eruption, fire, flood, landslide, and tsunami depending on schools location of the school • Retrofitting and reconstruction of schools to be able to become accessible safe houses during times of emergencies and link school community with evacuation centre management training and standards • A plan for education continuation post disaster • Work in conjunction with police to create traffic safety plan and input traffic safety measure to protect students.
Department of Women Affairs	<ul style="list-style-type: none"> • Support and identify vulnerable people within each community to ensure they are not forgotten during times of disaster • Work to ensure that women’s and people with disabilities’ views are heard and they are actively part of the decision making process within each community • Support coordination between humanitarian structures, women’s organisations, Vanuatu Women’s Centre, disabled persons’ organisations and disability service providers
Department of Information, Culture and Tourism	<ul style="list-style-type: none"> • Key education and awareness messages for preparedness actions are known and promoted in different formats that are accessible to all • Promotion of disaster related policies in different formats that are accessible to all
Police	<ul style="list-style-type: none"> • Promote inclusive awareness on the law and access to justice • Promote further coordination through the Joint Operations Team to promote accessibility of justice services and protection for people most at risk during disasters • Develop traffic safety plan for schools and input road safety measures for schools that are close to busy roads. • Make more awareness of road safety. • Develop monitoring and evaluation plan on safety (seas, roads) • Make more awareness of traffic signs. • Develop safety plan for pedestrians (foot path)
Office of the Register of Cooperatives and Business Development	<ul style="list-style-type: none"> • Ensure affordable materials and equipment for disaster response and climate change adaptation is readily available to communities and PDCCC. • Establish sustainable and markets and mechanisms for the distribution of local produce to areas affected by disaster through the cooperative network. • Promote business risk reduction awareness and practices among businesses operators

(Produced with the assistance of PDCCC, Area Council Secretaries, Women’s Representatives and representatives of people with disabilities)

Humanitarian Partners & Programs

To assist the Provincial Council with activities on disaster risk reduction, climate change, food security and water security, programs that are undertaken by our humanitarian partners need to be registered with the Provincial Disaster Officer (PDO). The knowledge of coverage, capacity and activities taking place is important information for the PDO to gauge if communities have benefitted from preparedness activities and if they have, of what kind, and which communities need to be supported in future activities. (Annex 18 - VHT Program Register)

9. Resource Mobilization

Province needs money to execute the plan. This section presents how to manage the money, how to map resources (staff, asset, stock etc.) already available and management procedure if money is raised through donation/external fund.

9.1. Surge Capacity

There needs to be an inventory of the strategically placed resources stockpiled for emergencies in the province (Annex 19 List of stock materials & NFI), which would be kept by the PEOC. An updated list of all registered volunteers also needs to be kept, either for logistics, distribution, assessment, information dissemination or qualified first aiders. (Annex 20 List of trained volunteers and their contact information)

External surge capacity for logistics, personnel, communications, supplies, emergency equipment and expertise also needs to be determined in consultation with the NDMO. (Annex 21 Logistics capacity assessment)

9.2. Emergency Funds

Any recovery of emergency costs is managed by the NDMO.

The restoration process of community functioning, the ongoing protection and continuous assessment of the recovery process is the responsibility of the PDCCC and the Provincial Government.

9.3. Donations/External Funds Management

In the event of a major disaster, the possibility of setting up a disaster relief fund would be given by the NDMO, who would administer and allocate it

List of participant of the consultative workshops

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List of annexes

Annex 1 Vanuatu CC & DRR Policy

Annex 2 Policy Reference to National Disaster Act

Annex 3 NDMO Strategic Plan 2016-2020

Annex 4 National Disaster Plan 2010

Annex 5 TAFEA demographics data

Annex 6 TOR for Provincial Disaster & Climate Change Committee

Annex 7 PEOC SOP

Annex 8 PDCCC Communications Tree

Annex 9 PDCCC & Key Stakeholder Contact List

Annex 10 Initial community assessment form

Annex 11 Initial community assessment guidelines

Annex 12 Mass Evacuation Guideline

Annex 13 List of Evacuation Centres & Temporary Shelters

Annex 14 Provincial SimEX guidelines

Annex 15 Community-based Disaster Risk Reduction (CBDRR) Handbook

Annex 16 Cyclone Response Plan

Annex 17 TAFEA El Nino Response Plan 2015

Annex 18 VHT Program Register

Annex 19 List of Emergency Stockpiled Materials

Annex 20 List of Volunteer/First Aiders Contacts

Annex 21 Logistics capacity assessment

Annex 22 VHT member agencies location and operation Summary

Annex 23 NDMO Standard Operation Procedure (SOP) and Communications Tree

Annex 24 NDMO and Provincial Organisation Structure Chart

Annex 25 Emergency Distributions SOP

