



VANUATU

Disaster Management Reference Handbook

October 2026



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Letter from the Director

Vanuatu is highly exposed to a range of natural hazards. Meanwhile, its small size and remote island geography present challenges for building resilience as well as for disaster response logistics. In the face of these challenges, Vanuatu has increased its disaster management capabilities not only through legislation and policy but also through the creation and operationalization of key disaster management organizations and practices.

In recent years, the relationship between Vanuatu and the United States (U.S.) has grown, highlighted by the opening of the U.S. Embassy in Port Vila in July 2024. A devastating earthquake in December 2024 destroyed infrastructure in the capital and damaged the important tourism industry. It impacted lives and livelihoods and underscored the constant threat natural hazards pose to Vanuatu's people and prosperity. The earthquake also destroyed the Embassy building, but the U.S. Embassy remains operational, and the relationship between the U.S. and Vanuatu continues to grow.

The U.S. partners with Vanuatu to conduct various engagements related to disaster management. The U.S. Navy's Pacific Partnership humanitarian assistance and disaster response preparedness mission has visited the country twice since 2024. During Pacific Partnership 2025, the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) held a workshop co-sponsored by Vanuatu's National Disaster Management Office (NDMO). It brought together Vanuatu government ministries, national disaster responders, and international partners in a demonstration of the many stakeholders the country can mobilize in times of need.

As the partnership between the U.S. and Vanuatu expands, both countries share a commitment to promote disaster preparedness, response, and resilience, economic opportunity, and a stable, secure and prosperous Pacific region. CFE-DM will continue to support Vanuatu through projects alongside other U.S. government agencies, military units, partner nations, and with Vanuatu government organizations and disaster responders.

This updated Vanuatu Disaster Management Reference Handbook provides baseline information on the country's disaster risk, including natural hazards and vulnerabilities, disaster management institutions, and critical infrastructure. It is intended to support civilian and military personnel who are planning for a disaster response or working alongside Vanuatu agencies or emergency responders in training and other engagements.



Sincerely,

Joseph D. Martin, SES
Director

About the Center for Excellence in Disaster Management & Humanitarian Assistance

Overview

The Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DM) is a United States (U.S.) Department of War (DoW), also known as Department of Defense) organization comprised of nearly 30 subject matter experts that provide academic research, civil-military coordination training, and operational insights to support decision making before, during, and after crises. The Center is designed to bridge understanding between humanitarians, civilian, and military responders. CFE-DM partners with a diverse group of governmental and non-governmental actors, as well as academic institutions to increase collaborations and capabilities in humanitarian assistance and disaster response. While maintaining a global mandate, the Indo-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice. The Center is a direct reporting unit to U.S. Pacific Command (US PACOM) and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

Vision

Resilient Joint Forces, Allies, and Partners that are fully prepared to respond across the spectrum of humanitarian crises.

Mission

CFE-DM builds crisis response capacity in US, Allies and Partner militaries across the Indo-Pacific to save lives before, during, and after emergencies.

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EXECUTIVE SUMMARY

Vanuatu consistently ranks near the top of countries with the highest natural disaster risk in the world, based on factors related to exposure to a range of natural hazards, societal vulnerability, and coping capacity.

The risk natural hazards pose is compounded by the country's location, dispersed island geography and population, fragmented infrastructure, limited natural resources, fragile economy, and disaster management (DM) capabilities that are resource constrained. Most of Vanuatu's population live in rural areas across 65 inhabited islands, a settlement pattern that is a challenge to humanitarian access. Outside of the country's two urbanized areas, Port Vila and Luganville, responders must be prepared to work in an environment that is logistically constrained.

In recent years, Vanuatu has strengthened its national-level DM frameworks, policies, and institutions. Institutional changes were formalized by the Disaster Risk Management (DRM) Act of 2019. The law establishes a whole-of-government and whole-of-society approach to DRM. Much of the country's growing capacity can also be attributed to maturing local DM networks and the ongoing work of provincial authorities, local leaders, churches, non-governmental organizations (NGO), and the Vanuatu Red Cross Society (VRCS).

The country's key DM agencies are steadily gaining capacity. The National Disaster Committee (NDC) is the senior statutory committee responsible for national-level DRM oversight. The National Disaster Management Office (NDMO) is the principal national agency responsible for coordinating DRM, preparedness, response, and facilitation of international humanitarian assistance, and the National Emergency Operation Center (NEOC) is Vanuatu's principal national operational coordination facility during disasters. The National Cluster System was established with the objective of strengthening disaster

preparedness and response.

While Vanuatu continues to increase capacity, it integrates assistance as needed from regional and international partners – i.e., United Nations (UN) entities, NGOs, and donors.

As of the publication of this handbook, Vanuatu is still recovering from a large earthquake in December 2024; it caused significant infrastructural damage to the capital, Port Vila, and surrounding areas. The impact set back Vanuatu's economy and affected the livelihoods of many. While the Vanuatu government led the response to the quake, the damage was such that the government requested assistance from regional partners and the international humanitarian community. Additional response capabilities, such as search and rescue, medical treatment, logistics, airlift, surveillance, and emergency aid, were provided by the international community and foreign militaries.

The 2024 earthquake response demonstrated not only how Vanuatu's DM leadership and stakeholders operate in an emergency but also showed how they had learned from previous disasters – e.g., Tropical Cyclones Pam (2015) and Harold (2020). After those storms, Vanuatu improved the way it integrated incoming support while also improving its own domestic coordination mechanisms, leading to better cooperation during the 2024 earthquake response.

This handbook provides a DM profile of Vanuatu to support civilian and military personnel who are planning a disaster response operation in support of Vanuatu or developing DM engagements with the government and community stakeholders. This publication provides a profile of the national DM structure, policies, plans, and institutions, as well as background information on the country, its natural hazards, and details of past cooperation with international partners – including the United States (U.S.) – for disaster preparedness and response.

COUNTRY OVERVIEW

The archipelagic nation of Vanuatu is in the southwest Pacific. Its location in the Pacific Ring of Fire and the southern Pacific cyclone belt shapes its geography, climate, economy, and society. Vanuatu relies on agriculture and tourism for revenue, and these sectors are vulnerable to shocks such as natural disasters and global market fluctuations. Rural and outer island residents face challenges accessing public services due to rugged terrain, limited infrastructure, high fuel costs, and infrequent transport. Urban populations, including those living in Port Vila, have better access to services and economic opportunities, but those communities are also highly exposed to natural hazards. Domestic and regional responders are likely to face logistical challenges linked to the dispersed island geography and settlement patterns alongside limited transport and communication infrastructure.

Geography and Environment

Vanuatu is an archipelago of over 80 islands about 800 kilometers (km; 500 miles [mi]) west of Fiji.¹

Comprised of several island groups, Vanuatu extends north-south for 650 km (400 mi) in a “Y” shape. The Torres Islands are the northernmost group. Moving south, the main islands include Vanua Lava and Santa Maria (Gaua) in the Banks Island group, Espiritu Santo, Aoba (Ambae), Maewo, Pentecost, Malakula, Ambrym, Epi, Efate, Erromango, Tanna, and Anatom. Two uninhabited islands, Hunter and Matthew, are claimed by both Vanuatu and France.² Figure 1 shows a map of Vanuatu.³

Sixty-five islands are inhabited,⁴ among which the most populated are Efate, Espiritu Santo, and Tanna.⁵ The capital, Port Vila, is on Efate. Espiritu Santo is the largest island and home to the highest point, Tabwemasana, which reaches up to 1,879 meters (m; 6,165 feet [ft]).⁶

The islands are mostly mountainous and have narrow coastal plains. The terrain varies from rugged mountains and high plateaus to rolling hills and low plateaus, with coastal terraces and offshore coral reefs. Many of the islands are covered by dense rain forest, but drier regions have patches of savanna grassland. There are active volcanoes and submarine volcanoes, while some islands have fumaroles and solfataras (types of volcanic vents).⁷ Forest covers around one-third of the country, mostly at the higher elevations and on the wet windward slopes, while semi-deciduous forests are found lower on the drier leeward slopes.

There are some 25-30 freshwater lakes, with most being crater lakes; some are in active volcanoes. The largest lake is Lake Letas, a crater lake in Gaua Island's Mount Garet

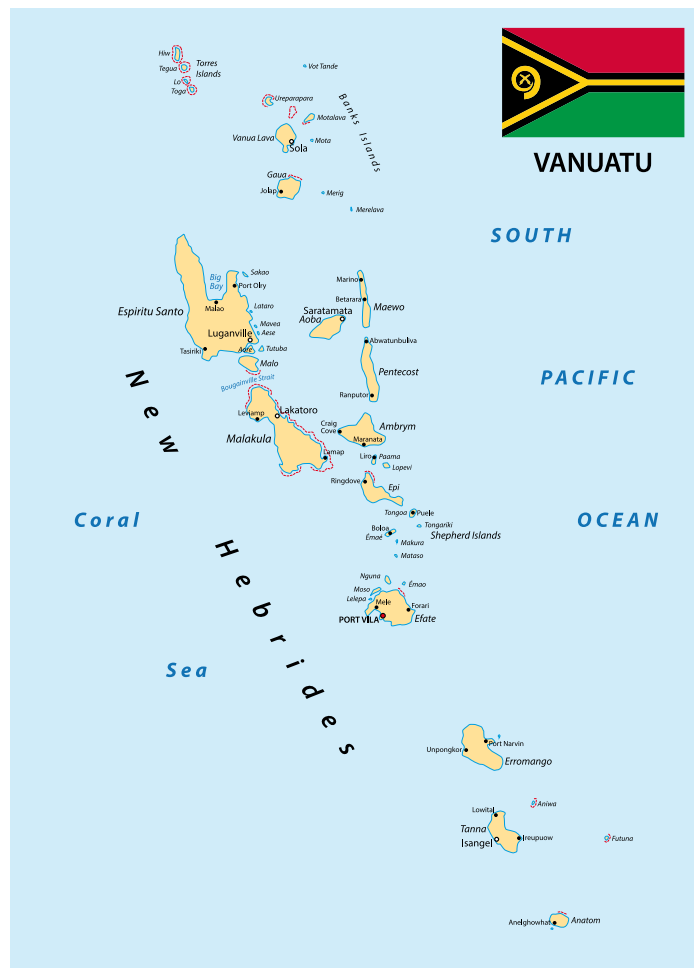


Figure 1: Map of Vanuatu

volcano, which is sometimes active. Covering 190 km² (73 mi²), Letas is one of the largest freshwater lakes in the Pacific. The highest lakes in the South Pacific lie at an elevation of more than 1,300 m (4,265 ft) on Waivundolue, an active volcano on Vanuatu's Ambae Island.

Vanuatu has a tropical maritime climate that varies slightly across the island chain. The northern islands have a consistent hot, tropical climate, while the southern islands experience a semi-tropical climate with seasonal differences. In the capital, average temperatures range 21-25°C (70-77°F). Southeast trade winds are common from May to October, while the cyclone season runs from November to April.⁸

There are two seasons: a hot and rainy season (wet season) from November to April, and a cooler and drier season (dry season) from May to October. There is less rainfall in the southern islands, but in the northern islands, annual precipitation ranges 2,000-4,000 millimeters (mm; 80-160 inches [in]).⁹ During the dry season, the country experiences less rainfall, cooler temperatures, stronger southeast trade winds, lower humidity, and more stable weather conditions. Occasional rain can occur from passing weather systems even in the dry season. When El Niño conditions affect the country, dry conditions can be exacerbated due to reduced rainfall and increased evaporation.¹⁰

The climate of the islands is influenced by the South Pacific Convergence Zone (SPCZ) and the El Niño-Southern Oscillation (ENSO).

The SPCZ is the major influence, with Vanuatu located on the southern boundary of the Zone. The SPCZ is a diagonal band of intense rainfall and atmospheric convection. It extends from the Equator to the subtropical South Pacific. Its position and intensity are dominant regional influences, and changes in its latitude influence Vanuatu. If the SPCZ moves south, even minimally, the country becomes wetter. If the SPCZ moves north, the country becomes drier. Many tropical cyclones form along and southern side of the SPCZ.¹¹

There are three phases of ENSO – El Niño, La Niña, and neutral. An El Niño event is generally associated with less rainfall

in Vanuatu, while La Niña is generally associated with more rainfall. As an El Niño event develops, some areas of Vanuatu may experience less rainfall or longer dry periods, reduced water availability, and higher temperatures, conditions that may increase the risk of bush and grass fires and drought. The impacts develop gradually and may vary from area to area.¹² Tropical cyclone formation during an El Niño event is generally expected to be less frequent; however, the storms that do develop may have the potential to be more intense.¹³

During a La Niña event, there is an earlier start to the wet season, and rainfall is generally above average with a higher chance of cyclones. Sea surface temperature is generally warmer, and sea levels are higher. Above normal sea levels during La Niña can lead to coastal flooding linked to the phase exacerbating high tides or storm surges.¹⁴

Society and Demographics

The most recent National Population and Housing Census (2020) found that the population of Vanuatu was 300,019 people.¹⁵

The Ni-Vanuatu (meaning “of Vanuatu”),¹⁶ or indigenous population, are mostly Melanesian, with some outer-island communities having Polynesian ancestry. As of 2020, Ni-Vanuatu made up around 99% of the population.¹⁷ The rest of the population consists of small minority groups of Micronesians, Europeans, Chinese, and Vietnamese.

Almost 75% of the population lives in rural areas. The two urban centers, Port Vila and Luganville, have seen a significant increase in their population size as people move there for better economic opportunities.¹⁸ Coastal areas have a high population density, while most island interiors are not inhabited.¹⁹ Of the population that lives in rural areas, 64% reside within 1 km (0.6 mi) of a coastline, and 99% lives within 10 km (6.2 mi) of a coastline.²⁰

Bislama, an English-based Melanesian creole, is the national language. English, French, and Bislama are the three official languages of Vanuatu. In total, more than 100 Melanesian languages and dialects are spoken by the

country's residents.²¹

Approximately 93% of the population identify as Christian. Among the group, an estimated 32% are Presbyterian, 13% Anglican, 13% Roman Catholic, and 12% are Seventh Day Adventists. Other groups include the Church of Christ, Apostolic Church, Assemblies of God, other Protestant denominations, the Church of Jesus Christ of Latter-day Saints, and Jehovah's Witnesses. There are also small numbers of adherents to Islam and Baha'i. There is no official state religion, and the constitution provides for individual freedom of "religious or traditional beliefs."²² A notable unique religion is the Jon Frum movement, an indigenous group that arose during WWII and became a religion as well as a political party. It is based on the island of Tanna and includes around 5% of the population.²³

Vulnerable Groups

Factors such as socio-economic status, cultural norms, and access to resources influence both the impact of hazard events on individuals and their coping strategies. Including members or representatives of vulnerable groups in disaster awareness, planning, and risk reduction activities can reduce the impact of disasters by reducing vulnerability and building societal resilience.

Vulnerable groups in Vanuatu include women, children, the elderly, people living with disabilities, and impoverished people. These populations face additional risks during disasters due to the country's remote geography, limited infrastructure and basic services, and small economy. Discrimination or challenges accessing resources can prevent these groups from seeking or accessing safe shelter.²⁴ After Tropical Cyclone Harold (2020), reports highlighted that limited and overcrowded shelters led to stories of severe limitations for women and marginalized groups' access to water points or latrines.²⁵

Children

Children are uniquely vulnerable due to their dependence upon others. During disasters,

they face risks linked to family separation, school closures, trauma, limited access to health care, and lack of clean water and sanitation, all of which have distinct effects on children because of their specific physiological and developmental needs. Because children rely on family or caregivers, the loss or separation of family members during a disaster places them at risk of harm or even exploitation.

In past disasters, students have been unable to attend classes due to unsafe conditions, and forced absences may not only set back educational attainment but also separate children from additional adult supervision. The negative impact on attendance from disasters exacerbates already low attendance rates. While early education attendance rates are high in Vanuatu, enrollment drops when students reach secondary school. School completion rates for upper secondary are among the lowest in the region.

Following the December 2024 earthquake, many children experienced trauma due to displacement. The effects of negative physical and emotional experiences were exacerbated by limited access to psychosocial support, health care, and education. Amidst critical water, sanitation, and hygiene (WASH) shortfalls, children are also disproportionately affected by diarrheal disease outbreaks, malnutrition, and other health issues.²⁶

Elderly

Older adults face challenges due to physical limitations related to restricted mobility, frailty, or chronic illness. Many also do not have incomes and have limited safety nets. Conditions associated with aging drastically impair older adults' ability to evacuate quickly or secure their homes ahead of a hazard event.

In 2020, people aged 60 years and over comprised 6.4% of Vanuatu's total population, and this cohort is expected to increase to 9% by 2030 and 14% by 2050. However, the country already experiences the third highest age-related disease burden globally; 28% of older adults have some form of disability. In 2020, life expectancy was 69.1 years for men and 72.3 years for women.

The highest concentration of older people is in Malampa province, and the lowest is within Port Vila (Shefa province). In 2020, 8.3% of Malampa's population was 60 years of age or older; they accounted for 3,509 people from a total province population of 42,499. Next were the provinces of Penama at 7.1% (2,535), Shefa at 6.7% (3,673), and Torba at 6.5% (735). Port Vila and Luganville had proportions of people aged 60 years and older of 5.3% and 5.6%, respectively. Most of this population – 81.4% – reside in rural areas. Older adults are likely to be at greater risk in isolated rural areas when a disaster strikes, as these people are already far from basic services, and their regions are harder to access for the delivery of relief supplies.²⁷

People Living in Poverty

Poor households in Vanuatu have restricted access to basic needs such as food supplies, essential non-food items, and health services. Urban poor households are particularly badly affected. Many households in urban areas depend on informal work in tourism and other industries and are greatly affected when tourist numbers decline after a disaster.²⁸

According to a 2025 World Bank report, the poverty headcount rate in Vanuatu was estimated to be 36.9% in 2019. The poverty rate in urban areas was 2%, but the poverty rate in rural areas was much higher at 20.8%. Most employed poor adults work in agriculture, a sector that is often the worst affected by disasters. Urban residents have better access to wage jobs or employment outside of agriculture,²⁹ but specific types of disasters – widespread structure fires, flooding linked to poor drainage, or earthquakes – can wipe away the services economy that supports urban residents.

People Living with Disabilities

Many people living with disabilities depend on others. They are more likely to be in the bottom 20-40% for household wealth. Being economically disadvantaged increases the vulnerability of this population. Reliance on others paired with economic disadvantages can

compound the difficulties people living with disabilities face when a disaster strikes.³⁰ As people living with disabilities are less likely to be formally employed, many rely on fishing and farming, both of which can be significantly affected by hazard events.

People living with disabilities face additional challenges trying to reach emergency shelters; physical barriers or a lack of transport may mean that they cannot evacuate at all. Hindrances at evacuation centers may include not being able to enter the main facility or bathrooms. Additionally, people living with disabilities may not have access to early warning systems or disaster communications if these systems lack accommodations, such as sign language interpretation.

Vanuatu has made progress with integrating this population into DM. Community members and the Education Department have recently worked together to create a sign language for Vanuatu. Community groups hope this will assist the deaf and hard of hearing when it comes to early warning or disaster communications. In addition, the Vanuatu Society for People with Disability is working towards ensuring early evacuations before disasters strike.³¹

Women

Women face multiple challenges, which can complicate preparing adequately for or responding safely after a disaster. Income opportunities are often limited for women. Violence against women and girls is a serious issue, with some 60% of women in the country having experienced physical or sexual violence from their partners. Women are also under-represented in community, provincial, and national decision-making.³²

After past disasters, studies have shown that women face more domestic and gender-based violence when societal and economic stressors combine with limitations on movement. Women also face potential discrimination and insecurity amidst crowded conditions in emergency shelters or when trying to access basic services. Disasters can also exacerbate existing socio-

economic gaps, disproportionately pushing women to poverty and marginalization.

Despite these challenges, a grassroots movement has taken hold in the decade since Tropical Cyclone Pam struck in 2015. The Vanuatu Department of Women's Affairs, supported by Action Aid, established "knowledge centers" to provide a safe space for women and girls, including those living with disabilities, to identify protection needs and find solutions to ensure self-reliance. This project evolved into Women I Tok Tok Tugeta, a locally led network with over 9,000 women across 5 islands. From this movement emerged the Women Wetem Weta (Women Weather Watch), which is a network utilizing short message service (SMS), very high frequency (VHF) radio, and phone trees to provide local weather updates to communities. The organization was established after realizing that warnings often failed to reach isolated communities. As such, the Women Wetem Weta aims to ensure that warnings reach the elderly, people living with disabilities, and remote areas. The network has also helped assess and improve evacuation centers to ensure they are safe and accessible.³³

Government

For administrative purposes, the country is divided into six provinces: Malampa, Penama, Sanma, Shefa, Tafea, and Torba.³⁴ Figure 2 shows a map with provincial administrative divisions.³⁵

The capital and largest city is Port Vila, located on Efate, in Shefa Province.³⁶

Under the 1980 constitution, the president, who serves as head of state, is elected to a 5-year term by an electoral college made up of the unicameral Parliament and presidents of the Regional Councils. Parliament is comprised of 52 members, who are elected to 4-year terms. Parliament elects the prime minister, who is the head

of government, from among its members, and the prime minister then appoints a cabinet called the Council of Ministers.

The constitution also provides for a National Council of Chiefs (Malvatumauri), composed of elected "custom chiefs." This body advises the government on matters relating to customs and tradition.

The Supreme Court is the highest court for both civil and criminal matters. The chief justice is appointed by the president in consultation with the prime minister and the leader of the opposition, while the other justices are appointed by the president with input from the Judicial Service Commission. There are also a Court of Appeal and magistrates' courts. The chief justice appoints two or more justices to the Court of Appeal. Island courts may be established to rule on land disputes.³⁷

Each of Vanuatu's six provinces has its own

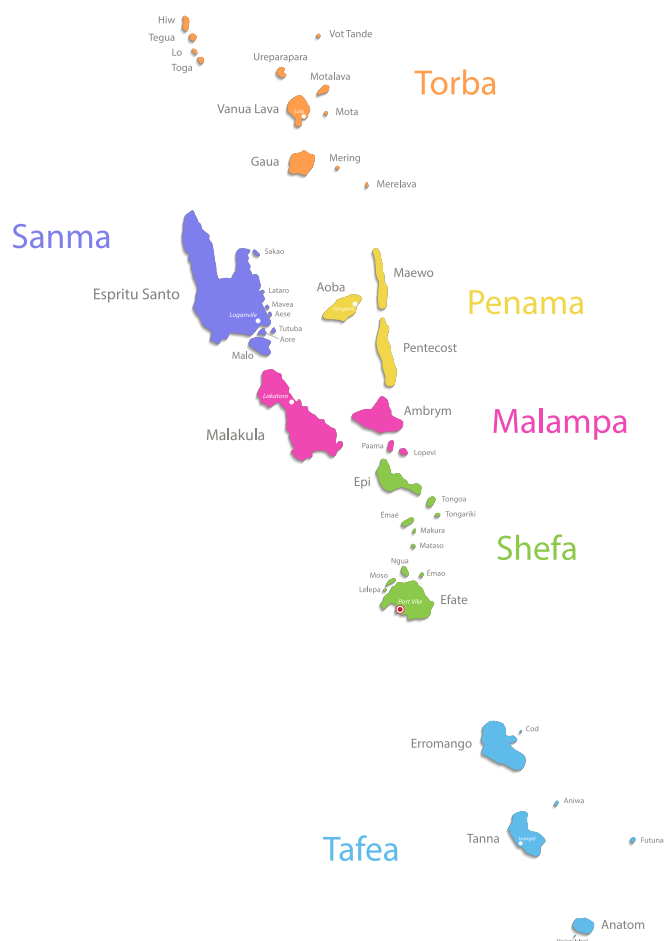


Figure 2: Provincial Map of Vanuatu

Provincial Council that is responsible for local governance. The urban areas of Port Vila (Efate Island), Luganville (Espiritu Santo Island), and Lenakel (Tanna Island) each have their own Municipal Council for governance.³⁸

Economic Profile

The World Bank classifies Vanuatu as a “lower-middle income economy.”³⁹ While it has little arable land, it is dependent on subsistence agriculture, supplemented by fishing and hunting. Tourism and offshore financial services are the largest contributors to Gross Domestic Product (GDP), but sectors such as forestry are seeing a resurgence. Barriers to economic development include few exportable commodities, long distances to markets, and the frequent impacts of disasters.

The government estimates that annualized economic losses (losses from intensive and extensive risk plus indirect losses) are around US\$166.96 million, or around 21% of GDP. However, single catastrophic events are now regularly costing more than 60% of GDP; one example was Cyclone Pam (2015), which caused an estimated US\$449.4 million in damage, equal to 64.1% of GDP. At the same time, the government points out that while economic damage is quantifiable, non-economic loss and damage are also incurred and encompass loss of cultural heritage, traditional knowledge, biodiversity, human health, and community cohesion, all of which contribute to economic loss even if they are more difficult to concretely price.⁴⁰

Traditionally, subsistence agriculture formed the basis of the economy. Food processing (frozen food and fish, and canned meat) and processed wood products added value to the basic products for export.⁴¹ At present, beef, cocoa, coconuts, coffee, copra (dried coconut), fish, kava, taro, timber, yams, fruits, and vegetables are the country’s main exports.⁴² After a government ban on the export of roundwood and limits on annual harvests in the 1990s, earnings from processed wood grew, and wood products now account for a significant

proportion of exports. The sale of commercial fishing rights is another important source of revenue, while there is widespread small-scale fishing for local consumption.⁴³

Tourism plays a major role in the country’s economy. It, along with agriculture, is highly sensitive to the impacts of disasters and external shocks. The hundreds of thousands of visitors that arrive annually contribute massively to both public coffers and private incomes. However, recent global disruptions such as the COVID-19 pandemic undermined the sector, and tourist numbers have not rebounded.⁴⁴ When the COVID-19 pandemic started, the country’s total lockdown in March 2020 brought the tourism industry to a halt. A month later, Tropical Cyclone Harold destroyed infrastructure, damaged crops, and affected around 40% of the population. Estimates place the total economic impact of both events combined at US\$534 million.⁴⁵

Because of its exposure to multiple hazards, by 2060, Vanuatu has a 50% chance of experiencing disaster-related losses exceeding US\$330 million and a 10% chance of experiencing disaster-related losses exceeding US\$51.8 billion, according to a United Nations Office for Disaster Risk Reduction (UNDRR) report.⁴⁶ A World Bank report estimates that disasters could increase Vanuatu’s public debt by around 13 percentage points (around US\$230 million) compared to if Vanuatu suffered no damage from disasters.⁴⁷

Most recently, the powerful earthquake in December 2024 had major economic and livelihood impacts. The economic damage caused by the quake was estimated at US\$197 million (equivalent to 17% of the country’s GDP).⁴⁸ Impacts rocked both the tourism and agricultural sectors, in particular subsistence farms, on which around 80% of the population rely. Due to damage, the international wharf in Port Vila was closed to cruise ships, and many shops and businesses shuttered. Tagabe Bridge on the capital’s main road required repairs, and many buildings were deemed unsafe and had to be demolished.⁴⁹

DISASTER PROFILE

Key factors that drive disaster risk in Vanuatu include geographic location, exposure of population centers to hazards, remote coastal populations, and limited infrastructure and economic safety nets. The major natural hazards to which Vanuatu is exposed are drought, earthquakes, tropical cyclones (TC), tsunamis, and volcanic eruptions. In recent years, simultaneous major hazard events have impacted a majority of the population and resulted in severe economic damage. In 2023, an earthquake of moment magnitude (Mw) 6.5 and two Category 4 TCs, Judy and Kevin, impacted over 80% of the population in a 48-hour period.⁵⁰ Vanuatu's geography, particularly its remote islands, pose logistical challenges to responders and lead to delays to aid delivery.

Hazards

Vanuatu is exposed to a range of hydrometeorological and geophysical hazards. The most frequent hazard events are TCs, volcanic eruptions, and earthquakes. However, the country is also exposed to coastal erosion, drought, disease outbreaks, heatwaves, flooding, landslides, and tsunamis. Vanuatu experienced nearly 50 major disasters during the period 1940-2020. TCs affect the most people and have the largest economic impact. Hundreds of earthquakes strike the country every year and raise the risk of tsunami, and the country also deals with frequent volcanic activity.⁵¹ Hazard events impact infrastructure, livelihoods, and economic development.

Coastal Hazards

An estimated 94% of the population resides along the coastline and is, therefore, exposed to coastal erosion, storm surges, and tsunamis. Environmental changes are expected to increase the frequency of extreme weather events, deplete natural storm “defense” resources such as mangroves, and threaten communities as sea levels rise and push saltwater into communities and water sources. The sea level around Vanuatu

has risen by an average of 6 mm (0.24 in) each year since 1993.⁵²

Sea level rise and coastal erosion pose potential threats to the country's tourism industry and agricultural sector. These hazards could impact the country's scenic beaches and well-known recreational diving spots, thereby damaging a key industry and the livelihoods of many. There are potential damaging impacts to the agricultural sector as well, as most arable land lies in coastal areas, where rising seas and saltwater intrusion threaten food crops.⁵³

Disease Outbreaks

Vanuatu faces public health challenges, including outbreaks of communicable and vector-borne diseases such as dengue, influenza, leptospirosis, measles, pertussis, tuberculosis, and yaws. The World Health Organization (WHO) notes that Vanuatu is highly vulnerable to disease outbreaks, as an influx of infections can overwhelm its limited health system. Moreover, hazard events can disrupt access to clean water, sanitation, food, and basic health services. Disasters can also result in displacement, and overcrowded conditions in emergency shelters can contribute to the spread of disease. Finally, disasters can interrupt routine health services like vaccinations and surveillance and increase the risk of disease outbreaks.⁵⁴

Drought

Two types of drought – meteorological (precipitation deficit) and hydrological (surface and subsurface water flow deficit) – affect Vanuatu. Meteorological drought is a key concern, as there is very high dependence on rainwater catchment for drinking water and agriculture.⁵⁵ Drought can severely impact the country's freshwater and food supplies. However, the Vanuatu's Meteorology and Hydrometeorological Services (VMHS) says that occasional rainfall events are still possible during El Niño, although rainfall events may not

be enough to bring an end to drought.⁵⁶

As with other Pacific Island countries and territories (PICTs), drought in Vanuatu tends to correlate with El Niño events. In late August 2015, the Vanuatu Meteorology and Geo-Hazards Department (VMGD; now the Vanuatu Meteorology and Hydrometeorological Services [VMHS]) confirmed an El Niño event expected to last through the first quarter of 2016. The main risk Vanuatu faced was less-than-average wet-season rainfall. VMGD called on the country to prepare for sustained insufficient precipitation after rainfall had been below normal across most of the country after June 2015. People were advised to collect and save rainwater in water tanks and drums and to continue to plant drought-resilient crops.⁵⁷

Using the 2015 drought as an example, impacts on drought-affected households include longer walks (more than 30 minutes) to collect clean water for cooking, washing, showering, and drinking, as well as increased expenses (US\$12 per trip) related to hiring water trucks. Schooling can be impacted as students are required to support household water collection or to utilize alternative water sources – e.g., the sea – for bathing and, therefore, miss classes. Of course, the loss of agricultural productivity from an extended drought can lead to high rates of food insecurity.⁵⁸

As a result of its drought experience, since 2018, Vanuatu has worked to develop a drought modeling and early warning system that monitors El Niño events.⁵⁹

Earthquakes

Sitting within the “Pacific Ring of Fire” at the meeting of the Australia and Pacific tectonic plates, Vanuatu experiences frequent earthquakes.⁶⁰ This region ranks among the world’s most seismically active areas.⁶¹ As the Indo-Australian Plate dips under the edge of the Pacific Plate, the islands move 10 centimeters (cm; 3.9 in) northwest each year. They also rise 2 mm (0.07 in) higher each year.⁶²

The Vanuatu subduction zone (VSZ), extending north-south just west of Vanuatu, is among the world’s fastest moving plate

boundaries, and it has a history of producing numerous moderate to strong earthquakes, including Mw 7.8-8.0 quakes, most recently in 2013 and 2019. Quakes in the zone are reportedly potentially able to trigger tsunamis that travel from west-southwest to east-northeast, towards Vanuatu.⁶³ There is a more than 20% chance of a potentially damaging earthquake and tsunami occurring in the next 50 years.⁶⁴

Studies suggest that every year Vanuatu is affected by two earthquakes of at least Mw 7.0 and with the potential to generate a tsunami. Some 100-300 small earthquakes can be felt every month. Due to this high exposure to earthquakes, the VMHS upgraded its monitoring network and partnered with counterparts in Fiji, New Caledonia, Papua New Guinea, Samoa, Solomon Islands, and Tonga, to form the Oceania Regional Seismic Network (ORSNET). The regional network detects and assesses the damaging potential of seismic events.⁶⁵

A recent quake highlights the risk posed by earthquakes. On 30 March 2026, a Mw 7.3 earthquake struck off the eastern coast of Espiritu Santo in northern Vanuatu. The epicenter was 48 km (30 mi) east-northeast of Luganville and at a depth of 122 km (76 mi). Vanuatu reported no deaths or injuries from the earthquake, but some buildings suffered minor damage, and a landslide was reported on Malekula Island.⁶⁶

Floods

Flooding is a common hazard event in Vanuatu. It is often triggered by heavy rainfall, which can cause flash floods, riverine flooding, and drainage failure, especially on the steeper volcanic islands and on degraded slopes. In addition to pluvial flooding, communities along the coastline are at risk of storm surge or coastal flooding, especially during a cyclone. Heavy rainfall and flooding can also trigger landslides. Flooding in Maewo in September 2018 triggered a landslide that destroyed the houses and assets of 450 people across three villages. No casualties were reported.⁶⁷

Floods and landslides triggered by rain can

inundate or destroy roads, bridges, and other transport infrastructure, as well as houses, schools, and health clinics. Household gardens and the agricultural sector can also be severely impacted by flooding. Flooding can damage or contaminate water supplies. Public health threats, including the potential spread of water-borne diseases, are a risk during and after flooding.⁶⁸

With the country's dispersed islands and limited road network, even localized flooding has the potential to isolate communities and delay emergency response. Residents of informal settlements around the capital and Luganville are at high risk as they are built on marginal land including along riverbanks and floodplains that are regularly flooded and are commonly built with any available material rather than meeting standard building codes.⁶⁹

Tropical Cyclones

The cyclone season, also known as the hot or wet season, runs from November to April. TCs bring strong winds, heavy rainfall, storm surge, and rough seas, and they have the potential to drive flooding and landslides that cause severe damage.

The country sees 2-3 TCs each season, with the greatest frequency occurring in the months of January and February. According to the VMHS, on average, 20-30 TCs per decade transit Vanuatu and its marginal seas, and 2-5 TCs per decade cause severe damage.⁷⁰ Vanuatu tends to see more powerful and frequent TCs during La Niña years. Between 1971 and 2021, TCs within 500 km (311 mi) of Vanuatu have been more frequent during La Niña years (around 13 cyclones per decade) than during El Niño and ENSO-neutral periods (around 9 cyclones per decade).⁷¹

Out of all the natural hazards to affect Vanuatu, TCs have impacted the most people. They have directly affected over 1 million people during the period 2000-2026.⁷² TCs Judy and Kevin made landfall over Vanuatu on 1 March and 3 March 2023, respectively; combined, they affected approximately 250,000 people. They damaged critical infrastructure and

caused widespread power outages.⁷³ TCs also account for the most displacements caused by natural disasters in the country. In 2020, 80,000 people were displaced by TC Harold.⁷⁴

One of the most devastating TCs to strike Vanuatu was TC Pam, which affected the country in March 2015. TC Pam struck 22 of Vanuatu's islands as a Category 5 storm on 13 March. It packed wind speeds of 250 km per hour (kph; 155 mi per hour [mph]) and gusts of over 320 kph (199 mph). The storm's eye passed close to Efate and Port Vila. A total of 166,600 people were affected. In Tanna, 50% of shelters were destroyed, and in Erromango, up to 90% of shelters were wiped out.⁷⁵ Eleven fatalities were confirmed, all in Tafea and Shefa. Approximately 17,000 buildings were damaged or destroyed; they included houses, schools, clinics, and other medical facilities. The cyclone harmed the livelihoods of over 40,000 households, as it destroyed over 90% of food crops. Among all agricultural households in disaster-affected provinces, 50% lost all or part of their crops.⁷⁶

Tsunami

Due to the seismicity of the region, Vanuatu is exposed to tsunami risks. It is particularly prone to impacts because of the risk of potential "run-up," which occurs when the tsunami waves push a large amount of water above sea level onto the shore. For most of Vanuatu's at-risk coastal areas, the maximum vertical height above sea level exposed to tsunami run-up is estimated at 3-4 m (9.8 - 13.1 ft); however, they could reach higher than 15-20 m (49-65 ft) on the west coasts of Espiritu Santo and Malekula. The effects of tsunami can be amplified if they coincide with high or king tides.⁷⁷

The latest earthquake-generated tsunamis triggered within the VSZ were in December 2018 and March 2022 when quakes between Mw 6.9 and 7.5 generated tsunamis as high as 2 m (6.6 ft). They affected the southern islands of Vanuatu.⁷⁸ In 1999, a Mw 7.5 earthquake generated a large tsunami with 6-m (20-ft) waves that destroyed the Baie Martelli village, killed 10 people, injured over 100 people, and

affected over 23,000 people. According to research, there is a more than a 20% chance of a potentially damaging earthquake and tsunami occurring in the next 50 years.⁷⁹

Volcanic Activity

In recent years, VMHS has closely monitored six active volcanoes – Manaro Voui (sometimes interchanged as Ambae volcano) on Ambae island; Yasur on Tanna; Benbow and Marum on Ambrym; Lopevi on Lopevi; Mount Garet on Gaua; and Suretamatai on Vanua Lava. As of 17 August 2026, the VMHS was actively monitoring these volcanoes, as well as the East Epi group of submarine cones. The VMHS posts the latest volcanic alert levels, and “Volcanic Alert Bulletins” are issued every last Thursday of the month or when there is a significant change in volcanic activity.⁸⁰

The volcanoes in Vanuatu pose various threats to the population depending on the type of volcano and where they are located. Eruptions may produce lahars (mudflows), pyroclastic or hot ash flows, volcanic gases, ashfall, lava flows, volcanic quakes, and potential tsunamis. These events are often localized; however, ashfall can spread hundreds or thousands of kilometers from the source. Volcanic activity can impact food and water sources. Fresh water sources can be contaminated by ashfall, which can also damage food crops and other vegetation. Eruptions pose health risks, including increased respiratory health risks and reduced visibility. Finally, volcanic activity can impact Vanuatu’s tourism industry by disrupting flights and reducing the attractiveness of the country as a destination.⁸¹

From 2000 to 2026, volcanic eruptions directly affected at least 47,000 people.⁸² Volcanic activity has also resulted in significant displacement. For instance, the 2017 eruption of Manaro Voui caused the displacement of 11,000 people, and another eruption of Manaro Voui in 2018 displaced a similar number

of people.⁸³ The 2018 eruption also caused extensive economic damage that triggered a US\$3.4 million budget allocation from the government for displaced populations and lost livelihoods.⁸⁴ In March 2026, Manaro Voui was reported to again be active, with emissions of gas and dark smoke and intermittent ashfall. The activity affected South Ambae, which experienced minor ashfall and impacts on water sources and gardens, while West Ambae experienced occasional light ashfall.⁸⁵

Photo 1 shows volcanic activity of Yasur volcano on Tanna Island.⁸⁶

Disasters by Numbers

An examination of data about past disasters in a country can indicate how future hazard events may impact the country’s people, economy, and land. This section breaks down available statistics from disaster events in Vanuatu since the year 2000 to illuminate trends over time and space to understand what types of events may necessitate an appeal for international assistance and, therefore, potential international military support to civilian responders. Moreover, it may support practitioners working toward Vanuatu’s preparedness and capacity to mitigate hazard impacts.

The data used in this section come from the Centre for Research on the Epidemiology of Disasters’ Emergency Events Database (EM-DAT). The EM-DAT collects and makes



Photo 1: Yasur Volcano

available to the public data on the occurrence of disasters globally. It considers disasters to be events involving an unexpected and overwhelming harmful impact on human beings and limits inclusion of events in the database by the following thresholds:

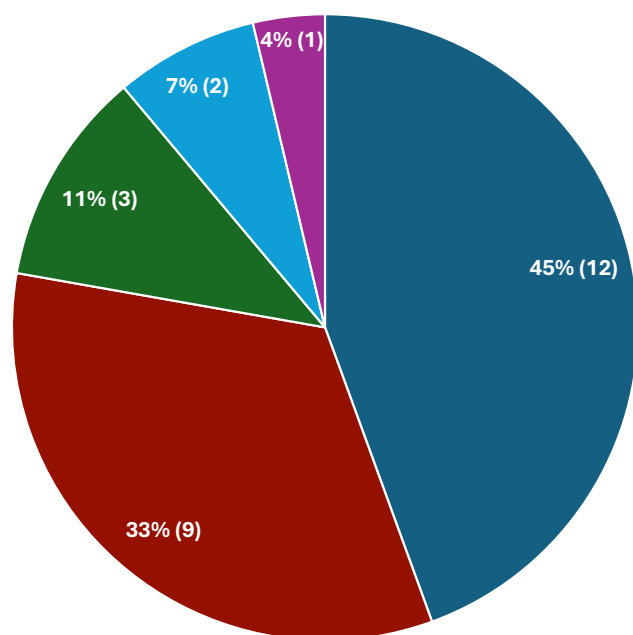
- At least 10 deaths (including dead and missing)
- At least 100 affected (people affected, injured, or homeless)
- A call for international assistance or an emergency declaration⁸⁷

The data in EM-DAT derive from multiple sources, including UN agencies, national statistics and disaster offices, and national and international technical agencies and organizations. Because of the specific criteria set out by the database and its sources, there are data limitations.⁸⁸ In fact, for small island developing states like Vanuatu, even small numbers of people affected may mean that a significant portion of their population sustained impacts from a hazard event. Moreover, a hazard event with minimal human impacts may still wreak devastation on livelihoods that, in a larger country, would be easily absorbed by national economic and political capacity. Nonetheless, EM-DAT data are used in this section because of their standardization and clarity.

EM-DAT records 27 disasters for the period 2000–2026 (August) in Vanuatu. All events originate from natural hazards rather than anthropogenic ones.⁸⁹

Of the 27 disasters recorded, 12 are storms (including tropical cyclones), 9 are volcanic activity, 3 are earthquakes, 2 are floods, and 1 is an epidemic. Figure 3 illustrates the proportions of disasters by hazard type for the period.

The most common hazard event – storms – is also the one that affects the most people. The 12 storms recorded in the data set between 2000 and August 2026 affected 1,020,771 people. The second most common hazard – volcanic activity – affected 46,869 people during the period. However, earthquakes, the third most common hazard event, affected more of the



■ Storm ■ Volcanic Activity ■ Earthquake ■ Flood ■ Epidemic

Figure 3: Percent of Disaster Events, by Hazard Type (2000–2026 [August])

population than did volcanic activity; three quakes affected some 81,000 people, or nearly half again as many as were affected by nine volcanic episodes, according to the database. Floods affected much smaller portions of the population – 3,950 people – while there was no number of people affected for the one epidemic event recorded in the database.

Figure 4 illustrates the prevalence of storms as the hazard with the greatest total of affected people in Vanuatu.

Recent Disasters

The following is a list of the major disasters in Vanuatu over the past 10 years (2016–2026).

Drought – July 2026

In July 2026, the VMHS declared a meteorological drought for northern parts of the country including Torba and parts of Sanma, Penama, and Malampa provinces, which had experienced below-average rainfall over the previous three months. According to the VMHS, a declaration of a meteorological drought acts as an early warning that, if drought conditions persist, a more severe agricultural drought may occur. El Niño had been declared in early 2026, and this ENSO phase often correlates with

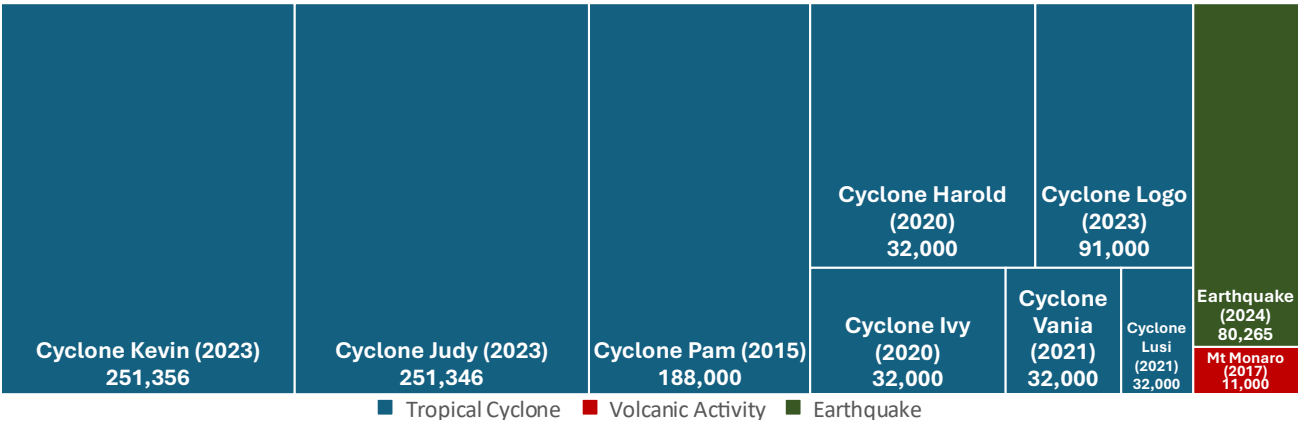


Figure 4: Total People Affected by Hazard Event (2000-2026 [August])

drought conditions across the PICTs.⁹⁰

Earthquake – March 2026

On 30 March 2026, a Mw 7.3 earthquake struck off the eastern coast of Espiritu Santo in northern Vanuatu. The epicenter was located 48 km (30 mi) east-northeast of Luganville and at a depth of 122 km (76 mi). According to the NDMO, no deaths or injuries were reported; however, some buildings suffered minor damage, and a landslide was reported on northeast Malekula Island, where some roads were affected. A power outage at a water treatment facility affected more than 15,000 people in Luganville.⁹¹

Pertussis Outbreak – 2025-2026

Vanuatu experienced a Pertussis outbreak in 2025. It lasted into mid 2026 with some 833 cumulative reported cases in the country as of 13 July 2026. The outbreak resulted in at least seven deaths. Most cases were in Tanna, and one death was reported in Shefa. Geographically, the disease remained concentrated in Efate (55% of the cases) and Tanna (37% of the cases). In July 2026, officials declared the outbreak over.⁹²

Earthquake – December 2024

A Mw 7.3 quake struck 30 km (18.64 mi) west of Port Vila on 17 December 2024. It triggered landslides and building collapses, and it damaged roads, bridges, water supplies, telecommunications, and port facilities. The earthquake left at least 14 dead and more than 265 injured. It affected around 80,000 people,

with 36,000 directly impacted in Port Vila. An additional 2,400 were displaced. Widespread damage was reported to areas across Efate and surrounding islands, with two major water reservoirs in Port Vila being damaged and access to the main airport and seaport limited due to road damage. The quake triggered landslides that obstructed road access in Efate and outer islands.

The Port Vila International Airport was closed to commercial flights for nearly a week.⁹³ Essential services were disrupted, and access was constrained due to damage to roads, bridges, and port infrastructure. The landslides and transport restrictions led to delayed relief efforts.⁹⁴ Severe structural damage was recorded at the Tagabe, Teouma, and Blacksand bridges.⁹⁵ The quake prompted the government to declare a State of Emergency, which lasted until 24 December 2024, and to request assistance.⁹⁶

TC Lola – October 2023

TC Lola made landfall on 24 October 2023 on the northern islands of Torba province. It was a Category 4 TC that brought heavy rainfall, strong winds (maximum sustained winds up to 222 kph [138 mph]) and storm surges. The TC tracked across to Penama and Malampa but weakened to a Category 1 cyclone by the time it reached Port Vila. The most affected provinces were Penama and Malampa, areas that had been previously affected by TC Judy earlier that year. Around 110,750 people were affected in these provinces. The damage prompted the government to declare a State of Emergency

for six months for Torba, Sanma, Penama, Malampa, and Shefa provinces.⁹⁷

TCs and Earthquakes – March 2023

TCs Judy and Kevin (both Category 4 storms) made landfall in Vanuatu on 1 and 3 March 2023, respectively. They were joined by twin earthquakes of Mw 6.6 and 5.4 on 3 March off Espiritu Santo. On 2 March, national authorities declared a State of Emergency in Mera Lava, Penama, Ambrym, Paama, Shefa, and Tafea; the declaration was then extended to cover the entire country three days later,⁹⁸ after most parts of Port Vila were reported to be without power.⁹⁹ The cyclones caused dozens of injuries but no deaths, while no major impact was reported after the earthquakes.

The NDMO reported that the Port Vila area and Tanna were badly affected, with economic damage estimated at US\$50 million. An estimated 30,000 households were affected.¹⁰⁰ Later assessments found that more than 251,000 people – 80% of the country's population – were impacted by the cyclones and earthquakes.¹⁰¹ In the hard-hit provinces of Shefa and Tafea, 90% of homes were damaged, and upwards of 123,000 people were affected. Communities in these areas faced water-borne diseases, gastroenteritis, and ringworm, due to a lack of safe drinking water, fresh food, and adequate sanitation. By late March, concerns had risen over an increase in leptospirosis cases linked to using contaminated water sources.¹⁰²

Yasur Volcano Eruption – October 2021

There was an increase in the level of activity at Yasur, on Tanna Island, 200 km (124 mi) south of Port Vila, on 22 October 2021. The VMGD confirmed “major unrest” on 1 November as the volcano continued to emit substantial plumes of volcanic gas and ash. Authorities established a danger zone of 1 km (0.62 mi) around the volcanic cone, and some 1,622 people in nearby villages were affected by falling ash that destroyed gardens and contaminated water sources. Reports from the Provincial Disaster Office indicated that people had no access to clean water due to the acid rain

and ashfall.¹⁰³

COVID-19 and TC Harold – 2020-2023

The government dealt with the COVID-19 pandemic in conjunction with the effects of TC Harold. On 26 March 2020, the President signed a Declaration for a State of Emergency for a 2-week period for the purpose of strengthening prevention and containment measures in response to the declaration of the pandemic. The emergency was extended multiple times for the dual purposes of continuing COVID-19 prevention and containment measures and responding to TC Harold.

TC Harold hit Vanuatu on 6 April 2020. It packed winds reaching 250 kph (155 mph) and caused extensive damage to infrastructure and agriculture and affected the livelihoods of a large portion of the population. Due to pandemic restrictions, there were no tourists in the country, and economic activity was limited when TC Harold struck.

The storm left more than half of the country's total population, or around 160,000 people, in need of assistance. The most affected were in the northern provinces of Sanma, Malampa, and Penama, especially the islands of Espiritu Santo, Maewo, Pentecost, and Ambae. It was initially estimated that 80-90% of the population was displaced, while 60% of the schools and 70% of health centers were damaged. TC Harold also reportedly damaged around 70% of the buildings in Luganville. At least 60% of crop land was severely damaged. At the household level, severe losses of small livestock and stored seeds and crops were reported. Damage was also reported at 96 health facilities across 6 provinces, where care that had been destabilized by COVID-19 movement restrictions was further disrupted.¹⁰⁴

The Vanuatu TC Harold and COVID-19 Post Disaster Needs Assessment found that the monetary value of the combined disaster impacts stood at US\$617 million, approximately 61% of GDP in 2020. The total cost of recovery and reconstruction activities was estimated at US\$358 million.¹⁰⁵

The pandemic complicated the cyclone

response. A TC Harold Lessons Learned Workshop found that the pandemic and border closures led to complex procedures that slowed the import of relief supplies and delayed distribution once they were in country.¹⁰⁶ Moreover, as of 10 May 2023, Vanuatu had reported a total of 12,016 confirmed cases of COVID-19; there had been 14 deaths.¹⁰⁷ Because of border closures, the country evaded most of the health impacts of COVID-19. The country did not record cases linked to community spread until 4 March 2022.¹⁰⁸

Dengue Outbreak – April 2019

Between January and April 2019, Vanuatu reported 198 suspected dengue cases and 18 confirmed cases. The Ministry of Health (MoH) reported that 66% of cases were among people aged 5-24 years, and 66% of people infected were men. There were no severe cases or deaths. Sanma and Shefa were the areas most impacted with Port Vila and Luganville each having more than 100 suspected cases during the 4 months of the reporting period. The MoH had undertaken community awareness and prevention measures, including outdoor mosquito spraying and enhanced surveillance measures.¹⁰⁹

Monaro Voui Volcano – 2017-2018

Increased activity at the Monaro Voui volcano on Ambae led to two evacuations of the entire island's population, first in September 2017 and again in July 2018. During these periods, the danger zone ranged 2-3 km (1.2 - 1.9 mi) from the center of the caldera.

On 23 September 2017, VMGD increased the activity alert to indicate that flying rocks and volcanic gas were affecting areas within 6.5 km (4 mi) of the volcano's crater. As of 25 September, provincial authorities had evacuated 6,800 people from high-risk areas to evacuation centers, and thousands more evacuated later. By early October, the danger zone had been reduced and, on 20 October, the government decided to repatriate 11,000 evacuees.¹¹⁰

The second evacuation began on 18 March 2018, when the government raised

the alert level. In mid-April, the volcano resumed emissions of ash and smoke. After approximately 750 people lost their homes due to volcanic ash and landslides, the Council of Ministers declared a state of emergency on Ambae and ordered the entire population to evacuate on 23 April. Approximately 3,500 people evacuated as the state of emergency was extended through 13 July. On 16 July, much of the east and north of Ambae experienced heavy ashfall after the eruption intensified, and a second state of emergency was declared to run through 26 September.¹¹¹

TC Donna – May 2017

On 3 May 2017, a tropical disturbance formed north of Vanuatu. The disturbance developed into TC Donna and would eventually intensify into a Category 3 system 175 km (108 mi) west of Torres. The government raised alert levels across northern provinces and issued warnings over radio and via text messages. A 6 May rapid assessment of Torba, the most affected area, included Community Disaster Committees on Loh, Hiu, Tegua, and Toga islands. They found that a significant number of houses were either destroyed or damaged. Almost all residents of Loh had moved to an evacuation center. On 14 May, Hiu Island reported contaminated water and increased cases of diarrhea.¹¹²

Dengue Outbreak – 2016-2017

From 11 November 2016 through 5 January 2017, there were 4,011 suspected cases of dengue reported in the country. Dengue serotype-2 was confirmed in two samples by New Zealand's Institute of Environmental Science and Research Limited. In the final week of February 2017, over 1,700 cases were reported amidst an escalating outbreak. Most suspected cases were in Port Vila, with cases also reported in Luganville, Lenakel, and Norsup. As of 4 May, the outbreak had slowed. There were 147 hospitalizations during the course of the outbreak.¹¹³

DISASTER MANAGEMENT POLICY, PLANNING, AND RESPONSE

Vanuatu has established a comprehensive DM system spanning preparedness, response, and recovery. The DRM Act of 2019 provided the principal legal framework and established institutions and procedures at the national, provincial, and municipal levels. Regional and international partners are integrated through government-led clusters and preparedness mechanisms, including formal procedures for requesting, accepting, and coordinating international disaster assistance.

National Disaster Management System

Vanuatu's DM framework has evolved considerably over the past decade. Rather than treating disasters principally as emergencies to be managed after impact, national law and policy increasingly frame disaster risk as a development, climate, land-use, fiscal, social-protection, and governance issue that must be addressed before, during, and after a hazard event. The result is a layered framework in which legislation establishes authorities and institutions, national policies establish strategic direction, operational plans translate those authorities into preparedness and response procedures, and regional and international frameworks shape broader resilience objectives.

Legal Frameworks and Policies

The principal legal foundation is the DRM Act, which established a clear institutional hierarchy and formalized responsibilities at national, provincial, and municipal levels. Within the context of the law, there is a policy environment shaped by sustainable development goals and a risk-informed land development policy. Disaster risk financing reform, the national climate policy, and operational preparedness instruments developed by NDMO and its partners.¹¹⁴

Disaster Risk Management Act of 2019

The DRM Act is the principal legislation governing DM. It marked an important change in national policy by moving beyond a predominantly emergency-management model toward integrated DM. The Act explicitly incorporates disaster risk reduction (DRR) alongside preparedness, response, subnational governance, international humanitarian assistance, and disaster financing.¹¹⁵

The law's objectives make this shift explicit. The legislation seeks to:

- Establish institutions and mandates at national, provincial, and municipal levels
- Facilitate whole-of-government coordination
- Strengthen participation by communities, civil society, and other actors
- Integrate DRR and climate change adaptation into government systems
- Establish effective preparedness and response arrangements
- Regulate states of emergency and international disaster assistance
- Establish an Emergency Fund¹¹⁶

The Act provides the legal foundation for the NDC, NDMO, NDMO Director as National Controller, NEOC, National Cluster Framework, Provincial Disaster and Climate Change Committees, and Municipal Disaster and Climate Change Committees. It also establishes responsibilities for the Vanuatu Police Force (VPF) and other first responders.¹¹⁷

For preparedness, the Act requires NDMO to develop and implement national DRM plans, support preparedness among government agencies and partners, maintain hazard and disaster information, promote DRR and climate adaptation across government policy and planning, develop NEOC standard operating procedures (SOP), and issue community alert messages based on technical advice from the responsible authority.¹¹⁸ For response, the

legislation creates a deliberately distributed system. The NDMO Director becomes National Controller and can mobilize specified government resources and exercise operational authorities. The NEOC provides the national mechanism for coordination of monitoring, warning, and response among government and partner agencies.¹¹⁹

Meteorology, Geological Hazards and Climate Change of 2016

The Meteorology, Geological Hazards and Climate Change Act provides the institutional and legal foundation for national meteorological, geohazard, and climate functions and formalizes elements of Vanuatu's integrated climate and disaster risk governance architecture.¹²⁰ The legislation is particularly relevant to risk monitoring, forecasting, early warning, climate services, and geohazard management. It provides the statutory framework within which Vanuatu's meteorological and geohazard institutions operate and formalizes the National Advisory Board on Climate Change and Disaster Risk Reduction.¹²¹

Climate Change and Disaster Risk Reduction Policy 2016–2030

The Vanuatu Climate Change and Disaster Risk Reduction Policy 2016–2030 provides the principal integrated national policy linking climate adaptation and DRR. The policy represented a deliberate decision to address climate change and disaster risk through an integrated governance framework rather than parallel institutional systems. Among its priorities are strengthening governance, improving climate and disaster information and early warning, mainstreaming risk into sector and development planning, strengthening community resilience, improving preparedness and response, and improving recovery arrangements.¹²²

Lead Agencies

Authority and coordination duties are

distributed among the NDC, NDMO, NEOC, government ministries and agencies, national clusters, provincial and municipal disaster committees, emergency services, civil society, and partner organizations. During a major disaster, these structures are intended to function as an interconnected system – i.e., technical agencies identify and monitor hazards, NDMO coordinates preparedness and response, the NEOC provides the national operational coordination platform, clusters organize sector activities, provincial and municipal authorities manage subnational operations, and needs that cannot be met domestically can be escalated through a formal process for international assistance.

National Disaster Committee (NDC)

The NDC is Vanuatu's senior statutory committee responsible for national-level DM oversight and advice. Its membership is deliberately senior and cross-government and consists of Directors-General from the NDMO, Foreign Affairs and Trade, Internal Affairs, Infrastructure and Public Utilities, and the Prime Minister's Office, alongside the NDMO Director, Police Commissioner, and Chief Executive of VRCS. The chair may invite additional technical or operational advisors according to the nature of the disaster.¹²³

The NDC's role is principally strategic decision-making, oversight, and advice. It advises government agencies on preparedness and response, oversees DRM policies, advises on emergency response and whether a state of emergency should be declared, extended, or terminated, and advises on requests for international assistance. The NDC can also require government agencies to undertake actions or make personnel, facilities, or assets available for rescue and relief operations. The NDC also has a central role in decisions concerning international assistance.¹²⁴

The DRM Act requires the NDC to meet at least four times each year, with additional meetings as necessary. NDMO serves as the secretariat.¹²⁵

National Disaster Management Office (NDMO)

The NDMO is the principal national agency responsible for coordinating DRM, preparedness, and response. It is a department within the Ministry of Climate Change Adaptation, Meteorology & Geo-Hazards, Energy, Environment and Disaster Management (MOCCA). The 2019 DRM Act established NDMO as both the national coordinating and monitoring body for DRM and the institution responsible for coordinating preparedness, response, and facilitation of international humanitarian assistance.¹²⁶

NDMO's mandate spans the DM cycle. Its statutory functions include:

- Developing DM policies and strategies
- Implementing NDC decisions
- Developing and implementing the National DRM Plan
- Supporting government agencies, partners, and communities
- Maintaining hazard and disaster information
- Encouraging the mainstreaming of DRR and climate change adaptation across government policy
- Developing the SOP for the NEOC

NDMO is also responsible for issuing community alert messages concerning potential threats on the advice of the VMHS through communication channels accessible to different groups within communities.¹²⁷ This responsibility illustrates an important division of functions. Technical agencies such as VMHS determine and communicate scientific information concerning hazards, while NDMO translates hazard information into DM messaging, preparedness actions, and coordination measures. The distinction becomes especially important during events in which scientific warning and government protective action occur in parallel.¹²⁸

The Director of NDMO holds particularly important operational authority. Under section 12 of the DRM Act, the Director becomes the National Controller during a disaster. The Director may require government agencies to make vehicles, plans, office space, equipment,

or personnel available for response, rescue, and relief operations. Once an official warning has been issued, the Director may also order the public to vacate high-risk areas and may order first responders to respond to a disaster threatening human life.¹²⁹

National Emergency Operations Centre (NEOC)

The NEOC is Vanuatu's national operational coordination facility during emergencies and disasters. The DRM Act formally established the NEOC and authorizes the NDMO Director to activate, operationalize, and deactivate it.¹³⁰ Once activated, the NEOC becomes the central platform through which government agencies and partner organizations coordinate disaster monitoring, warning, and response. Its functions include:

- Coordinating actions resulting from NDC direction
- Preparing and disseminating reports and other information to partner agencies
- Keeping the public informed about disaster warnings, events, and response through the media

The DRM Act specifies that the NEOC is operated by NDMO staff together with officers from other government agencies as agreed or determined by the Director.¹³¹

National Cluster System

The national clusters were established under the DRM Act to strengthen disaster preparedness and responses through predictability, accountability, and partnership by ensuring better coordination.¹³² The DRM Act allows the NDC to establish a National Cluster, activate or deactivate a National Cluster, and appoint a Government Lead Agency for a National Cluster.¹³³ A government agency leads each cluster, and a humanitarian partner holds a co-lead role. Vanuatu's Inter-Cluster is the coordinating mechanism for the clusters.¹³⁴ During response, the cluster system provides the primary mechanism for organizing sector-specific assessments, planning, information management, partner coordination, and

identification of unmet needs.¹³⁵ Figure 5 shows Vanuatu's DM structure.¹³⁶

Table 1 provides the agencies and partners that lead or co-lead the national clusters.¹³⁷

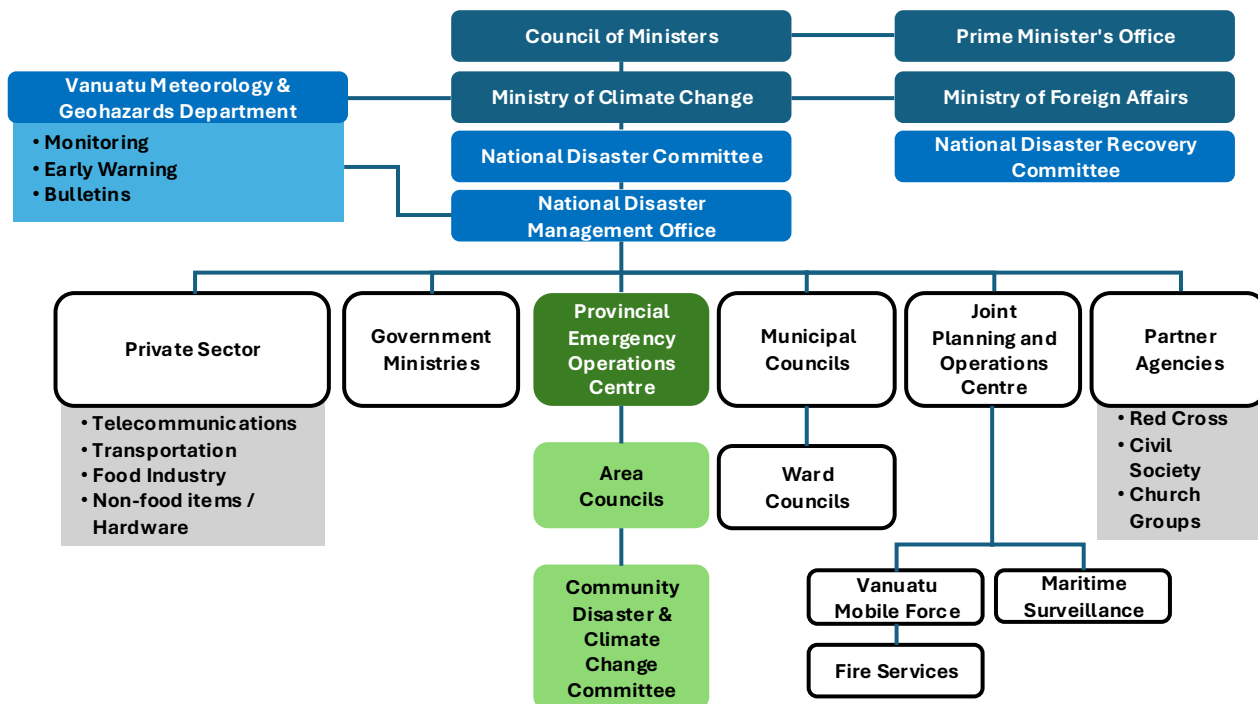


Figure 5: Vanuatu's Disaster Management Structure

Cluster	Lead	Co-Lead
Business Resilience	Ministry of Tourism, Trade, Commerce, and Ni-Vanuatu Business	Food and Agriculture Organization (FAO), World Food Programme (WFP)
Displacement and Evacuation Centre Management	NDMO	International Organization for Migration (IOM)
Education	Ministry of Education and Training	Save the Children
Emergency Shelter	NDMO	VRCS
Emergency Telecommunications	Office of the Government Chief Information Officer	Office of Telecommunications, Radiocommunications, and Broadcasting Regulator
Energy Services	Energy Department	
Food Security and Agriculture	Ministry of Agriculture, Livestock, Fisheries, and Biosecurity	FAO, WFP
Gender and Protection	Ministry of Justice and Community Services	Save the Children, CARE
Health and Nutrition	Ministry of Health	WHO
Logistics	NDMO	WFP
Maritime Search and Rescue	Vanuatu Maritime Safety Authority	
National Search and Rescue	VPF	
Transport and Infrastructure	Ministry of Infrastructure and Public Utilities	
Urban Search and Rescue (USAR)	VPF	
Water, Sanitation, and Hygiene (WASH)	Ministry of Lands and Natural Resources	United Nations Children's Fund (UNICEF)

Table 1: Cluster Leads and Co-Leads

Other Responders

Other government agencies retain their normal sector responsibilities during disasters. Health authorities manage emergency health operations; infrastructure agencies assess roads and public works; agriculture and fisheries authorities assess productive-sector losses; education authorities manage school impacts and continuity; utilities companies work to restore essential services; and other ministries contribute personnel, assets, and technical expertise.¹³⁸ The national DM framework is therefore best understood as a system for coordinating existing government capabilities, not as a separate institution expected to possess every operational capability itself.

Vanuatu has developed an important national civil society coordination architecture for humanitarian action. At its center is the Vanuatu Humanitarian Team (VHT), a network established to improve coordination among humanitarian organizations and between those organizations and government. NDMO identifies the VHT as an operational partner; the international NGO Oxfam has historically served as its convener. The network has included the VRCS, French Red Cross, Vanuatu Association of NGOs (VANGO), Oxfam, CARE, Save the Children, World Vision, Adventist Development and Relief Agency, UN entities, and other organizations.

The VHT has worked with NDMO and government clusters on preparedness as well as emergency response. This arrangement gives Vanuatu's NGOs two complementary paths into national disaster operations. Individual organizations participate in the technical cluster corresponding to their expertise, while the VHT provides a broader mechanism for humanitarian coordination, information exchange, preparedness, and engagement with NDMO. This partnership is particularly important for organizations with established community networks outside Port Vila. Their staff and partners may possess information about individual communities, vulnerable groups, access conditions, local leadership, and immediate needs that cannot be generated

quickly from centralized government assessments alone. Concurrently, participation in the national coordination system helps ensure that NGOs distribute consistent government-approved information, share assessment findings, avoid duplicating assistance, and direct resources toward identified gaps.¹³⁹

Subnational and Local Implementation

Vanuatu's DM system is designed to support coordinated response across a dispersed archipelago. Provincial governments, municipalities, Area Councils, community organizations, customary chiefs, churches, Red Cross volunteers, NGOs, and multiple sectors provide connective tissue between the national DM system and affected communities. During a major event, these structures carry warnings and preparedness instructions outward, organize local resources, develop the first picture of impacts and needs, and communicate requirements back to the NDMO and NEOC.¹⁴⁰

The legal foundation for this decentralized system is Part 5 of the DRM Act, which establishes a Provincial Disaster and Climate Change Committee (PDCCC) for each province and a Municipal Disaster and Climate Change Committee (MDCCC) for each municipality that fall under the NDMO/MOCCA. The Act gives these bodies responsibility not only for emergency response but also for preparedness, planning, DRR, climate change adaptation, public awareness, warning dissemination, assessment, and coordination of available resources.¹⁴¹

There are also Area Councils – local government structures through which provincial authorities connect with communities – and Community Disaster and Climate Change Committees, which are community-based mechanisms developed through government, Red Cross, and NGO programming rather than statutory bodies established under the DRM Act.¹⁴² These distinctions help in determining who has authority to coordinate resources, who communicates information, and where an external responder should enter the system.

Provincial and Municipal Disaster and Climate Change Committees (PDCCC and MDCCC)

A PDCCC comprises each provincial government region's Secretary General, Provincial Disaster Officer, and Police Commander, as well as planners, finance officers, senior officers of government departments, representatives of the gender and protection sector, representatives of local authorities, and representatives of NGOs.¹⁴³

PDCCCs have substantial responsibilities before a disaster occurs. They are required to:

- Develop the Provincial Disaster Response Plan
- Support implementation of government preparedness and response policies
- Coordinate DRR and climate change adaptation activities with communities
- Conduct training and awareness
- Disseminate disaster information and warnings through Area Councils and local communities.¹⁴⁴

The DRM Act envisages provincial committees as standing disaster-governance bodies rather than committees assembled only once an emergency begins.

During response, the PDCCC is responsible for coordinating impact assessments, deciding on the use and deployment of available provincial resources, liaising with NDMO regarding required assistance, and coordinating emergency and disaster response within the province.

During a large-scale emergency, provincial coordination may be conducted through a Provincial Emergency Operations Centre (PEOC). Provincial plans developed before enactment of the DRM Act describe this operational model in detail. The Sanma Provincial Disaster and Climate Change Response Plan, for example, sets out procedures for disaster preparedness and emergency operations and places provincial coordination under the Secretary General and provincial disaster structure.

When communications remain functional,

a PEOC can consolidate reports from multiple islands and Area Councils rather than requiring every village to communicate independently with the national NEOC. When communications are degraded, the provincial level can also become the point at which incomplete information is pieced together from High Frequency (HF) radio, mobile telephone, police networks, government officers, Red Cross branches, NGOs, maritime operators, and returning assessment teams.

MDCCCs are intended to perform functions similar to PDCCCs within urban jurisdictions. An MDCCC is chaired by the Town Clerk, and membership includes the Senior Town Planner, a Department of Local Authorities representative, a municipal councilor, a gender and protection representative, an NGO representative nominated by VANGO, and a private-sector representative nominated by the Vanuatu Chamber of Commerce and Industry. The Provincial Disaster Officer serves as secretary. Like PDCCCs, MDCCCs are required to meet at least four times each year.¹⁴⁵

Area Councils

Between the province and individual communities, Area Councils and Area Council Secretaries provide a critical connection. They help move warnings, assessment information, and requests between provincial authorities and settlements that may be separated by mountains, seas, poor roads, or unreliable telecommunications.

The DRM Act expressly requires PDCCCs to disseminate disaster information and warnings through Area Councils and local communities. The Act does not establish a separate statutory disaster committee at Area Council level, but it clearly recognizes the Area Council as part of the provincial warning and communication pathway.

The Area Council level is especially useful in DM because it can aggregate information rather than merely pass messages. A provincial authority may need to know not only that one village has damaged houses but also whether several communities in the same area have lost

water systems, whether roads or boat access remain usable, whether food stocks have survived, and which settlements have not yet communicated.¹⁴⁶ An Area Council Secretary can help consolidate that local picture before information reaches the PEOC or PDCCC.

Warning dissemination provides one of the clearest examples of how the national and subnational systems interlock. VMHS provides technical hazard information, while NDMO and national authorities issue DM messaging and preparedness instructions. PDCCCs then disseminate warnings through Area Councils and communities.¹⁴⁷ From there, information may be moved through multiple channels: Area Council Secretaries, chiefs, churches, schools, health workers, Red Cross branches and volunteers, NGOs, radio, telephone, SMS, social media, HF radio, or face-to-face. The system is intentionally redundant because no single communications platform can be assumed to survive a severe cyclone, earthquake, volcanic event, or tsunami.¹⁴⁸

The same network that carries warnings outward becomes the principal source of information moving inward after impact. Initial information may originate with community leaders, Area Council Secretaries, police, sector officers, health facilities, schools, Red Cross volunteers, NGOs, telecommunications providers, or other people able to communicate from the affected area. The DRM Act provides a firm legal basis by explicitly making the PDCCC responsible for coordinating assessments of disaster impacts in affected areas.

Other Subnational Actors

Subnational response is inherently multi-agency. The statutory membership of the PDCCC deliberately embeds provincial administration, police, government sectors, local authorities, gender and protection actors, and civil society in the same coordination structure.¹⁴⁹

The DRM Act specifically provides for a VANGO-nominated NGO representative on

each PDCCC, while the MDCCC likewise includes an NGO representative and a private-sector representative. This feature is important for a humanitarian response because it provides a formal route through which civil society's knowledge and capacity can enter provincial decision-making. An NGO may participate in a provincial response while also reporting through a national cluster or the VHT. These overlapping connections are not necessarily duplication; they allow local information to reach both geographic and sector coordination mechanisms.

Civil-Military Coordination in Disaster Response

Civil-military coordination in Vanuatu reflects the country's distinctive security architecture and its strong preference for civilian-led, nationally coordinated disaster response.

Vanuatu does not maintain a standing military. Instead, the Vanuatu Mobile Force (VMF) is a paramilitary component of the VPF. The VPF describes the VMF's primary role as assisting the general-duty police in maintaining law and order and its secondary role as providing a limited first line of defense in the event of an external threat.¹⁵⁰ Although VMF personnel receive military training, use military ranks and organization, and regularly train with foreign militaries, disaster operations remain embedded within Vanuatu's civilian DM and policing structures rather than under a separate ministry or national armed forces command.¹⁵¹

Under the DRM Act, the NDMO is primarily responsible for coordinating international humanitarian assistance, including foreign military assets. The NDMO ensures that all foreign military support aligns with national priorities and is integrated into existing response structures. The Joint Planning and Operation Centre (JPOC), housed within the VPF, serves as the operational hub for coordinating both local and foreign military activities. The JPOC facilitates logistics, communications, and deployments in alignment with the NEOC and the NDMO.¹⁵²

Vanuatu Police Force (VPF)

The VPF provides the principal national security capability available to support civil authorities during emergencies. Its General Duties Branch, VMF, Police Maritime Wing, communications functions, and other specialist elements give civilian authorities options of capabilities that can be mobilized when a disaster exceeds the capacity of civilian agencies alone.¹⁵³

The VMF can be especially useful where a disaster creates requirements for manpower, communications, transport, access, or search and rescue. For example, after the December 2024 earthquake, VMF participated directly in USAR operations in Port Vila. The New Zealand Defence Force (NZDF) subsequently documented the work of the VMF Engineer Squadron, which worked alongside other first responders at the collapsed Billabong building. That response also demonstrated the value of long-term capacity-building relationships: a Royal New Zealand Engineer who had been seconded to the VMF Engineer Squadron since 2023 assisted the Vanuatu team with technical guidance, logistics, and rescue operations following the earthquake.¹⁵⁴

Vanuatu has also strengthened the ability of police and disaster authorities to communicate during emergencies. With Australian support, the Vanuatu Government National Emergency Radio Network developed to connect police posts across the provinces with Police Headquarters and NDMO when normal commercial communications are disrupted. Such systems give the VPF an important supporting role in maintaining situational awareness between Port Vila, provincial authorities, and remote islands following major disasters.¹⁵⁵

Civil-Military Coordination

The NDMO and NEOC provide the primary interface where security forces liaise with lead civilian agencies. The NEOC brings together government agencies and partner organizations and provides the national forum through which response priorities, assessments, logistics requirements, and requests for additional

capabilities can be coordinated.¹⁵⁶

This relationship became particularly clear after TC Pam, which struck in mid-March 2015. The storm brought large numbers of international responders and foreign military assets into a small island state with limited logistics infrastructure. The UN Office for the Coordination of Humanitarian Affairs (OCHA) reported that military assets became critical to moving relief supplies among affected islands, and it emphasized the need to transition toward sustainable civilian transportation as military assets withdrew. By mid-April, foreign military air assets were already drawing down, a transition that emphasizes the temporary and enabling nature of military support.¹⁵⁷

Foreign military assistance is governed by Vanuatu's broader legal regime for international disaster assistance. The DRM Act created procedures through which the government determines that international assistance is required, requests or accepts that assistance, and coordinates incoming international actors. The legislation was specifically intended to ensure that response operations remain coordinated and effective while facilitating international humanitarian assistance where domestic capacity is insufficient.¹⁵⁸

Foreign military forces do not have an automatic role. Their participation follows a request from, or acceptance by, the Government of Vanuatu. Once assistance is accepted, the contributing government and Vanuatu authorities can determine how the available capability will be employed. Vanuatu may identify broad requirements, and bilateral and regional partners identify capabilities they can provide. Liaison personnel then work with Vanuatu authorities to translate those requirements into executable missions.¹⁵⁹ The important point is that the availability of a foreign military capability does not itself establish the requirement for its use.

The December 2024 earthquake provides a clear example.

- Australia stated explicitly that its initial assistance was deployed in response to requests from the Vanuatu government.

Australia sent civilian USAR and medical teams, Australian Federal Police personnel, government liaison staff, and other specialists aboard Royal Australian Air Force (RAAF) C-17A Globemaster III and C-130J Hercules aircraft. It also provided support directly to NDMO.¹⁶⁰

- New Zealand used the same demand-driven approach. The NZDF stated that it worked with the New Zealand Ministry of Foreign Affairs and Trade and partners in Vanuatu to provide the support requested by Vanuatu. Royal New Zealand Air Force (RNZAF) aircraft transported emergency responders, search-and-rescue equipment and humanitarian assistance, conducted reconnaissance, and supported evacuations.¹⁶¹

Military aircraft or vessels may be highly visible, but the presence of a defense platform does not necessarily make the operation military led. During the earthquake response, Australian Defence Force (ADF) aircraft primarily enabled a broader civilian emergency operation by transporting USAR teams, medical personnel, engineers, government specialists, and humanitarian supplies.¹⁶²

Vanuatu's geography makes certain foreign military capabilities particularly valuable. The country's inhabited islands are widely dispersed, many communities have limited aviation or maritime infrastructure, and severe cyclones, earthquakes, volcanic activity, landslides, or flooding can rapidly disrupt roads, wharves, airfields, telecommunications, and normal inter-island transportation. Military assets can fill specific capability gaps that are difficult to meet rapidly from civilian sources – e.g., strategic and tactical airlift, helicopters, maritime lift, landing craft, engineering, reconnaissance, communications, search-and-rescue support, and specialist logistics planning. Their value is greatest where they provide a capability that Vanuatu and civilian humanitarian partners cannot readily generate themselves.¹⁶³

The response to TCs Judy and Kevin in

2023 illustrates this enabling role. At Vanuatu's request, Australia deployed a rapid assessment capability and used RAAF aircraft for aerial surveillance and damage assessment. Australia subsequently deployed HMAS Canberra, carrying ADF personnel, Chinook helicopters, medical facilities, and humanitarian supplies. Australian humanitarian assistance also included 139.4 metric tons (153.7 tons) of relief supplies.

International / Regional Organizations

Vanuatu's DM system is nationally led but deliberately structured to incorporate a large network of civil society organizations, humanitarians, regional institutions, bilateral partners, donors, and foreign civilian and military capabilities.

Vanuatu's legislation establishes an explicit process for requesting, accepting, and coordinating international disaster assistance. The NDC recommends to the Council of Ministers that international disaster assistance is required, based on the determination of the NDMO Director. On the advice of the Council of Ministers and the NDC, the Prime Minister, through the Ministry of Foreign Affairs may request international assistance specifically to a particular international actor or make a general request for international disaster assistance directed to the international community.¹⁶⁴

The DRM Act separately governs offers of assistance. Foreign states, governments, and international organizations must direct written offers through the responsible foreign affairs authority, while foreign NGOs and individuals direct their offers to NDMO. An international actor may not provide assistance in an affected area until its offer has been accepted. Offers must identify the type and quantity of assistance, its expected duration, and confirm that the assistance was expressly requested by Vanuatu's government.¹⁶⁵

NDMO is designated as the national focal point between the government and personnel of international actors entering Vanuatu. Incoming international actors are to be facilitated and integrated into the relevant national cluster¹⁶⁶ to provide the legal underpinning for the system

seen in recent responses: foreign assistance, including foreign military capability, is intended to reinforce rather than bypass Vanuatu's national coordination mechanisms.¹⁶⁷

Separately from disaster response operations, Vanuatu is an active participant in global and regional DM projects, frameworks, and strategies.

Global and Regional Frameworks

Vanuatu's system is situated within the Sendai Framework for Disaster Risk Reduction 2015–2030, the principal global agreement on DRR. The Sendai Framework establishes four priorities:

- Understanding disaster risk
- Strengthening disaster risk governance
- Investing in resilience
- Enhancing preparedness for effective response while using recovery, rehabilitation, and reconstruction to “Build Back Better”

It expressly recognizes that states have the primary responsibility for reducing disaster risk while responsibility is shared with local government, the private sector, civil society, communities, and other stakeholders.¹⁶⁸

That principle closely mirrors Vanuatu's own approach. The NDMO and government retain leadership, but DRM is treated as an all-of-society function. The national cluster system, VHT, community disaster structures, Red Cross networks, development partners, telecommunications companies, and regional agencies operationalize this principle.¹⁶⁹

At the regional level, the Framework for Resilient Development in the Pacific 2017–2030 (FRDP) is the most directly relevant policy framework. It deliberately integrates climate change adaptation and DRM. Its three goals are:

- Strengthened integrated adaptation and risk reduction
- Low-carbon development
- Strengthened disaster preparedness, response, and recovery

The FRDP identifies governments,

communities, civil society, the private sector, donors, development partners, and regional organizations as participants in resilience-building and explicitly emphasizes governance, partnerships, communications, and resources across all three goals.¹⁷⁰

The Boe Declaration on Regional Security, adopted by Pacific Islands Forum (PIF) Leaders in 2018, adds a security dimension. The Declaration broadened the Pacific conception of security beyond conventional military threats to encompass human security, humanitarian assistance, environmental security, climate change, cyber security, and transnational challenges. It specifically places regional cooperation and resilience to disasters and climate change within the Pacific security agenda.¹⁷¹

The 2050 Strategy for the Blue Pacific Continent, endorsed by PIF Leaders in 2022, subsequently established a long-term vision for a resilient, peaceful, secure, inclusive, and prosperous Pacific. “Climate Change and Disasters” is one of its principal thematic areas, while political leadership, people-centered development, peace and security, technology and connectivity, ocean and environment, and resources and economic development all intersect with disaster resilience.¹⁷²

Taken together, these frameworks create a relatively consistent hierarchy of principles. The Sendai Framework supplies the global DRR framework; the FRDP translates integrated climate and disaster resilience into a Pacific regional approach; the Boe Declaration recognizes disasters and climate change as regional security issues; and the 2050 Strategy embeds resilience within the broader long-term Blue Pacific political vision. None replaces Vanuatu's national legislation or NDMO authority. Rather, they shape the principles under which development partners, regional organizations, donors, and humanitarian actors support national systems.

United Nations

The UN system provides technical, sectoral, logistical, financial, and coordination support

to Vanuatu, but the international humanitarian cluster system is adapted to the country's national cluster model. At the regional level, the UN OCHA Office of the Pacific Islands supports the Pacific Humanitarian Team (PHT), a network of UN agencies, the International Red Cross and Red Crescent Movement, international NGOs, and other humanitarian organizations with capacity to assist Pacific governments.¹⁷³ UN OCHA supports the PHT to make regional humanitarian assistance more timely, predictable, and coordinated, and its regional cluster structure is designed to reinforce national systems rather than automatically take control of them.¹⁷⁴

Individual UN entities contribute according to their mandates.

- UNICEF is a major partner in WASH, education, child protection, nutrition, and emergency supplies and works through the corresponding government-led sectors and clusters.¹⁷⁵
- WHO supports the MoH, health emergency coordination, surveillance, medical supplies, public health, and Emergency Medical Team coordination.¹⁷⁶
- WFP provides logistics, emergency telecommunications, supply chain services, warehousing, aviation, food security expertise, and, when requested, food or cash assistance.¹⁷⁷
- FAO supports the Food Security and Agriculture Cluster and agricultural, livestock, fisheries, and livelihood recovery.¹⁷⁸
- IOM has played important roles in displacement, evacuation center management, population movement, shelter, assessments, and durable solutions.¹⁷⁹
- United Nations Development Programme (UNDP) contributes disaster risk governance, early recovery, resilience, financing, and recovery planning.
- The United Nations Populations Fund (UNFPA) supports sexual and reproductive health and protection services.¹⁸⁰
- UN Women supports gender-responsive DM and women's participation.

The international system can also mobilize specialized mechanisms when requested. Emergency Medical Teams may reinforce health services; WFP-led or supported logistics and emergency telecommunications capabilities can assist national clusters; humanitarian aviation can provide regional movement of personnel and urgent cargo; and UN entities can mobilize global or regional supply chains.¹⁸¹

Pacific Regional Organizations

Several Pacific regional organizations contribute primarily through technical assistance, preparedness, risk information, policy development, and resilience-building rather than frontline command and control.

- PIF provides the principal political and policy framework under which Pacific governments approach climate and disaster resilience, security, collective action, and regionalism. It underpins the political architecture within which regional mechanisms and principles of Pacific-led assistance are developed.
- The Pacific Community (SPC) provides technical expertise in DRM, geoscience, food security, fisheries, agriculture, public health, water, data, statistics, infrastructure, and resilience. Its Geoscience, Energy, and Maritime work area and related programs have supported hazard mapping, risk information, technical capacity development, and regional policy implementation.¹⁸²
- The Secretariat of the Pacific Regional Environment Programme (SPREP) is central to climate information, meteorology, climate adaptation, environmental resilience, and early warning. It works closely with Vanuatu institutions. SPREP-supported initiatives such as VanKIRAP have linked climate information directly to sectors including agriculture, water, tourism, infrastructure, and fisheries.¹⁸³

Other Disaster Management Partners

Vanuatu's DM system is deliberately

structured to incorporate a large network of civil society organizations, humanitarians, regional institutions, bilateral partners, donors, and foreign civilian and military capabilities. International and non-government partners do not constitute a separate response structure. Instead, the NDMO, NEOC, government ministries, provincial authorities, and national cluster system provide the principal mechanisms through which external assistance is incorporated into a response.

After TC Pam struck in 2015, the government institutionalized a standing national cluster system so that relationships among government agencies and humanitarian partners could be developed before emergencies rather than created after impact. The result is a system in which humanitarian partners are expected to augment national capacity rather than substitute for it. During an emergency, organizations generally report sector-specific assessments and activities through the relevant cluster; cluster leads consolidate reports on needs, gaps, response activities, and requests; and the Inter-Cluster mechanism supports coordination across sectors and with NDMO and the NEOC.

International Red Cross and Red Crescent Movement

The VRCS occupies a distinctive position in the national DM structure. It is an auxiliary to public authorities in the humanitarian field while remaining member of the International Red Cross and Red Crescent Movement.¹⁸⁴ Its nationwide volunteer structure allows it to conduct preparedness, early warning, assessments, first aid, evacuation support, relief distribution, shelter assistance, WASH activities, community engagement, and recovery at locations that may be difficult for national or international teams to reach rapidly.

During major emergencies, VRCS can activate its own emergency operations structure while coordinating with NDMO, provincial authorities, VHT, and national clusters.¹⁸⁵ International support may then be mobilized through the International Federation of Red Cross and Red Crescent Societies (IFRC),

including Disaster Response Emergency Fund financing, Emergency Appeals, technical specialists, surge personnel, logistics capacity, and assistance from partner National Societies.¹⁸⁶

Non-Governmental Organizations

Participation in the national coordination system helps ensure that NGOs distribute consistent government-approved information, share assessment findings, avoid duplicating assistance, and direct resources toward identified gaps. VANGO provides an additional link to domestic civil society.¹⁸⁷ Local organizations have comparative advantages that are especially significant in an archipelago where response may depend on relationships developed long before a cyclone or earthquake. Churches, community associations, women's organizations, disability organizations, youth groups, traditional leaders, and other local bodies remain in communities after international teams depart and can connect emergency relief with longer-term recovery and resilience programming.

Bilateral Partners

Vanuatu receives support for DM from a wide group of bilateral partners. They provide financing, relief items, technical assistance, logistics, emergency personnel, and recovery assistance. The three key regional players that most commonly support Vanuatu, especially during disaster response operations are Australia, France, and New Zealand.

Australia

Australia is a longstanding and substantial partner of Vanuatu across broad development goals, and it has the ability to deploy civilian, police, medical, search-and-rescue, airlift, sealift, engineering, communications, and ADF capabilities. Australian support is coordinated with the national government and may include direct government assistance, work by NGOs from within the Australian Humanitarian Partnership,¹⁸⁸ Australian Red Cross, humanitarian stockpiles, the Department

of Foreign Affairs and Trade, specialist Disaster Assistance Response Teams, Australian Medical Assistance Teams, Australian Federal Police, and ADF assets.¹⁸⁹

France

France has an important operational role because of the proximity of New Caledonia and the presence there of French military, civil protection, maritime, and aviation resources. French assistance can include reconnaissance, rotary- and fixed-wing aircraft, engineering support, maritime assets, communications, medical capabilities, relief items, and search-and-rescue personnel.¹⁹⁰

New Zealand

New Zealand is another longstanding bilateral partner of Vanuatu. It has the ability to combine humanitarian financing with civilian technical teams, NZDF aircraft and ships, medical and engineering support, relief supplies, and NGO assistance. New Zealand's humanitarian policy emphasizes that assistance should operate through coordination systems established by affected governments and should complement OCHA, Red Cross, NGO, and bilateral mechanisms.¹⁹¹

Multilateral Partners

FRANZ Arrangement

The FRANZ Arrangement brings together France, Australia, and New Zealand. It derives from the 1992 Joint Statement on Disaster Relief Cooperation in the South Pacific, whereby the parties agree to respond in a coordinated fashion to an appeal for assistance from an affected state in the region. The ministerial-level foreign affairs offices (ministry or department) of each of the three signatories lead cooperation. They can mobilize additional government agencies – including their respective militaries – in support of a coordinated response, as needed.

The purpose is to improve information exchange and coordinate the use of French,

Australian, and New Zealand assets when a Pacific government requests assistance. The three partners reaffirmed in 2023 that FRANZ assistance should support nationally led responses, Pacific sovereignty, and local capacity, while preventing duplication among the substantial air, maritime, medical, engineering, and humanitarian capabilities available to the three signatories.¹⁹²

FRANZ is particularly relevant to Vanuatu because all three partners can place civilian and military assets at the service of the country relatively rapidly. The Arrangement was used to coordinate support to Vanuatu following TC Harold in 2020, the TC Judy-Kevin disaster sequence in 2023, TC Lola in 2023, and the December 2024 earthquake. During the earthquake response, Australia explicitly reported coordinating damage assessments and assistance with France and New Zealand under FRANZ.¹⁹³

Pacific Response Group

A newer mechanism relevant to Vanuatu is the Pacific Response Group (PRG), under the South Pacific Defence Ministers' Meeting (SPDMM). Established in 2024, the PRG brings together military personnel and capabilities from Australia, Fiji, France, New Zealand, Papua New Guinea, and Tonga to develop a Pacific-led, integrated, and rehearsed Humanitarian Assistance and Disaster Relief capability.¹⁹⁴ Members contribute planners and specialists across operations, logistics, health, engineering, intelligence, communications, and maritime functions. Its value lies in allowing regional military forces to plan and train together before a disaster and then generate interoperable assistance when requested by an affected Pacific government.

The group has trained through exercises including France's Croix du Sud and has already had direct relevance to Vanuatu. The PRG's first deployment was a small planning team that arrived in Vanuatu to support the response to the December 2024 Vanuatu earthquake. Any PRG deployment into Vanuatu requires Vanuatu's consent and would integrate with NDMO/

NEOC priorities and the civilian humanitarian coordination architecture.¹⁹⁵

Case Study: 2024 Earthquake

Shortly after noon on 17 December 2024, a Mw 7.3 earthquake struck offshore about 30 km (19 mi) west of Port Vila.¹⁹⁶ Strong shaking caused building collapses, landslides, road blockages, and extensive damage to critical infrastructure across Efate, with the most concentrated destruction in Port Vila. The earthquake ultimately caused 14 confirmed deaths and 265 injuries and affected more than 80,000 people. Telecommunications, electricity, water systems, roads, the international port, Port Vila (Bauerfield) International Airport, schools, and Vila Central Hospital (now Vanuatu National Hospital) were damaged or disrupted.¹⁹⁷

Within hours, the government activated its national emergency management system through the NDMO and the NEOC. Government NEOC Situation Report No. 1, issued at approximately 10:30 p.m. on 17 December, recorded that the NEOC was operational and that national surge capacity had been activated. It also identified immediate requirements, including mobile emergency medical teams, search-and-rescue teams, heavy machinery to clear landslides and collapsed structures, and safe drinking water and containers.¹⁹⁸

The initial response was overwhelmingly local and national. Residents, businesses, emergency workers, police, health personnel, VMF personnel, construction companies with heavy equipment, community members, and volunteers began extracting people from collapsed buildings and moving injured people toward Vila Central Hospital.¹⁹⁹ However, within 24 hours, international civilian and military capabilities also mobilized to respond to Vanuatu's appeal for international assistance.

What developed over the course of the next week was a coordinated, nationally led response bolstered by strong regional partnerships.

- **Nationally Led:** Vanuatu maintained national leadership for response efforts through the NDMO and NEOC while integrating

substantial international assistance

- **Regional Coordination:** FRANZ and the PRG coordinated complementary support based on Vanuatu identified requirements
- **International Support Filled Capability Gaps:** Foreign partners provided specialized search and rescue, airlift, medical, engineering, communications, and logistics support while operating within Vanuatu-led coordination structures

Domestic Mobilization

On the evening of 17 December, the Prime Minister declared a State of Emergency,²⁰⁰ and the government called for international assistance.²⁰¹

Damage forced many agencies and humanitarians to operate from temporary facilities. On 21 December, OCHA reported that the country was using a fully operational NEOC located in a temporary site.²⁰² This site would be the hub for all stakeholders after the government activated the national cluster system.

- Sectoral actors began conducting assessments and organizing assistance across health, WASH, shelter, displacement and evacuation centers, logistics, emergency telecommunications, food security and agriculture, education, gender and protection, and related sectors
- International organizations reinforced the national clusters through the corresponding PHT and regional cluster arrangements²⁰³

The VMF was particularly important during the initial response. VPF's Joint Police Operations Centre supported search and rescue, security, traffic management, access control, and emergency operations. VMF facilities helped support the relocation of health services, while VPF, VMF personnel, local machinery operators, firefighters, medical staff, and civilians worked around collapsed structures and landslide areas amidst substantial aftershocks²⁰⁴ that complicated rescues and increased the risk of secondary structural collapse.²⁰⁵

The VHT and VANGO, along with major domestic and international NGOs with local

operations – FALE Vanuatu, CARE, Save the Children, World Vision, Oxfam, and others – operated through community networks and the cluster system. FALE and VANGO mobilized within hours. Despite banking, transport, and telecommunications disruption, they conducted rapid assessments in communities around Efate.²⁰⁶

This local presence was operationally important. Foreign USAR and military teams brought specialist capabilities, but Ni-Vanuatu civil society supplied relationships, language ability, local access, beneficiary knowledge, and continuity after international surge teams departed.²⁰⁷

International Mobilization

At Vanuatu's request, the UN and PHT mobilized immediately. OCHA supported information management and inter-agency coordination while regional humanitarian clusters reinforced Vanuatu's already activated national cluster structure.²⁰⁸

- UNICEF began emergency assistance within 24 hours; it worked across WASH, health and nutrition, education, child protection, and psychosocial support sectors,²⁰⁹ and supported government assessments²¹⁰
- WFP reinforced logistics and emergency telecommunications. It deployed a logistics specialist to work with the NDMO and supported regional logistics coordination and humanitarian air movements. The WFP-led Pacific Humanitarian Air Service (PHAS) supported movement of urgent humanitarian cargo, while WFP logistics arrangements helped humanitarian agencies make use of the constrained international transport network²¹¹
- IOM supported displacement tracking and evacuation center management, including assessment of displaced populations
- WHO worked with the MoH on health emergency coordination and the management of incoming Emergency Medical Teams (EMT). Subsequent analysis of the response identified a formal coordination function connecting the

MoH, WHO, and arriving national and international medical teams

- UNFPA supported reproductive health, dignity, and protection requirements²¹²
- United Nations Satellite Centre (UNOSAT) and other technical mechanisms supplied satellite-based damage information to improve assessments where physical access was constrained

The International Red Cross and Red Crescent Movement supported VRCS' mobilization. Despite damage to its own facilities and communications, VRCS volunteers assisted Vila Central Hospital, delivered first aid, and participated in WASH, relief distribution, community assessments, and other response activities.

- IFRC provided international surge support and launched an Emergency Appeal seeking US\$6.26 million; an initial US\$939,000 Disaster Response Emergency Fund allocation supported rapid action²¹³
- Australian and New Zealand Red Cross societies reinforced VRCS. New Zealand Red Cross telecommunications specialists helped sustain VRCS communications using pre-positioned "IT-in-a-Box" capability and other systems, while Australian Red Cross support was financed as part of Australia's broader humanitarian package²¹⁴

On 18 December, Australia confirmed that the three FRANZ signatories had formalized coordination of this response under the Arrangement mechanism in response to the Vanuatu government's request and in support of Vanuatu national responders.²¹⁵ The mechanism allowed the three countries to exchange assessments, deconflict assistance, divide tasks, and coordinate the use of their substantial air, maritime, engineering, medical, and logistics capabilities.²¹⁶

- France was able to respond particularly quickly because substantial French military capabilities are based nearby in New Caledonia
 - On 18 December, the French

- Armed Forces in New Caledonia (FANC) mobilized to conduct early reconnaissance
 - FANC deployed personnel and communications support from New Caledonia
 - A Puma helicopter and CASA transport aircraft were subsequently mobilized to move civil protection, coordination, and other reinforcement personnel²¹⁷
- Australia mounted the largest initial external response. On 18 December, Canberra announced an immediate A\$2 million (US\$1.43 million) package to include:
 - A 64-person Disaster Assistance Response Team (DART) and two search dogs for USAR
 - An initial 6-person Australian Medical Assistance Team (AUSMAT)
 - A 5-person Department of Foreign Affairs and Trade (DFAT) Crisis Response Team
 - A National Emergency Management Agency liaison officer
 - Nine additional Australian Federal Police (AFP) officers joining six officers already posted in Vanuatu²¹⁸
- In the first days of the response, ADF was also active across response sectors:
 - RAAF provided a strategic air bridge from the first 18 December flights that delivered AUSMAT and DART; by 22 December, ADF had conducted 9 assistance flights carrying response teams, technical specialists, humanitarian commodities, and equipment on behalf of organizations including the Red Cross, WFP, CARE, Save the Children, and World Vision²¹⁹
 - Engineer teams assessed the airport and Vila Central Hospital, examined fuel pipelines at the wharf, and provided specialist technical assistance for repair of the telecommunications landing cable and restoration of internet connectivity²²⁰
- NZDF operations included an especially important early aerial reconnaissance function

- On 18 December, a RNZAF P-8A Poseidon flew over Port Vila's airport, runway, port, surrounding infrastructure, and nearby islands. The imagery was delivered to Vanuatu authorities to improve understanding of access conditions and damage. The aircraft conducted another reconnaissance mission the following day to cover outlying areas²²¹
- RNZAF simultaneously established an air bridge to carry New Zealand USAR personnel, Foreign Affairs staff, police, health staff, and National Emergency Management Agency staff, as well as multiple loads of rescue equipment and aid supplies²²²

Additional military capabilities were supplied by the inaugural operational deployment of the PRG. The PRG deployed a team that worked with the VMF and NDMO and gave Vanuatu's government access to multinational military planning expertise while keeping Vanuatu authorities at the center of the operation.

- The team deployed from Australia using a C-17A Globemaster III
- The mission was to liaise with Vanuatu authorities, understand emerging requirements, identify where regional military capabilities might add value, and determine whether a larger PRG force should be generated
- After liaison and assessment, the conclusion was that follow-on PRG military forces were not required²²³

Table 2 shows a timeline of military assets utilized by FRANZ partners for the 2024 earthquake response.²²⁴

Successful activation of the PRG did not require deployment of the maximum available force. The PRG functioned initially as a planning and advisory mechanism that gave Vanuatu access to a pre-organized multinational military network. Because Australia, New Zealand, France, Vanuatu's own security forces, civilian USAR teams, UN entities,

Date	France	Australia	New Zealand
18 December 2024	1 x Falcon 200 aerial assessment 2 x PUMA with satellite communication and engineers 1 x CASA with personnel reinforcement	1 x G150 with 6-person Australia Assistance Team 1 x C-130 with DART team and equipment and AFP surge team 1 x C-17 with DART SAR CRT and AFP surge team	1 x Boeing Poseidon aerial assessment
19 December 2024	3 x CASA with humanitarian relief supplies and 1 military buggy (FARDIER)	1 x C-130 with DART, ADF, and AFP equipment and supplies; 1 x C-17 with DART, ADF, and AFP equipment and supplies	1 x C-130 with USAR personnel and heavy equipment from NZ gov 1 x Boeing 757 with humanitarian relief supplies; 1 x Boeing P8 Poseidon aerial assessment
20 December 2024	1 x Falcon 200 reconnaissance for NDMO aerial imagery 3 x CASA with humanitarian relief supplies and repatriation flight	1 x C-130 with AFP surge team, DART structural engineers, and GeoGas engineers; and 1 mobile storage unit for NDMO from WFP 1 x C-17 with humanitarian relief supplies for NDMO, VRC – household kits, hygiene kits, shelter toolkits, kitchen sets, tarpaulins – by Australian Gov, ARC, UK Gov, and Starlink terminals for NDMO, Ministry of Foreign Affairs (MoFA), Ministry of Internal Affairs (MoIA) and VPF, by Australian Gov	
21 December 2024	3 x CASA with humanitarian relief supplies and repatriation flight 2 x PUMA aerial assessment with national and international partners	1 x C-17 with partner stores (CARE, SAVE, WV, and VRC) 1 x C-130 with 1 mobile storage unit for NDMO from WFP	1 x C-130 with relief supplies from New Zealand gov, heavy duty equipment for NZDF
22 December 2024	2 x CASA with humanitarian relief supplies and repatriation flight 1 x PUMA roundtrip to Santo to transport 4 medical personnel	1 x C-130 with equipment and supplies for DART and 1 mobile storage unit for PMO by DFAT 1 x C-17 with equipment and supplies for DART, 2 mobile storage units for NDMO by WFP and PMO by DFAT, and partner store (CARE)	
23 December 2024	2 x CASA with humanitarian relief supplies and repatriation flight		
27 December 2024			1 x C-130 with humanitarian relief supplies and psychosocial personnel
28 December 2024			1 x Boeing 757-200 with humanitarian relief supplies and return flight for NZ disaster response personnel

Table 2: FRANZ Military Assets Utilized for the 2024 Earthquake Response

and humanitarian organizations were already addressing many of the identified requirements, a large additional regional military deployment could have created duplication and additional logistics pressure.

Transition to Recovery

Of course, the disaster was not over for the people of Vanuatu when the foreign military mission ended. With the 21 December first flight of the WFP-led PHAS,²²⁵ foreign military assets could begin to transition the reconnaissance and logistics tasks to international humanitarians, while bilateral government civilian missions also continued. For example, after the first week, as recovery needs were becoming clear, Australia expanded its assistance with an additional A\$5 million (US\$3.57 million) humanitarian package, another 17-member AUSMAT deployment, assistance to Australian Humanitarian Partnership NGOs, and support to Australian Red Cross working with the VRCS. Its longer-term humanitarian and recovery commitment eventually reached A\$28 million (US\$20 million) including restoration of critical services and infrastructure.

The government developed the Port Vila/ Efate Earthquake Recovery and Resilience Plan, establishing priorities for restoration of government services, housing, health, education, transport, utilities, businesses, livelihoods, and damaged infrastructure. The earthquake caused

hundreds of millions of dollars in damage and losses relative to Vanuatu's small economy, and this level of recovery need was far beyond the scope of immediate humanitarian relief.²²⁶

Conclusion

The December 2024 earthquake demonstrated the importance of local response during the period before international surge capacity arrives. Local residents, VPF, VMF personnel, medical staff, construction operators, Red Cross volunteers, NGOs, churches, and community organizations carried the initial burden. International USAR, medical, aviation, engineering, and telecommunications capabilities subsequently expanded the response.

The earthquake response illustrates key areas where foreign military capability is critical and where it has limitations. Vanuatu needed specialized capabilities – USAR, airlift, reconnaissance, engineering, medical, emergency communications, and logistics – not a large generic military presence. The PRG's decision, after consultation with Ni-Vanuatu authorities, that a larger follow-on military force was unnecessary is consequently a significant example of demand-driven international disaster response. Photo 2 shows Australian Aid being unloaded at the Port Vila International Airport.²²⁷



Photo 2: Operation Vanuatu Assist 2024

CRITICAL INFRASTRUCTURE FOR DISASTER MANAGEMENT

Like other PICTs with populations dispersed over remote islands, Vanuatu faces challenges in providing comprehensive infrastructure connectivity. Its international air and sea connections are vital for its economic development and are key conduits for emergency relief following large-scale disasters. In the National Sustainable Development Plan 2016-2030 (also known as Vanuatu 2030 or “The People’s Plan”), the government targets improvements in infrastructure to ensure that public infrastructure is to code and increases access to renewable energy, potable water, information and communications technologies (ICT), and efficient and safe transport.²²⁸

For detailed logistics capacity information across Vanuatu’s infrastructure for the purpose of disaster preparedness, see: Digital Logistics Capacity Assessment: Vanuatu, prepared July 2023 – February 2025 by WFP/Logistics Cluster and Vanuatu NDMO, <https://www.lca.logcluster.org/vanuatu>

Transportation

Port Vila, on Efate Island, has the primary international airport and seaport. The second largest international airport and seaport are outside Luganville, on Espiritu Santo Island. Efate and Espiritu Santo also have the largest networks of sealed roads, including main ring roads. Dirt roads across all islands are particularly susceptible to damage and disruption during the rainy season, from November to April. Figure 6 shows a map of Vanuatu’s key transport hubs – air- and seaports.

In addition to the limited transport network, logistics capacity is minimal. There is a shortage of warehouse space near main ports of entry. During the response to TCs Judy and Kevin in March 2023, the NDMO used the EX-FOL Indoor Sports Facility as the warehouse for storing emergency relief items. During the response to TC Lola in October 2023, the

Customs Warehouse at the Main International Wharf was used. During the earthquake response in December 2024, the NDMO used the Customs Warehouse located near Port Vila (Bauerfield) International Airport. For various ports, erecting temporary storage in parking lots or grassy areas would be a consideration during large-scale disaster response.

Airports

The Civil Aviation Authority of Vanuatu (CAAV), under the Ministry of Infrastructure and Public Utilities, oversees all aspects of Vanuatu’s civil aviation system, including regulating access to all airports. CAAV provides regulatory services on aviation security and safety standards and is also the primary regulator of autonomous flying drone operations within Vanuatu airspace.

There are three international airports. The largest is Port Vila (Bauerfield) International Airport, located outside the capital. The second is the smaller Santo International Airport (formerly Santo-Pekoa) on Espiritu Santo Island. The third is Whitegrass (Tanna or White Grass) Airport on Tanna Island. Airports Vanuatu Limited (AVL) manages these three airports. Airports Vanuatu Limited (AVL) has mutual aid agreements with the VPF and the Vanuatu Fire Service.²²⁹

Following a disaster, the NDMO issues situation reports that include the status of landing strips around the country and whether they are cleared for operations. After the December 2024 earthquake, Port Vila International Airport reopened within five days to jet operations after Air Navigation Services personnel and Public Works Department (PWD) engineers worked in coordination to inspect and certify control towers and navigation aids.

Table 3 offers some details of Vanuatu’s international airports.²³⁰

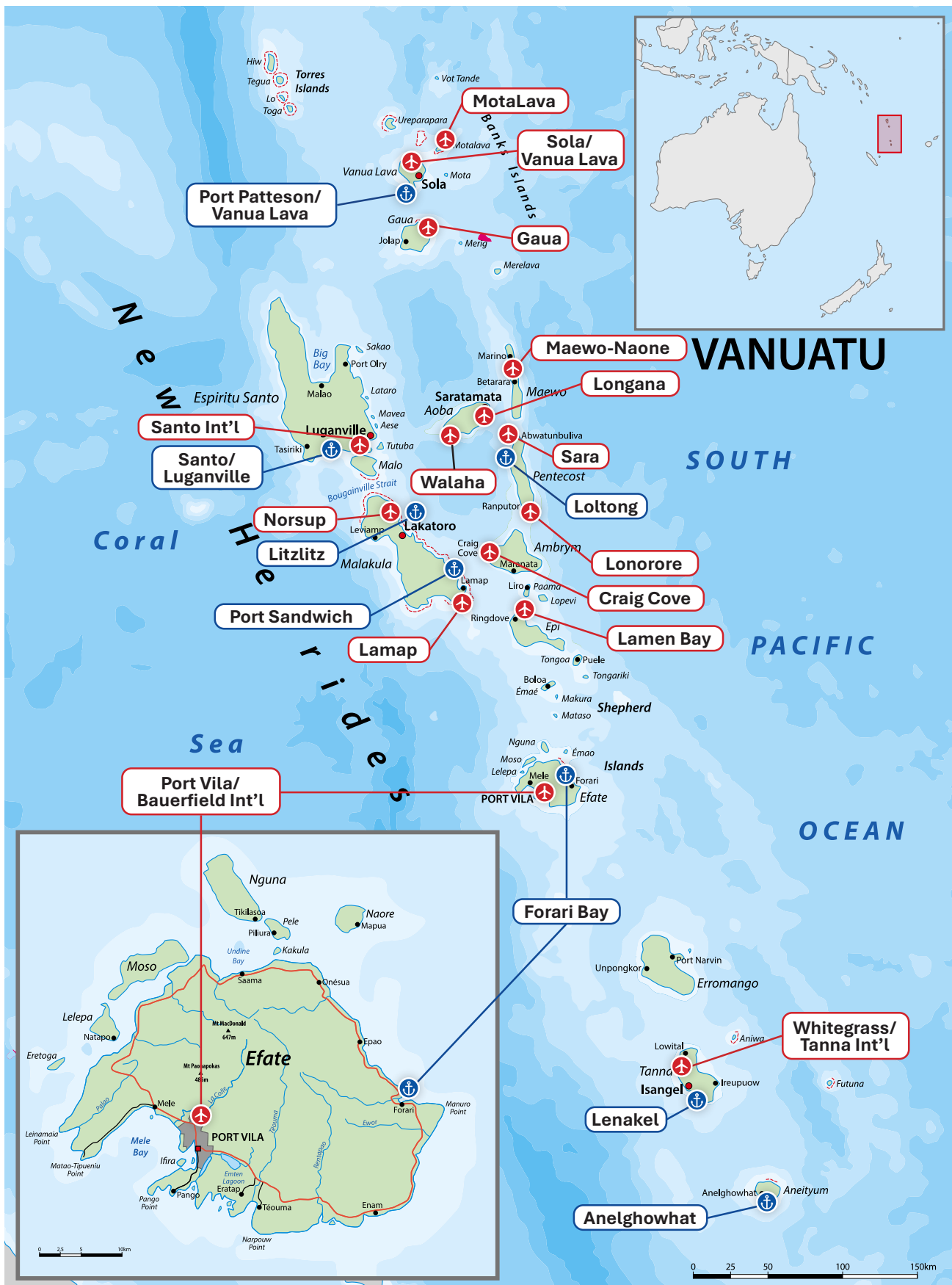


Figure 6: Key Airports and Seaports

Airport	IATA/ICAO Code	Coordinates	Elevation	Runways and Helipads
Port Vila (Bauerfield) International Airport	VLI/ NVVV	17.69917°S 168.3197°E	20.7 m (68 ft)	11/29: 2,600 × 60 m (8,530 × 197 ft) Surface: asphalt and grass 1 Helipad
Santo International Airport	SON/ NVSS	15.50500°S 167.22000°E	41.1 m (135 ft)	12/30: 1,988 × 30 m (6,522 × 98 ft) Helicopters can use paved or grass areas
Whitegrass (Tanna) International Airport	TAH/ NVVW	19.45483°S 169.22367°E	8.2 m (27 ft)	15/33: 1,230 × 30 m (4,035 × 98 ft) Helicopters can use paved or grass areas

Table 3: International Airports in Vanuatu

Port Vila International Airport

The maximum sized aircraft that can be offloaded on pallet is a Boeing 737. Aircraft parking can accommodate one large jet aircraft, two small jet aircraft, and two turboprop aircraft. Storage area totals 1,000 m² (10,764 ft²).

Following TC Pam (2015), a 10 × 32 m (33 × 105 ft) mobile storage unit was constructed in the vehicle parking lot, and DHL commercial shipping company was contracted to manage the temporary warehouse.

Santo International Airport

Santo International Airport is modestly sized; cargo and baggage handling is mostly through manual labor. Plane types that can service Santo International Airport include Boeing 737-800, ATR 72-600, ATR 42, twin otter, BN-2 Islander, and small private jets. The maximum sized aircraft that can be offloaded on bulk cargo or pallet is Boeing 737 or C-17 military aircraft on load restriction. The aircraft parking area can accommodate 1 ATR and 3 twin otter aircraft.

There is a small storage area, primarily used by Air Vanuatu. For use in disaster response, a mobile storage unit would probably need to be erected in the automobile parking area or grassy area beside the airport.

Fuel services are not readily available for unscheduled flights. Emergency response aircraft should order fuel supplies several days in advance.

Whitegrass International Airport

The maximum sized aircraft that can be offloaded on bulk cargo or pallet is an ATR 72-

600. The aircraft parking area can accommodate two ATR 72-600 aircraft. Storage area is limited, 4 × 3 m (13 × 10 ft) and is only for Air Vanuatu cargo. Storage facilities are not sufficient for an emergency response. An option suggested for emergency scenarios is erecting a mobile storage unit in the grassy area.

Refueling service is only available for the Twin Otter and BN-2 Islander. ATR and bigger planes must carry enough fuel to return to Port Vila.²³¹

Domestic Airfields

There are 24 domestic airfields, managed by the PWD of the Ministry of Infrastructure and Public Utilities. The following domestic airfields are serviced by Air Vanuatu.

- Torba Province – MotaLava, Sola, and Gaua
- Penama Province – Maewo, Longana, Walaha, Sara, and Lonorore
- Malampa Province – Norsup, Lamap, and Craig Cove
- Shefa Province – Lamén Bay²³²

Seaports

The two international ports are the Port of Port Vila, outside the capital, and the Port of Luganville. The Port of Port Vila is the principal port and handles cruise ships, oil tankers, and international cargo vessels. The Port of Luganville handles dry and wet cargo. Both ports are managed by the Department of Ports and Marine.²³³ In addition to Port Vila and Luganville, smaller international ports of entry are Santo, Malekula, Tanna, and Anatom.²³⁴

Port of Port Vila

The Port of Port Vila is the principal seaport.

It is located 11.5 km (7 mi) from Port Vila. It consists of three wharfs:

- Main International Wharf handles cruise ships and gas and oil tankers
 - Berth (conventional): 220 m (721 ft); maximum draft: 10 m (33 ft)
- Lapetasi International Wharf handles international cargo vessels
 - Berth (container): 200 m (656 ft); maximum draft: 13 m (43 ft)
- Star Wharf, a smaller dock, handles domestic cargo vessels

Ships can refuel at both international wharves. There is a large container storage facility within the premises and space for bonded, less-than-container load, and break-bulk cargo. Roll-on/roll-off facilities are available when needed.

The December 2024 earthquake caused significant damage to the Port and to access roads serving it. The Main International Wharf experienced significant damage, and repairs continue as of the publication of this handbook. The Lapetasi International Wharf is operational. Cruise ships returned via a temporary tendering port in June 2025, while longer-term restoration work continues.

Wharf Road, which had been closed by a landslide during the earthquake, was reopened in June 2026.²³⁵

Port of Luganville

The Port of Luganville is 1.9 km (1.2 mi) from Luganville on the south-eastern coast of Espiritu Santo. It is used for transshipment of beef, fish, cacao, and copra (dried coconut), and for import of general goods and oils. The government-owned port also accommodates cruise ships and tankers. Seasonal constraints occur during the rainy season, November to April.

- Berths: 2 (1 conventional and 1 container) × 360 m (1,181 ft); maximum draft: 20 m (65.6 ft)
- Storage: 1,000 m² (10,764 ft²) warehouse (customs and quarantine)

Ships arriving must be equipped with their own crane with a minimum capacity of 38 metric tons (41.8 tons); no tined machines. There is one crane for hire; it is owned by a Chinese company at Velit Bay.

Samansen Wharf is adjacent to the Port of Luganville and handles domestic ships and ferries. It can handle only one cargo ship at a time. Two other ports in Luganville are also used for domestic sea travel – Ifira Santo Wharf and Melcoffee Wharf.²³⁶

Roads

Vanuatu has 2,958.6 km (1,838 mi) of road managed by the PWD. Gravel and dirt roads across the islands are not maintained by PWD. There are sealed roads on Efate and Espiritu Santo, and urban areas of Port Vila and Luganville are where most sealed roads are concentrated. Rural areas have limited transport services. Rural road infrastructure is particularly impacted during heavy rains. Higher transport costs on poor road conditions hinder access to needed services.

Additional details of the islands' roads include:

- Efate Island – Sealed ring road around the island
- Espiritu Santo Island – Sealed road from Luganville to Port Olry
- Tanna Island – Gravel road from Whitegrass International Airport to Green Hill in the north; sealed road from Lenakel to Imaki in the south; sealed road from Lenakel to Snake Hill in the east
- Malekula Island – Sealed road from Norsup to Pushman's Bay in the center
- Pentecost Island – Roads can be impassable after persistent heavy rain, particularly in the north; numerous small ports along the west coast can facilitate supplies reaching villages

The December 2024 earthquake heavily affected Port Vila. In January 2025, a traffic management plan was developed to address the closure of Central Port Vila.²³⁷ Work continues as of the publication of this handbook.

From November to April, the rainy season

negatively affects road conditions. Heavy rains exacerbate potholes on sealed roads and persistent heavy rains can render dirt roads unpassable. Following the successive cyclones, TCs Judy and Kevin in 2023, the bridge in Tanna was damaged, and numerous potholes developed across various roads, making road transport a challenge.²³⁸

Navigable Waterways

Vanuatu's rivers are not typically navigable. The terrain lends to short rivers and streams that function not for navigation but to provide freshwater, irrigation, and power generation, and to replenish watersheds.²³⁹

Interisland waterways, however, offer navigable sea transport for passenger and cargo ferries. Private sea transport companies operate out of Port Vila and Santo. The Vanuatu Ferry and Big Sista provide the primary passenger ferry services. Vanuatu Ferry carries passengers among Port Vila, Santo, Malekula, and Tanna. Big Sista also serves the more populated islands. Vanuatu Cargo is a sister ship of Vanuatu Ferry.

Ocean Logistics is the major company for tugs and barges. There are smaller, privately-operated boats that also transport cargo and passengers. Cargo vessels are not designed for passenger transport, but some smaller cargo vessels may carry up to a handful of passengers.²⁴⁰

During a national emergency, the Police Maritime Wing (PMW) of the VPF will assist and coordinate through the NDMO regarding maritime logistics, domestic vessel safety, sea transport of humanitarian cargo and people, and support maritime search and rescue tasks.²⁴¹

Communications

Vanuatu has experienced growth in ICT access, due in large part to mobile cellular connectivity. However, less than half of the population accesses the internet. Consequently, a range of communication media are important for disseminating disaster warnings and other critical information. Radio remains a widely accessible and trusted broadcast medium, as well as a critical information lifeline, especially

in rural communities. TV, print, digital, and word-of-mouth also contribute to disseminating disaster-relevant information.

Early Warning Systems and Information Sharing

Vanuatu approaches early warning through an integrated, community-focused Multi-Hazard Early Warning System (MHEWS) comprised of a hazard-monitoring network, national warning center, and information dissemination system.²⁴² The MHEWS is built around the VMHS, NDMO, NEOC, GSMA, provincial and municipal disaster structures, Area Councils, and community-level organizations. The legal foundation for this arrangement is the DRM Act, which establishes among the statutory functions of the NEOC coordination of the activities of government and partner agencies involved in “disaster monitoring, warning and disaster response,” preparation and dissemination of information to partner agencies, and keeping the public informed of disaster warnings, events, and responses through the media.²⁴³

Preparation for TC Pam in 2015 helped establish an early warning process linking Vanuatu's weather forecast agency and two telecom operators, TVL and Digicel, and their cooperation meant that the vast majority of the population received free SMS warning alerts about the storm.²⁴⁴ Since then, Vanuatu has been at the forefront of several initiatives improving early warning in innovative ways. In April 2026, the government rolled out a pilot MHEWS on Efate at Port Vila and Mele; it aims to quickly send to communities localized warnings attuned to their microclimates. Traditional knowledge, which has long observed climate and environmental changes, has been integrated with modern science in emerging tools, such as the ClimateWatch App, to enhance early warning capabilities.²⁴⁵ Vanuatu has also started constructing Early Warning Backup Centres, designed to immediately continue disseminating warnings and disaster information if the main center in Port Vila is operationally compromised.

The warning architecture separates but

closely links scientific warning functions and DM decision-making. VMHS observes hazards, interprets scientific information, forecasts conditions, and produces technical alerts, advisories, bulletins, and warnings.²⁴⁶ NDMO, operating through the NEOC when activated, coordinates what government agencies and partners do with that information and communicates preparedness and response instructions to the population.

Hazard Detection and Monitoring

At the upstream end of the system is VMHS, a department of MOCCA. Its mandate encompasses meteorological observations and forecasting, climate services, marine weather, and observation and monitoring of cyclones, earthquakes, tsunamis, volcanoes, and associated geophysical hazards.²⁴⁷

For TCs and severe weather, VMHS combines national observational capabilities with regional and global meteorological data and forecasting products.²⁴⁸ Vanuatu operates its own TC warning service that draws on regional information from the World Meteorological Organization (WMO) and the Regional Specialized Meteorological Centre in Nadi, Fiji.²⁴⁹

VMHS issues tropical cyclone outlooks, information, advisories, warnings, forecast-track products, severe weather warnings, marine forecasts, heavy-rainfall and flooding information, and seasonal outlooks. It has progressively shifted toward a more impact-based warning model. WMO, VMHS, NDMO, and other stakeholders are currently implementing Impact-Based Forecast and Warning Services with financial support from the Climate Risk and Early Warning Systems (CREWS) program.²⁵⁰ The objective is to supplement forecasts describing wind, rainfall, or other physical conditions with warnings explaining the consequences those conditions may produce for particular places, people, infrastructure, and sectors. WMO and VMHS are also integrating the Common Alerting Protocol (CAP) into operational forecasting services, which supports machine-readable,

standardized warning distribution across multiple communication platforms.²⁵¹

VMHS also maintains Vanuatu's primary geophysical monitoring capability.²⁵²

The national network incorporates seismic, volcanic, and other geophysical monitoring stations, with data transmitted to the national warning center in Port Vila.²⁵³ World Bank investments strengthened this capability by linking volcano, seismic, and weather observing stations through real-time data communications and by improving multi-hazard SOPs.²⁵⁴ One major investment established a network of seismic stations near active volcanoes;²⁵⁵ it is capable of automatically transmitting seismic and volcanic observations and imagery and allows VMHS to maintain and update volcanic alert levels without relying exclusively on periodic field observation.

For volcanoes, VMHS assigns Volcanic Alert Levels and publishes volcanic bulletins. Regular bulletins are issued for monitored volcanoes, with additional information issued when activity changes significantly.²⁵⁶ These scientific assessments can then trigger government preparedness measures, access restrictions, evacuation planning, or other actions coordinated through NDMO and provincial authorities.

VMHS's geohazards monitoring systems also include seismic sensors, visual and camera surveys, and satellite imagery from the U.S. National Oceanic and Atmospheric Administration (NOAA).

Warnings and Alerts

VMHS's warning is not the end of the process. Information passes into Vanuatu's DM architecture, principally through NDMO and the NEOC.²⁵⁷

The NEOC functions as the national warning-to-action coordination hub. When a hazard is judged likely to require multi-agency preparedness or response, NDMO can activate or scale up the NEOC, bring government ministries and partner organizations into the coordination structure, communicate with provincial authorities, issue public preparedness

information, activate or recommend activation of evacuation centers, and coordinate national clusters and other response mechanisms. The NEOC SOP specifically integrates early warning and hazard updates into operational information management and public communication.

Government broadcasters have arrangements to transmit emergency warnings, while multiple communication channels are used to maintain contact with national and provincial actors.²⁵⁸

The difference between VMHS warnings and NDMO alerts is especially clear in Vanuatu's TC system. VMHS assesses cyclone location, track, intensity, winds, rainfall, and likely timing. NDMO applies a color-coded preparedness system linked to the forecast hazard. Under current public guidance:²⁵⁹

- Blue Alert signifies that VMHS forecasts cyclone-related conditions within approximately 48 hours and communities should prepare.
- Yellow Alert signals a higher level of threat and the need to act on preparations.
- Red Alert directs people in threatened areas to remain in a safe shelter or safe place as destructive conditions become imminent.

Public instructions accompanying each stage include monitoring radio, television, SMS, and internet information, securing property, assembling household members, preparing emergency supplies, and moving to safe shelter.

Importantly, these alert stages can be applied geographically rather than nationally. During storms, different provinces may simultaneously be under different alert levels as the weather system moves through the archipelago. NDMO situation reports from TC Donna, for example, recorded Sanma and Malampa under Red Alert, while Shefa was under Yellow and Tafea under Blue.²⁶⁰ This progression allows preparedness measures to escalate sequentially along the cyclone track rather than waiting for a nationwide threshold.

Vanuatu's geography makes warning dissemination as important as forecasting accuracy. The population is distributed across dozens of inhabited islands, many communities

lack reliable broadband or mobile coverage, and severe cyclones can quickly disable the same infrastructure used to distribute warnings. Vanuatu therefore uses multiple, partially redundant communication channels rather than relying on a single warning platform.

VMHS and NDMO disseminate information through combinations of radio, television, SMS and mobile networks, government websites, social media, telephone, internet services, and HF radio. During TC Pam, VMHS warnings were transmitted through SMS, telephone calls, and the internet. When mobile towers and some HF infrastructure failed, other channels continued to carry warning information. VMHS's cyclone materials identify Radio Vanuatu and other national and provincial radio stations as important broadcast channels for warning and preparedness information.²⁶¹

Traditional Knowledge

Traditional and indigenous knowledge remains an important component of how Ni-Vanuatu communities understand environmental change and prepare for hydrometeorological hazards.

Long before modern meteorological services, communities developed locally specific systems for observing plants, animals, winds, clouds, ocean conditions, and astronomical phenomena to anticipate seasonal changes and potentially hazardous conditions.²⁶² This knowledge is still practiced and transmitted across generations, particularly in rural and island communities where locally observable indicators can complement national forecasts. The VMHS formally recognizes traditional knowledge as an accessible means of understanding and anticipating weather, climate, and extreme events and has worked with traditional knowledge holders to document and preserve these practices.²⁶³

Under the Vanuatu Klaemet Infomesen blong Redi, Adapt mo Protekt (VanKIRAP) project, VMHS and its partners compiled a Vanuatu Traditional Knowledge National Indicator Booklet²⁶⁴ and developed provincial traditional knowledge resources to support the use of these

observations in community preparedness and early action.²⁶⁵

VMHS's Traditional Knowledge Strategy also calls for indicators to be monitored, tested, and documented before traditional knowledge narratives are incorporated into forecasting products.²⁶⁶ The ClimateWatch Vanuatu app, developed through VanKIRAP, enables community members and citizen scientists to record observations of selected traditional indicator species and phenomena and transmit those observations for analysis. VMHS maintains the resulting data to examine changes in flowering, breeding, migration, and other seasonal behaviors.²⁶⁷ The intent is not to replace instrument-based forecasts but to develop hybrid climate information products that draw upon both contemporary scientific and traditional knowledge systems and communicate risk in ways that are meaningful to Ni-Vanuatu communities.

Local civil-society organizations have also been trained to use traditional knowledge monitoring forms, provincial calendars, the National Traditional Knowledge Indicators Booklet, and ClimateWatch to support community decision-making. This integration is particularly important as extreme weather events alter the timing and behavior of some indicator species, potentially changing the reliability of knowledge developed under earlier environmental conditions. By documenting, validating, and continually monitoring these indicators, Vanuatu is incorporating indigenous knowledge into a broader people-centered approach to early warning while also preserving knowledge that might otherwise be lost as lifestyles, ecosystems, and climate conditions change.

Information Sharing Focal Points

NDMO and NEOC

National Disaster Management Office and
National Emergency Operations Center
Location: Nambatu Area, Port Vila,
Vanuatu
Phone: +678 22699 / +678 33366

Email: ndmo@vanuatu.gov.vu

Website: <https://ndmo.gov.vu/>

Facebook: <https://www.facebook.com/ndmo.gov.vu/>

Instagram: <https://www.instagram.com/ndmo.vanuatu/>

You Tube: <https://www.youtube.com/channel/UCWjgCVxjNWjXaJCMHpEObYg/videos>

X (formerly Twitter): @NDMO_Vanuatu

VMHS

Vanuatu Meteorological and
Hydrometeorological Services
Location: Nambatu Area, Port Vila,
Vanuatu

Phone: +678 24686

Email: admin@meteo.gov.vu

Website: <https://www.vmgd.gov.vu/>

Facebook: <https://www.facebook.com/vmgd.gov.vu/>

X (formerly Twitter): @ForecastVMGD

VRCS

Vanuatu Red Cross Society Headquarters
Location: Nambatu, Port Vila (opposite Au
Bon Marche)

Website: <https://www.redcross.org.vu/>

Phone: + 678 27418

Email: admin@redcross.org.vu

Facebook: <https://www.facebook.com/VanuatuRedCross/>

Instagram: <https://www.instagram.com/vanuaturedcross/>

You Tube: <https://www.youtube.com/@vanuaturedcross9114>

X (formerly Twitter): @vanuaturedcross

Telecommunications Infrastructure

Telecommunication operators play a vital role in supporting government provision of important services and networks during emergency response. Vanuatu's telecommunications sector has seen a continuing increase in population use, particularly enabled by mobile internet.

Under the Universal Access Policy, the government has committed to achieving

nationwide mobile voice and data coverage.²⁶⁸ In 2025, Vanuatu had approximately 338,000 total active mobile-cellular connections, an increase of 10% from 2024 and 22% from 2023. While the figure was equivalent to 100% of the total population, some of those connections may only include services such as voice and SMS. Among the mobile-cellular connections, 99.4% are broadband (3G, 4G, or 5G).

An estimated 154,000 individuals (45.7% of the population) use the internet. In October 2025, there were 143,000 social media user identities, a total that suggests that 42.4% of Vanuatu's population may use social media, although many users may have multiple identities across platforms.

The share of web traffic by type of user device breaks down to 66.8% mobile phones, 30.6% laptop and desktop computers, and 2.6% tablet devices.²⁶⁹

With less than half of the population accessing the internet, a range of communication media remains important for disaster preparation, warning, and response. The December 2024 earthquake damaged Vanuatu's sole international submarine cable, the Interchange Cable Network (ICN1), and there was a nationwide internet outage. The ICN1 is a 1,280-gigabit-per-second (Gbit/s) submarine fiber cable that connects Port Vila to Suva, Fiji.²⁷⁰ The connection was restored 10 days after the earthquake following a multilateral repair effort.

The national Emergency Telecommunications Cluster (ETC) is usually only activated 24 hours before a disaster. The ETC is led by the Office of Government Chief Information Officer (OGCIO) and co-led by the Telecommunications Radiocommunications and Broadcasting Regulator (TRBR). The Chief Information Officer within the OGCIO reports directly to the Prime Minister. The NDMO currently uses the Vanuatu Government National Broadband Network, which consists of HF and VHF. In the outer islands, HF and VHF equipment are located in police stations.

The Vanuatu Government National Emergency Radio Network underwent a major

upgrade beginning in 2020, with initial phases completed in 2021. This network connects police posts across all six provinces, enabling dependable inter-island communication for the VPF, government agencies, and the NDMO during emergencies. The experience of TC Harold in 2020 highlighted the essential role of resilient radio communications and critical infrastructure in maintaining coordination during severe disruptions. The network is being delivered through a partnership between the VPF and the ADF under the Vanuatu-Australian Defence Cooperation Program.²⁷¹

Starlink became available in Vanuatu by 2023–2024, with a temporary disaster-use license granted in March 2023 and over 300 terminals deployed after the December 2024 quake.²⁷² In 2024, Starlink was granted a 15-year license to operate. Its satellite technology aims to provide reliable internet access to remote and hard-to-reach communities such as Ureparapara, Torres, Futuna, and Anatom, where connectivity has traditionally been limited by geography and cost.²⁷³ By 2025, five local resellers – Digicel Vanuatu, Vodafone Vanuatu, Pacific Link, Pacific Networks, and WanTok Network Ltd – offered service with a price of approximately US\$100 per month and about US\$600 for hardware.²⁷⁴

A mix of funding is contributing to the development of a second undersea cable – the TamTam system, the world's first Science Monitoring and Reliable Telecommunications (SMART) cable – to connect Vanuatu to New Caledonia. The Asian Development Bank, through its Wayfinder Program, is funding part of the project. In the private sector, it will be implemented by Interchange Limited and contracted to Alcatel Submarine Networks.²⁷⁵ The system is expected to be ready for service by the end of 2027. It will provide a backup international connectivity route to New Caledonia and extend domestic fiber connectivity to Tanna, Norsup, and Luganville.²⁷⁶ The cable will also be fitted with remote monitoring sensors that collect climate data and provide real-time, early warning alerts for earthquakes and tsunamis.²⁷⁷

TRBR is the statutory body that regulates telecommunications, radiocommunications, and broadcasting services. A TRBR-issued radio license is required for radio-transmitting equipment and radio frequency-emitting devices, with the exception of certain devices under General User Radio Licenses. To import and license humanitarian communications equipment (very small aperture satellite [VSAT], HF, VHF, Thuraya, etc.), humanitarian agencies must submit a request to TRBR for an exemption before bringing equipment into Vanuatu, including for training.²⁷⁸

Mass and Social Media

Vanuatu's media landscape is undergoing rapid change, shifting from traditional print and state broadcast services toward mobile and digital platforms.²⁷⁹ Despite this transition, radio remains a critical information lifeline, especially in rural and remote communities where telecommunication infrastructure limitations persist. Access to available media sources – radio, print, digital, or word-of-mouth – continues to shape how Ni-Vanuatu receive disaster news and alerts.²⁸⁰

Smartphone adoption and mobile network availability have made digital media the primary channel for news and information, though accessibility varies across provinces. By late 2025, mobile phone access reached 100% of the population, and most connections were broadband enabled, which means that they can connect via 3G, 4G, or 5G mobile networks. However, network coverage constraints, high data costs, and limited plan features continue to restrict usage in some areas. At the end of 2025, approximately 45% of the population used the internet, and about 42% of the population used social media. Word-of-mouth remains a core part of information sharing across all communities, regardless of technology access.²⁸¹

Vanuatu's media sector is led by two main institutions: the Vanuatu Broadcasting and Television Corporation (VBTC) and the Trading Post Ltd. State-owned national broadcaster VBTC operates three radio stations and one television station. Its public mandate includes

information dissemination, education, and entertainment. Trading Post Ltd – Vanuatu's largest independent media company – operates the Vanuatu Daily Post (the country's primary daily newspaper) and its digital platform, the Daily Post Digital Network. Trading Post Ltd also owns Capitol FM 107, a popular radio station.²⁸²

Radio remains the most accessible and trusted broadcast medium nationwide. VBTC's Radio Vanuatu reaches rural communities via shortwave transmission. In addition to Capitol FM 107, radio stations that disseminate disaster information include Buzz FM, Paradise FM, Halo FM, and Radio Life FM.²⁸³ Television access is delivered through a national digital TV service, with Vodafone Vanuatu serving as a major provider of telecommunications and broadcast infrastructure. While digital TV distribution has expanded coverage in some regions, reaching remote islands remains a challenge.

Social media are widely used but not consistently trusted as a news source. For many Ni-Vanuatu, access to social media platforms is the main reason for going online. Facebook is the most widely used platform, followed by Messenger, and YouTube. Younger audiences increasingly rely on a broader mix of platforms, including TikTok, WhatsApp, Imo, Instagram, Snapchat, LinkedIn, Viber, and X.²⁸⁴ During emergencies, the NDMO disseminates real-time updates through national radio broadcasts, mobile networks, and its official Facebook Page (<https://www.facebook.com/ndmo.gov.vu/>).

Utilities

Vanuatu faces many challenges in the electric power and water-sanitation sectors. Many obstacles are due to geography, population distribution, and overreliance on imported fossil fuels. There is also a pronounced rural-urban divide where relatively stable electricity is available in the main urban centers, while rural areas and outer islands do not have access to reliable sources of electricity. That same divide can be found in the water-sanitation sector, where urban areas have better access, with

private companies supplying freshwater, while rural and outer islands rely on natural sources or rainwater catchment and have less access to sanitation facilities. Renewable energy sources and ongoing projects in the power sector can be expected to provide more resilience during and after future disasters. The government has instituted a policy to improve water and sanitation, while donor countries and NGOs fund ongoing projects in rural areas to deliver services to communities.

Power

Vanuatu is highly dependent on imported fossil fuels and faces high electricity tariffs. It has historically faced some of the highest global energy prices, as its small market and lack of local capacity make it a price-taker in the volatile global market. Imported diesel fires most electricity, but there are small contributions from hydropower, wind power, and biodiesel fuel made from coconut oil.

Despite some recent progress, Vanuatu remains one of the least electrified countries in the Pacific. Many communities across the islands, particularly in rural areas, still have no access to reliable energy sources. In 2021, the electricity access rate was 78%. Diesel generation provides 82% of electricity, followed by hydro at 11%, wind at 3.5%, and solar at 3.5%. Efate accounts for 80% of national electricity demand, and the government focuses on this island to increase renewable energy – from 15% to 31%.²⁸⁵

Kerosene and biomass, such as wood, remain common energy sources for many, especially in rural areas. Biomass is used primarily for cooking, while kerosene is used to power lanterns. Small diesel generators and solar photovoltaic (PV) panels are common in rural areas for commercial, community, and institutional facilities. They are also used to a much lesser extent for household energy.

Most urban households are connected to the electric grid, although kerosene is still used in many urban and peri-urban households for lighting, while liquefied petroleum gas (LPG) is often used for cooking.

The total installed electricity generation capacity was 39 megawatts (MW) in 2023. Grid-connected electricity is available in Port Vila (Efate), Luganville (Espiritu Santo), Lakatoro (Malakula), and Lenakel (Tanna). Electricity is supplied by two private companies, Union Électrique du Vanuatu Limited (UNELCO) and Vanuatu Utilities and Infrastructure Limited (VUI). UNELCO, the largest power company, is a subsidiary of GDF Suez. It has concessions for Port Vila, Lenakel, and Lakatoro. The concession for Luganville is held by VUI, a subsidiary of Pernix Group.²⁸⁶

The grid on Efate accounts for some 26.4 MW of total national generation capacity. The capacity includes 16.8 MW of diesel gensets distributed from Tagabe and Port Vila power plants; a 3.4-MW wind power plant with 9 wind turbines located in Kawene; and 2.46 MW of solar PV distributed from Tagabe, Kawene, and Undine Bay, and an independent power producer for the parliament building.²⁸⁷

Renewable sources of energy include hydro and wind. The 1.2-MW Sarakata River Hydroelectric Power Station supplies 41% of grid-connected electricity to Luganville. The project was built with funding from the government of Japan. For wind-generated energy, the 2.75-MW Devil's Point Wind Farm on Efate supplies electricity to Port Vila. The wind farm consists of 11 turbines and was completed in 2008.²⁸⁸

A recent project by UNDP, concluded in March 2026, saw three pico-hydro power stations provide clean, renewable energy to the communities of Waterfall, Melsisi, and Larmiaat. The completion of the project provided some 26 settlements on Pentecost Island 24-hour electricity for the first time. The three stations have a combined capacity of 63 kilowatts and can produce 549,340 kilowatt-hours (kWh) of electricity each year, supported by 154 kWh of battery storage. They serve around 16% of Pentecost's population.²⁸⁹

At the grassroots level, organizations such as the Vanuatu Renewable Energy and Power Association, a Port Vila-based NGO, works with the government and other partners to promote

small-scale renewable energy initiatives. There are other projects to harness renewable resources, such as solar, hydropower, and energy efficient lighting projects, aimed at reducing dependency on imported fuels.²⁹⁰

Water and Sanitation

Both ground and surface water in Vanuatu are used for domestic purposes. In urban areas, shallow aquifers are the main water source. In rural areas, bores, wells, springs, rivers, and rainwater catchment are used. The urban water supply in Port Vila is provided by UNELCO. Another private company, Public Works, supplies Luganville, Isangel, and Lakatoro. Rural water supplies are donor-funded, and supplies are operated and managed by communities.²⁹¹

The population faces challenges accessing clean water and sanitation. Rainwater harvesting is the most common form of water supply; however, unpredictable rainfall and increased temperatures threaten availability. Saltwater intrusion of freshwater sources is another challenge.²⁹²

Over 80% of the rural population has basic access to water. However, basic access to sanitation is less than 50%, and access to hygiene is less than 20%. Diarrhea is the main cause of death in children under 5 years of age. Approximately one-third of children are stunted, with higher rates found in rural areas. UNICEF's 2024 Situation Analysis report identifies stunting as a major development challenge that is strongly linked to poor water quality and poor sanitation. The government recognizes these challenges, and sanitation policies seek to address them; however, gaps remain in institutionalizing these changes at the local level.²⁹³

Around 90% of urban households use improved sanitation facilities.

However, rural areas still rely on basic pits with unimproved options, such as open pits and pour/flush to open drains. Open defecation is common among 5% of rural households.²⁹⁴ Around 45% of households in Torba and Sanma lack improved sanitation facilities. Toilets are generally outside of houses, and they are exposed to natural hazards.²⁹⁵

Disasters impede progress in the water-sanitation sector, as they sometimes damage or destroy water sources and sanitation facilities. For example, rainwater is unsafe to drink on the island of Tanna as it is often contaminated by Mount Yasur, an active volcano. To help bring better services to Tanna, World Vision, supported by Australia's DFAT, launched a 5-year program in 2018 to improve facilities and practices. The project benefitted some 15,849 people on Tanna.²⁹⁶

Photo 3 shows Japan Ground Self-Defense Force and U.S. Navy personnel give a basic lifesaving class to Port Vila Central Hospital Staff in support of Pacific Partnership 2024.²⁹⁷

Health Systems

Vanuatu is highly vulnerable to persistent public health threats, many of which are amplified by limited infrastructure and the frequent occurrence of disasters. These events disrupt access to clean water, sanitation, and essential health services, while interruptions



Photo 3: Basic Life Skills Training during Pacific Partnership 2024

to routine activities, such as vaccination and disease surveillance, further increase the risk of outbreaks that can rapidly overwhelm the healthcare system.²⁹⁸

There remain key health risks associated with communicable and vector-borne diseases – especially dengue and malaria. Concurrently, the country is experiencing a growing burden of non-communicable diseases (NCD). In 2023, approximately 1,910 deaths – representing about 76% of all mortality – were attributed to cardiovascular diseases, diabetes, cancers, and chronic respiratory conditions.²⁹⁹ This rising prevalence of NCDs reflects shifting lifestyle patterns influenced by urbanization, consumption of processed foods, and tobacco use.

The MoH oversees the public health systems and services and works closely with agencies such as the NDMO to ensure a coordinated approach to health emergencies during and after disasters. As part of its preparedness efforts, the MoH developed the National Health Plan for Disaster Risk Management and Climate Change Adaptation (2021-2025). This plan guided the creation and implementation of strategies to address the health effects of hazards, including TCs, earthquakes, and pandemics. Its overarching goal was to maintain the delivery of essential health services with minimal disruption during response and recovery.³⁰⁰

Vanuatu's health service network consists of one primary referral hospital and several provincial facilities. In Port Vila, Vanuatu National Hospital (called Vila Central Hospital until 2025)³⁰¹ serves as the main referral hospital, providing emergency care, surgery, and specialized services. Additional provincial hospitals include Northern District Hospital in Luganville, Lenakel Hospital on Tanna, Lolowai Hospital on Ambae, and Norsup Hospital on Malekula. These facilities deliver general medical care, maternity services, and outpatient clinics to their respective populations.³⁰² Health services in remote island communities are supplemented by charitable and faith-based organizations, such as Medical Santo and the Tafea Health Care Association, which operate

health programs and clinics alongside the public system.³⁰³ Many outer islands rely on smaller medical aid posts, and some remote rural areas may have no formal health facilities.

Hospital and medical facilities remain limited, particularly outside urban centers. Pharmacies are few and are concentrated mainly in towns and missionary clinics, and they may have constrained supplies. In cases of severe illness or injury, medical evacuation is often required, with Australia and New Zealand providing the nearest advanced care options.³⁰⁴

The health workforce is significantly under-resourced. There are about 85 doctors nationwide, approximately 1 doctor per 3,700 people, a concentration well below the WHO benchmark of 1 per 1,000. There are about 532 nurses for over 307,000 people, or about 1.7 nurses per 1,000 people, while the WHO recommends 4.5 per 1,000.³⁰⁵

The Health Sector Strategy (2021–2030) outlines Vanuatu's long-term vision for a stronger and more resilient health system capable of effectively managing public health emergencies. The strategy emphasizes preparedness for a wide range of hazards, including disease outbreaks and extreme weather events. The Strategy's goals are:

- Ensure all people of Vanuatu who need health services, including women, youth, the elderly, and vulnerable groups, receive them without undue financial hardship
- Rebuild the public's confidence in the health system by reinforcing public health and clinical service delivery and ensuring equitable access to affordable, quality health care
- Redesign the health system to be more resilient to health shocks caused by disease outbreaks, disasters, and climate change while better preventing, detecting, and managing communicable diseases
- Optimize real improvements in population health and wellbeing through promotion and active facilitation of healthy lifestyles and health-seeking behaviors
- Revitalize health sector management capacity and systems at all levels, including

accountability through corporate and clinical governance and leadership with evidence-based policies and plans supported by strong monitoring and information systems

- Redefine collaborative action and expand our partnerships to meet the greater health needs of the people of Vanuatu³⁰⁶

Regional partnerships play an important role in building Vanuatu's health resilience. The WHO Representative Office in Suva, Fiji, provides tailored technical assistance to 21 PICTs, including Vanuatu, under the Pacific Islands-WHO Multi-country Cooperation Strategy (2024-2029). This strategy focuses on advancing universal health coverage, addressing the growing burden of NCDs, and strengthening preparedness and response capacities for health threats across the region.³⁰⁷

Within the national DM framework, the MoH leads the national Health and Nutrition Cluster.³⁰⁸ The WHO serves as the cluster co-lead and supports the MoH in reinforcing health system capacities and ensuring alignment with government priorities.³⁰⁹

The Health Incident Management Team coordinates national health responses during emergencies and operates from the national health emergency operations center (NHEOC). Support from development partners is organized through the Health Cluster, which ensures collaboration across organizations during major health events. All communications materials containing health information must be cleared by the Health Promotions Unit before dissemination to ensure accuracy and consistency during disaster response operations.³¹⁰

EMTs are often the first responders when a disaster or outbreak hits. Established in 2018, the Vanuatu Medical Assistance Team (VanMAT) is classified by WHO as a Type 1 Mobile, which provides care for acute trauma and non-trauma presentations, referrals, and community-based care. Type 1 Mobile EMTs must be operational within 24 hours of arrival at a disaster site and be able to manage at least 50 outpatient and emergency cases per day for at

least 14 days, working in multiple locations for at least 2 weeks. The EMTs may perform minor procedures such as wound debridement in an outpatient setting.³¹¹

The conjunction of TC Harold and the COVID-19 pandemic saw significant learning in emergency public health. On 6 April 2020, TC Harold struck amidst the early stages of the COVID-19 pandemic. Border closures and strict testing protocols required adaptations to contactless and remote support operations. They underscored the need for clearer SOPs and better integration of public health requirements within civil-military coordination frameworks.³¹² The VanMAT led the localized health response due to the travel restrictions and limited external deployment. Despite resource constraints, local medical professionals and response teams managed clinical care, coordinated medical supply shipments, and maintained essential services throughout the event.³¹³

The NHEOC TC Harold Health Sector Response Plan was implemented by the MoH; it included four key objectives:

- Activate the Incident Management System and the National and Provincial Health Emergency Operations Centers
- Initiate health facilities' and communities' impact and needs assessments
- Initiate priority response activities:
 - Provide life-saving services and essential medical support
 - Maintain minimum standards for provision and access to health services
 - Minimize the risk of communicable disease outbreaks
 - Minimize risk of NCD-related illnesses, including nutrition and psycho-social issues
- Produce regular situation reports³¹⁴

Then in March 2023, Vanuatu faced severe impacts from TCs Judy and Kevin. The NHEOC and the EMT Coordination Cell (EMTCC) were activated to coordinate deployment of both national and international EMT responses. The EMTCC deployed five national EMTs and managed the deployment of four international

EMTs. The EMTCC coordinated logistics, transport, and ration supplies, and implemented a medevac process for patient referrals.³¹⁵

Shelter and Housing

Most housing in Vanuatu is one- or two-story and freestanding. In rural areas, small villages consist of several buildings grouped together. Homes generally consist of a building for sleeping with a separate kitchen and outhouse.³¹⁶ Much of the construction in Vanuatu is informal and unregulated aside from the central urban areas of Port Vila and Luganville. In remote villages, traditional building materials are mostly used. In other areas, construction uses a mix of building materials. In the low-cost housing around Port Vila, builders use a mix of modern material like concrete and iron roofing; however, houses are reportedly not built to building codes.³¹⁷ Photo 4 shows houses in Port Orly Village on Espiritu Santo island.³¹⁸

More than 40% of housing is estimated to be of the traditional variety. Traditional housing is built primarily with material from palm trees, grass, bamboo, and timber. This method is more common in rural areas and in the outer islands. Semi-permanent or hybrid housing is built from a mixture of traditional material and industrial products, especially corrugated iron sheets, which are used for roofing. These hybrid houses are considered poorly constructed and are common in low-income areas such as informal urban settlements, but they are also increasingly found in rural areas. Permanent or “modern” dwellings are usually found in urban areas and built of industrial products such as concrete blocks, timber framing, and corrugated iron sheets. An estimated 27% of houses nationally are of this type.³¹⁹

While the use of traditional building methods and houses can be seen as a vulnerability as buildings can be more easily damaged, according

to a report, local people believe that the widespread use of lightweight materials was a factor in the low death toll and serious injuries resulting from TC Pam (2015). Injuries from dislodged traditional building materials were reportedly few. Following the cyclone, the Shelter Cluster found that traditional buildings survived better than houses with cement sheeting and iron roofing and better than houses built with traditional materials but in modern styles. The report suggested traditional roofing material survived the cyclone better and was quickly repairable.

However, a report by Save the Children came to different conclusions, saying that houses made of traditional materials suffered more damage than houses built using modern materials. The report also found that following TC Pam, corrugated iron and concrete were significantly easier to find than natural materials such as thatch and bamboo.

Initiatives to promote the usage of traditional materials have been tested. Traditional houses made of local materials and constructed to be cyclone shelters, known as “cyclone houses,” were promoted following 2009’s TC Innis, which destroyed many traditional homes. The cyclone houses are designed to have thicker thatch and a roof that extends to ground level. At least one end of the house is rounded to reduce wind resistance, frames are buried in the ground, the door is kept as small as possible,



Photo 4: Port Orly Village

and materials are lashed together to allow the homes to flex in strong winds. Cyclone houses were seen as an effective shelter following TC Pam and were promoted after the cyclone due to deaths that correlated with heavy building materials, which cyclone houses do not utilize.³²⁰

The Emergency Shelter Cluster has the lead on safe spaces for evacuation or temporary settlement. The cluster is formed from government agencies and NGOs under the leadership of the NDMO. The cluster has provided emergency support during recent disasters and continues supporting preparedness activities.³²¹ During previous cyclones, established evacuation centers have been areas where people sleep, but they return to their homes during the day to rebuild.³²²

To improve the availability of emergency shelters, the government initiated a national program to construct multi-purpose emergency shelters across the country. The shelters are designed to provide safe spaces during disasters. The shelters are also designed to be used as community centers. Six shelters were planned for Port Vila, while two shelters were planned for Luganville. The program was launched in 2024 and was to expand to Tanna, Malekula, and Santo. The multi-purpose shelters are planned to meet safety and accessibility standards and will be equipped with water tanks, solar power, sanitation facilities, and storage areas. Area Councils will oversee the management of the shelters. The government plans to expand the program to other islands where schools and public facilities are used as shelters and are often disrupted due to a lack of dedicated shelters.³²³

Food Security

Vanuatu's food system is characterized by the coexistence of a strong customary and subsistence production base with a growing dependence on commercial markets and imported foods. Across much of the archipelago, household food security continues to rest on subsistence and semi-subsistence agriculture, coastal fisheries, small livestock holdings,

customary exchange, and local markets.³²⁴

Government productive-sector policy identifies traditional subsistence food production and artisanal fishing as the foundation of household food security and seeks to strengthen sustainable domestic production of staple foods while improving market access and commercialization.³²⁵

The farming system is diverse and adapted to Vanuatu's tropical environment. Important staples include yam,³²⁶ taro, cassava,³²⁷ sweet potato, banana, and plantain, supplemented by island cabbage and other leafy vegetables, breadfruit, coconut, fruits, nuts, pigs, poultry, cattle, and locally caught fish and shellfish.³²⁸ Root crops are particularly important because they provide household calories while some varieties can remain in the ground until required, a characteristic that offers a degree of food storage within the farming system itself. Agriculture also has substantial cultural significance; yam, taro, pigs, and other foods support ceremonies, customary exchange, and social obligations.³²⁹

Household production is consequently a major component of national resilience. Subsistence production spreads food-system risk across thousands of gardens rather than concentrating supply entirely on large commercial farms or imported commodity chains.³³⁰ This decentralized production system is nevertheless linked increasingly to the cash economy. Surplus root crops, vegetables, fruit, livestock, and fish are sold through municipal markets and smaller provincial and roadside markets, while commercial agriculture supplies Port Vila, Luganville, tourism businesses, and export markets. Cash crops and commodities – kava, copra, cocoa, and cattle – provide income that households can use to purchase food or other goods or pay school fees and transport costs.³³¹ Consequently, a disaster that destroys gardens or fishing equipment can simultaneously reduce both food availability and household purchasing power.

Domestic production does not meet all consumption requirements. Rice, flour, and other grain products, processed foods, cooking

oil, canned fish and meat, and dairy products and beverages are important elements of the commercial food supply. Government policy recognizes increasing dependence on imported foods; the Vanuatu Bureau of Statistics identifies rice among significant imported commodities.³³² Imported foods are especially important in Port Vila and Luganville, and during periods when domestic crops are unavailable after disasters.³³³

Disasters create a dual vulnerability in rural and urban populations. Rural households are highly exposed to damage to gardens, livestock, fishing equipment, and local ecosystems, while urban and market-dependent populations are vulnerable to disruption of international and inter-island shipping or damage to ports, roads, and commercial inventories. Moreover, disruptions to household income can drive food insecurity. Imported foods provide an important buffer when local production fails, but dependence on imports exposes consumers to freight costs, international commodity prices, and transportation disruption. Conversely, strong subsistence production can protect households against international price shocks, but it is highly exposed to localized hazards.³³⁴

TCs represent the most frequent large-scale shock to Vanuatu's food system. High winds can destroy banana, coconut, and breadfruit trees, strip gardens, and damage livestock facilities. Heavy rain and flooding can inundate root crops and vegetable plots. Storm surge can contaminate agricultural land and freshwater. Damaged boats, canoes, fishing gear, and coastal infrastructure can interrupt access to marine foods.³³⁵ Even where immediate household food stocks survive, destruction of planting materials and perennial crops can create food-security consequences lasting many months.³³⁶

TC Pam (2015) demonstrated the scale of this vulnerability. Government-led assessments reported near-total destruction of banana crops in many areas, major damage to coconuts and leafy vegetables, uprooted or flooded root crops, loss of livestock, and extensive damage to fisheries equipment. FAO described the consequences for agriculture and food security

as severe, while humanitarian estimates indicated that approximately 166,000 people required food assistance during the response.³³⁷

Other hazards produce different patterns. Volcanic eruptions and ashfall can contaminate crops and water, damage grazing areas, and force people away from productive land.³³⁸ During the Ambae volcanic emergency (2017-2018), prolonged displacement created sustained requirements for food supply to evacuation centers and host communities. Earthquakes may destroy marketplaces, roads, port facilities, and storage infrastructure even where agricultural production survives. Following the December 2024 earthquake, landslides affected some agricultural areas, and severe economic and infrastructure disruption in Port Vila created additional threats to livelihoods and market access.³³⁹

Emergency food assistance is coordinated within the broader national DM system. Technical responsibility for food security and agricultural response falls principally to the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity and the national Food Security and Agriculture Cluster.³⁴⁰ The cluster brings together government agencies, national and international humanitarian organizations, and development partners to base food-security interventions on assessments and to reduce duplication and gaps.³⁴¹

The National Cyclone Support Plan states that national relief-food distribution is not to proceed until the Food Security and Agriculture Cluster has provided technical food-damage information. This condition is intended to prevent unnecessary or poorly targeted food aid and to distinguish communities capable of meeting their own food needs from those facing a genuine consumption gap.³⁴² Provincial authorities and Area Councils identify affected communities, displaced populations, and vulnerable households and support beneficiary verification and distribution arrangements. Where assessment confirms a significant food gap, emergency assistance generally combines commercial staple foods with available local food.

CONCLUSION

Vanuatu is one of the Pacific's most hazard-exposed countries, and disaster risk is a persistent feature of its national operating environment. Tropical cyclones, earthquakes, volcanic activity, tsunamis, drought, flooding, and other hazards can affect multiple islands simultaneously and quickly exceed locally available resources. Yet Vanuatu's DM system cannot be understood through exposure and capacity constraints alone. Decades of experience have produced a system that combines increasingly mature national institutions with provincial and community structures, traditional leadership and knowledge, civil society, and established regional and international partnerships.

Vanuatu has significantly strengthened its DM architecture in recent years. The DRM Act of 2019 provided a comprehensive legal basis for DRR, preparedness, response, subnational coordination, and accessing international assistance. Under the law, NDMO and the NEOC are central to preparedness and emergency response. Meanwhile, much of Vanuatu's DM capacity remains inherently local.

National plans and warning systems have limited effect if information does not reach communities or if impacts and needs cannot be communicated back to decisionmakers. Provincial authorities, Area Councils, chiefs, churches, VRCS, Community Disaster and Climate Change Committees, NGOs, and community volunteers help bridge this gap. These networks disseminate warnings, support evacuations, conduct initial assessments, organize available resources, and provide assistance during the period before national or international support can reach affected communities. In a dispersed archipelago, these relationships are not peripheral to the formal system; they are fundamental to how it operates.

The December 2024 earthquake provided an important test of both longstanding arrangements and recent reforms. Vanuatu led

the response through its national institutions while drawing on specialized international capabilities for search and rescue, medical support, engineering, reconnaissance, airlift, logistics, and relief. The first operational deployment of the PRG further demonstrated how regional military capabilities can support national decision-making without necessarily resulting in a large foreign military footprint.

This distinction is particularly important for civil-military coordination. Vanuatu does not maintain a separate standing military; the VMF is a paramilitary component of the VPF. Disaster response remains civilian-led, while the VMF provides useful domestic capabilities in areas such as engineering, communications, security, transport, and search and rescue. When requirements exceed national capacity, Australia, New Zealand, France, Pacific partners, and other international actors can provide capabilities that Vanuatu cannot readily generate on its own.

Vanuatu will continue to rely on international partners following disasters that exceed national capacity, but reliance on external support should not be mistaken for the absence of domestic capability. Its capacity also lies in the ability to issue warnings, organize communities, establish priorities, coordinate partners, and direct outside resources toward nationally identified requirements. Continued implementation of recent reforms, particularly at provincial and community levels and across the response-to-recovery transition, will determine how effectively the formal architecture translates into operations.

Ultimately, Vanuatu's DM system is strongest when local knowledge and action, national coordination, and international support reinforce one another. For outside responders, the task is not to recreate that system when a disaster occurs. It is to understand it before arriving, work through it once engaged, and provide the capabilities Vanuatu needs to manage the response and recovery on its own terms.

APPENDICES

Risk Indices

Risk calculation takes into account exposure to hazards, vulnerability, and coping capacity. Addressing all of these elements is important in reducing and mitigating disaster risk. Various indices emphasize structural or institutional risk while others emphasize hazards or losses (human and economic). Regardless of emphasis, disaster risk calculations use some form of the equation:

$$\text{Disaster Risk} = (\text{Hazard} \times \text{Vulnerability}) / \text{Capacity}^{343}$$

Taken from the UNDRR glossary, definitions will help clarify this formula:

- **Capacity** - The combination of strengths, attributes, and resources available within an organization, community, or society to manage and reduce disaster risks and strengthen resilience.
- **Disaster risk** - The potential loss of life, injury, or destroyed or damaged assets, which could occur to a system, society, or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability, and capacity.
- **Hazard** - A process, phenomenon, or human activity that may cause loss of life, injury, or other health impacts, property damage, social and economic disruption, or environmental degradation.
- **Vulnerability** - The conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of an individual, a community, assets, or systems to the impacts of hazards.³⁴⁴

In general, the goal of indexing risk is to inform decisionmakers and DRR practitioners of the level of risk to and underlying capacity of the target community. The various risk calculation models support proactive crisis management frameworks and are helpful for

prioritizing allocation of resources and for coordinating actions focused on anticipating, mitigating, and preparing for humanitarian emergencies.

INFORM Risk Profile

INFORM is a collaboration of the Inter-Agency Standing Committee Reference Group on Risk, Early Warning, and Preparedness with the European Commission. It is a multi-stakeholder forum for developing shared, quantitative analysis relevant to humanitarian crises and disasters. The Joint Research Center of the European Commission is the scientific lead. There are three operational dashboards – i.e., INFORM Risk, INFORM Severity, and INFORM Climate Change.³⁴⁵

The **INFORM Risk Index** is an open-source assessment that supports prevention, preparedness, and response decisions. It measures the risk of humanitarian crises and disasters in 191 countries. The INFORM model is based on the standard dimensions of risk: Hazards and Exposure, Vulnerability, and [Lack of] Coping Capacity. The first dimension measures the natural and human hazards that pose the risk. The second and third dimensions cover population factors that can mitigate against or exacerbate the risk. The Vulnerability dimension considers the strength of individuals and households relative to a crisis while the Lack of Coping Capacity dimension considers factors of institutional strength.³⁴⁶

The INFORM model is split into different levels to provide a quick overview of the underlying factors leading to humanitarian risk. INFORM gives each country a risk score of 1-10 (1 being the least risk and 10 being the greatest) for each of the dimensions, categories, and components of risk, as well as an overall risk score.³⁴⁷ The higher the score the more at-risk a country is. In the 2026 INFORM Risk Index, Vanuatu had an overall risk score of 4.5/10, which INFORM categorizes as the “Medium” risk class and lands Vanuatu as the

72nd most at-risk country in the Index. The Hazards and Exposure dimension score takes into account a combination of both natural and anthropogenic hazards, and Vanuatu rated 2.9/10, ranking 114th of 191 countries. The Vulnerability dimension score was 5.2/10, ranking 50th of 191, and the Lack of Coping Capacity dimension score was 6.0/10, ranking 45th of 191. Physical exposure to Tsunamis was scored at 7.0/10, marking the greatest threat in the Hazards and Exposure dimension. Aid Dependency measured 8.1/10, the highest risk in the Vulnerability dimension. DRR rated 6.9/10 to be the most significant contributor to risk in the Lack of Coping Capacity dimension. Figure 7 shows the INFORM Risk dashboard for Vanuatu for 2026.³⁴⁸

U.S. Government Disaster Management Engagement

The bilateral relationship between the U.S. and Vanuatu is overseen in terms of the day-to-day programming by the Chief of Mission (COM) of the U.S. Embassy in Port Vila. If Vanuatu experiences a disaster that overwhelms its national capacity to respond, the government may approach the international community, including the U.S. via the Embassy, for assistance. While there are U.S. federal agencies that specialize in delivering foreign disaster assistance, the COM is the lead authority for U.S. government work in the country.

U.S. Country Team

The U.S. and Vanuatu established diplomatic relations in 1986. The U.S. Embassy in Port Vila opened in July 2024. Since then, the U.S. has engaged in disaster preparedness, education, maritime security, health, and economic cooperation activities. The December 2024 earthquake destroyed the Embassy building;

however, the U.S. Embassy remains operational. As of August 2026, the Embassy continues to operate from a temporary space.³⁴⁹ Various U.S. federal agencies and offices operate in the country.

U.S. Embassy to Vanuatu

Web: <https://vt.usembassy.gov/>

Facebook: <https://www.facebook.com/usembassyvanuatu>

X: <https://www.facebook.com/usembassyvanuatu>

You Tube: https://www.youtube.com/@U.S._Embassy_Port_Moresby

In 2016, the U.S. and Vanuatu signed an historic law enforcement pact that included a shiprider agreement, which provided a mechanism for cooperation on the reduction of illegal, unreported, and unregulated (IUU) fishing and the enhancement of maritime law enforcement to protect Vanuatu's Exclusive Economic Zone (EEZ) and fisheries. U.S. military ships regularly call on ports in Vanuatu to engage in training and exchanges with the VMF.³⁵⁰ The U.S. and Vanuatu have also signed an Investment Incentive Agreement, which allows the U.S. International Development Finance Corporation to support private sector-led opportunities in Vanuatu.³⁵¹

In 2026, the U.S. provided US\$1.56 million to us AI-enabled solutions to modernize VMHS' weather forecasting and early warning systems.³⁵² In July 2026 the U.S. supported training for the VMHS on building, installing, and maintaining 3D-printed Automatic Weather Stations. The training was funded by the U.S. Department of State and the U.S. National Weather Service and delivered by the University Corporation for Atmospheric Research. According to the U.S. Embassy,

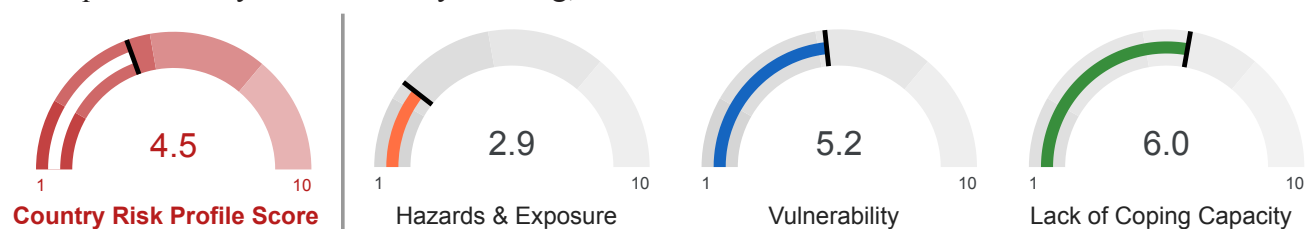


Figure 7: INFORM Risk Index Dashboard for Vanuatu (2026)

the low-cost stations can collect real-time information on data such as rainfall, wind, temperature, humidity, and atmospheric pressure. The weather stations will support disaster preparedness, more accurate forecasts, and Vanuatu's agricultural sector.³⁵³

The U.S. Coast Guard (USCG) has provided disaster response assistance and regularly conducts bilateral joint maritime law enforcement patrols and bilateral shiprider operations with Vanuatu under the 2016 U.S.-Vanuatu Shiprider Agreement. Under the agreement, USCG Cutter Harriet Lane (WMEC 903) has visited Port Vila to embark Vanuatu maritime security officials for joint law enforcement operations. The mission is part of the USCG's Operation Blue Pacific, which supports maritime governance and security in partnership with Pacific nations.³⁵⁴ Separately, in July 2025, the USCG completed participation in Operation Nasse, a 3-month joint operation that aimed to safeguard the marine resources of Pacific nations. The operation involved Australia, France, New Zealand, and the U.S., along with Fiji, Tonga, the Solomon Islands, and Vanuatu. The USCG Oceania District hosted the operation's joint coordination center at Coast Guard Base Honolulu. The multinational operation aimed to combat IUU in the Pacific.³⁵⁵

The Peace Corps is among the U.S. agency offices in Vanuatu. The Peace Corps has served in Vanuatu since 1990, with more than 850 volunteers working across the country during that period.³⁵⁶ Peace Corps volunteers work with their communities on locally prioritized projects in the education and health sectors. They focus on English literacy, community health assistants, and water and sanitation.³⁵⁷

Responses in the Past 5 Years (2021-2026)

The U.S. State Department is the lead federal agency for U.S. international disaster response. Within the Department, the Bureau of Disaster and Humanitarian Response (DHR) mobilizes funding, supplies, and personnel to support a disaster-affected state when that state requests or will accept international assistance and the

U.S. offers assistance within the context that the assistance meets requirements for U.S. interests. The State Department may request other U.S. federal agency support if specific capacities are needed; as such, the Department may request U.S. military support for unique capabilities. The U.S. military has not responded to a recent disaster in Vanuatu; however, other agencies such as DHR's predecessor, the former U.S. Agency for International Development (USAID)/Bureau of Humanitarian Affairs (BHA), and the USCG have supported recent responses in the country.

Earthquake – December 2024

Following the Mw 7.3 earthquake on 17 December 2024, the U.S. government, through the former USAID, provided US\$250,000 in humanitarian assistance to respond to emergency needs. USAID also deployed a team to Port Vila, where the agency had pre-positioned relief supplies.³⁵⁸ The assistance built on the U.S. government's support to Vanuatu's response to TCs Judy, Kevin, and Lola.³⁵⁹

TC Lola – October 2023

Following the passage of TC Lola, the U.S., through the former USAID, provided US\$1.25 million in assistance to support Vanuatu. The support included funding for USAID's partner CARE, who provided food, shelter, and protection programs for the most vulnerable communities. USAID also worked with the Vanuatu government and partner organizations to support assessments, logistics, transportation, and WASH.³⁶⁰

The USCG also deployed to assist in response to a request from the U.S. Embassy in Port Moresby (then responsible for Vanuatu) on 25 October. The USCG mobilized a C-130 aircraft, which was already deployed in the area. The aircraft provided post-storm overflights, assessed the condition of ports and critical infrastructure, and delivered relief supplies. Over the course of a week, the C-130 air crew conducted assessments of the Torba region and overflights of Santo and Lonorore airports to evaluate airfields ahead of aid deliveries. The

crew also provided overflights with personnel from the NDMO and from USAID. The C-130 delivered over 36,290 kilograms (80,000 pounds) of relief supplies, including aid kits and medical supplies from Australia and New Zealand.³⁶¹

TCs Judy and Kevin – March 2023

The U.S., through USAID, allocated US\$3.2 million in humanitarian assistance to support relief efforts in Vanuatu in response to TCs Judy and Kevin. The emergency support was intended for humanitarian partners to provide shelter assistance, agriculture support to help restore livelihoods and improve food security, WASH assistance including safe drinking water, and protection for the most vulnerable people affected by the cyclones.³⁶²

DoW DM Engagements (2021-2026)

When the capacity of state and national authorities is outstripped by the requirements of a disaster response and the U.S. government has offered assistance, if the Department of State assesses that it requires additional capacity to deliver relief, it can request support from the DoW via an inter-agency process. If the Secretary of War assesses that U.S. military forces have the capacity to respond, the Pentagon will assign the response to a Geographic Component Command (e.g., US PACOM) who can assign the response to an available and trained commander or unit. That unit will support DHR for a specified period of time. On the ground, State and DoW responders utilize a specified process to receive tasking and report the status of tasks.

To ensure that U.S. forces are ready to fulfill their tasking, U.S. military units and agencies commonly undertake preparedness activities to train with and enhance the capacity of Vanuatu responders and partner states. Historically, the Pacific Resilience Disaster Response Exercise and Exchange, held in Port Vila in 2014, marked the first civil-military disaster preparedness exercise held between the VMF and US PACOM. In the past five years, the U.S. military has conducted multiple DM activities in Vanuatu

or in collaboration with Vanuatu organizations in the Pacific region.

Pacific Partnership

Pacific Partnership (PP) is the U.S. Navy's largest maritime humanitarian and civic assistance mission conducted in the Indo-Pacific. Created after the 2004 Indian Ocean Earthquake and Tsunami, PP is an annual mission that has been joined by partner nations including Australia, Canada, France, Germany, Japan, the Republic of Korea, New Zealand, Singapore, and the United Kingdom. The mission has four lines of effort: DM, engineering, medical, and host nation outreach.

Pacific Partnership 2025 (PP25), the 21st iteration of the mission, visited Vanuatu and seven other Pacific Island nations. PP25's last stop featured a CFE-DM-led 3-day DM workshop and table-top exercise (TTX) in Vanuatu.³⁶³ Teams engaged in disaster preparedness, health, engineering projects, and community outreach. Disaster Management Training Workshops in Port Vila focused on oil-spill response, and search-and-rescue coordination, to help reinforce local emergency management.³⁶⁴

The CFE-DM workshop event was co-sponsored by the NDMO. At the request of the NDMO, this workshop focused on a whole-of-society response to disasters. The workshop began with presentations that outlined national and international frameworks and best practices for foreign military assistance. The event culminated in a 1.5-day TTX in which participants responded to a simulated Category 5 tropical cyclone. The conference brought together Vanuatu government ministries and national disaster responders, as well as international partners including Australia, Japan, New Zealand, and the U.S., as well as the SPC and representatives of UN OCHA, WFP, and IOM.³⁶⁵

A year earlier, as part of PP24, the mission visited Vanuatu in July 2024. The mission stop included collaborating with the government and people of Vanuatu on disaster response, medical care, and community outreach.³⁶⁶

During PP24, CFE-DM facilitated a comprehensive 3-day humanitarian assistance and disaster response workshop that brought together local government, international partners, and key U.S. agencies. The workshop addressed critical aspects of DRR and response coordination. Notable participants included representatives from the NDMO and international organizations such as UNOSAT and UNICEF. CFE-DM's efforts culminated in a roundtable discussion with U.S. Ambassador Ann Marie Yastishock, a discussion that reinforced the strong bilateral ties between the U.S. and Vanuatu.³⁶⁷

The closing ceremony of PP24 in Vanuatu was paired with the inauguration of the U.S. Embassy on 19 July 2024.³⁶⁸

Vanuatu Disaster Response and Search and Rescue Workshop – July 2025

In response to the December 2024 earthquake, and as a follow-on event to PP24, CFE-DM led a 4-day disaster response and search-and-rescue workshop in Port Vila 15–18 July 2025. The workshop had support from the Wisconsin Army National Guard and DoW Fire and Emergency Services from Joint Base McGuire-Dix. The NDMO had invited CFE-DM to facilitate command-and-control training for mid-level responders. The workshop included a diverse range of participants, including 30 civilian and military DM professionals from Vanuatu's national agencies, FRANZ signatory representatives, and staff from the U.S. Embassy. The workshop featured presentations followed by a TTX-based on real land and sea scenarios. On the last day, CFE-DM was asked to facilitate an interagency After-Action Report for the 2024 earthquake and outline a resource plan for a new national search-and-rescue cluster.³⁶⁹

Croix du Sud (Southern Cross) – April 2025

The U.S. military and the VMF participated in Exercise Croix du Sud, a 14-day biennial joint multinational military training exercise organized and led by the FANC. The exercise focuses on humanitarian assistance and

disaster response operations, crisis events, interoperability, and enhancing partnerships. The 2025 event was the 11th iteration and was held in New Caledonia and Wallis and Futuna. The scenario simulated a multinational response to a cyclone affecting a Pacific Island nation. Other participants included Australia, Brunei, Canada, Fiji, Germany, Indonesia, Japan, Malaysia, the Netherlands, Papua New Guinea, Peru, the Philippines, Singapore, Tonga, and the United Kingdom. In total, there were around 2,000 participants, 13 aircraft, and 5 ships from 18 countries.³⁷⁰

U.S. Army Security Assistance Training Management Organization (SATMO) – September 2023

In September 2023, the U.S. Army's Security Assistance Training Management Organization's (SATMO) Mobile Training Team (MTT) Vanuatu conducted humanitarian assistance and disaster response instruction with academic and hands-on training to help improve the skills and capabilities of VMF. SATMO is a subordinate organization to the U.S. Army Security Assistance Command and deploys U.S.-based teams to execute security assistance missions outside the U.S. The MTT supports U.S. Army Pacific partnerships.³⁷¹ Photo 5 shows SATMO's MTT Vanuatu conducting disaster response instruction with academic and hands-on training.³⁷²



Photo 5: U.S. Army Conducts Disaster Response Instruction with Local Security Forces

Additional Resources

This appendix provides additional references, with links, to enable readers to find relevant and contextual information.

International and U.S. Government Sources

U.S. Embassy in Vanuatu

<https://vt.usembassy.gov/>

Sendai Framework for Disaster Risk Reduction 2015-2030

United Nations Office for Disaster Risk Reduction

<https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>

Outlines targets and priorities for action to prevent new and reduce existing disaster risk

Pacific Disaster Center

<https://www.pdc.org/>

U.S. Centers for Disease Control and Prevention - Traveler's Health

<https://wwwnc.cdc.gov/travel/destinations/traveler/none/vanuatu>

Pacific Humanitarian Team (PHT)

https://response.reliefweb.int/pacific-region/pacific-humanitarian-team-pht?_gl=1*ewohob*_ga*MTU1MDI2MDAxOS4xNzcxOTc1OTUy*_ga_E60ZNX2F68*czE3NzUwNzY0NTkkbzEyJGcwJHJHxNzc1MDc2NDU5JGo2MCRsMCRoMA

UN Office in Fiji

<https://pacific.un.org/en/contact-us>

The UN office in Fiji covers Fiji, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

National Resources

Vanuatu National Disaster Management Office

<https://ndmo.gov.vu>

Disaster Risk Management Act No. 23 of 2019

https://ndmo.gov.vu/images/download/DRMAct2019/DRM_Act_23_of_2019.pdf

U.S. DoW Resources

USINDOPACOM Foreign Disaster Response in the Indo-Asia-Pacific April 1991 – January 2024

CFE-DM, U.S. Pacific Command

<https://www.cfe-dmha.org/Publications/New-Releases>

Contemporary historical synopsis of foreign disasters the U.S. DoW responded to in the Indo-Pacific.

Humanitarian Assistance Response Training – Disasters (HART-D) Course

CFE-DM, U.S. Pacific Command

<https://www.cfe-dmha.org/hart-d>

Target Audience: O3-O6, E6-E9, and DoW civilians who may plan for or execute a Foreign Disaster Relief mission or participate in disaster response activities in exercises or security cooperation engagements.

Regional/International Organizations and Initiatives

Pacific Islands Forum (PIF)

<https://forumsec.org/pacific-islands-forum>

Regional organization of 18 Pacific Island countries, including Vanuatu. Top-level political forum for collective action, including environmental security and disaster management.

Pacific Community (SPC)

<https://www.spc.int/>

Regional organization of 27 PICTs, including Vanuatu. The SPC emphasizes work on sustainable development, including adaptation and risk mitigation.

Secretariat of the Pacific Regional Environment Programme (SPREP)

<https://www.sprep.org/>

Organization of 22 PICTs and 4 metropolitan (former or current colonial powers) members, of which Vanuatu is a member. Scientific lead for many DM and environmental security initiatives.

Framework for Resilient Development in the Pacific (FRDP): An Integrated Approach to Address Climate Change and Disaster Risk Management: 2017 - 2030

<https://pacificresiliencepartnership.org/framework-resilient-development-pacific/>

2050 Strategy for the Blue Pacific Continent

Pacific Islands Forum

<https://forumsec.org/2050>

Strategic outline for Pacific Islands to collectively address political, social, security, economic, climate, environment, and technology challenges

South Pacific Defence Ministers' Meeting (SPDMM)

<https://spdmm.org/>

Asia-Pacific Regional Guidelines for the Use of Foreign Military Assets in Natural Disaster Response Operations ("APC-MADRO Guidelines")

The Asia-Pacific Conferences on Military Assistance to Disaster Relief Operations (APC-MADRO) & OCHA

<https://www.unocha.org/publications/report/world/asia-pacific-regional-guidelines-use-foreign-military-assets-natural-disaster-response>

Reference guide for states planning and executing foreign military support for regional disaster response.

Multinational Force Standing Operating Procedures (MNF SOP) – Annex C: Humanitarian Assistance/ Disaster Relief

Multinational Planning Augmentation Team (MPAT), U.S. Pacific Command

[https://www.pacom.mil/Portals/55/Documents/J7/MNF%20SOP%20Ver%203.4_14%20FEB%2025_vbf.pdf?ver=4LVTNxMJB8_1xpfYdARrg%3d%3d\(D1C1/PDFpg.883\)](https://www.pacom.mil/Portals/55/Documents/J7/MNF%20SOP%20Ver%203.4_14%20FEB%2025_vbf.pdf?ver=4LVTNxMJB8_1xpfYdARrg%3d%3d(D1C1/PDFpg.883))

Annex on international humanitarian assistance; part of broad standing procedures for regional multinational force operations other than war.

Humanitarian Advisory Group Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model

Regional Consultative Group (RCG) on Humanitarian Civil-Military Coordination for Asia and the Pacific

<https://www.acmc.gov.au/resources/publications/humanitarian-civil-military-coordination-emergencies-towards-predictable-1>

Acronyms and Abbreviations

°	degree(s) – of temperature (C = Celsius; F = Fahrenheit); or of latitude and longitude (N = North; S = South; E = East; and W = West)
\$	dollar(s), U.S.
ADF	Australian Defence Force
AUSMAT	Australian Medical Assistance Team
AVL	Airports Vanuatu Limited
CAAV	Civil Aviation Authority of Vanuatu
CAP	Common Alerting Protocol (used by WMO & VMGD)
CFE-DM	Center for Excellence in Disaster Management and Humanitarian Assistance (U.S.)
cm	centimeter(s)
COVID-19	Coronavirus Disease 2019
CREWS	Climate Risk and Early Warning Systems
DART	Disaster Assistance Response Team (Australia)
DFAT	Department of Foreign Affairs and Trade (Australia)
DHR	Bureau of Disaster and Humanitarian Response (in U.S. Department of State)
DM	disaster management
DoW	Department of War (U.S., also known as Department of Defense)
DRM	disaster risk management
DRR	disaster risk reduction
EEZ	exclusive economic zone
EM-DAT	Emergency Events Database, by the Centre for Research on the Epidemiology of Disasters
EMT	Emergency Medical Teams
EMTCC	Emergency Medical Team Coordination Cell
ENSO	El Niño-Southern Oscillation
ETC	Emergency Telecommunications Cluster
EWS	early warning system
FANC	French Armed Forces in New Caledonia
FAO	Food and Agriculture Organization of the United Nations
FRANZ	FRANZ Arrangement
FRDP	Framework for Resilient Development in the Pacific
ft/ ft ²	foot or feet / square feet
GDP	gross domestic product
HF	high frequency
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICN1	Interchange Cable Network (undersea cable)
IFRC	International Federation of Red Cross and Red Crescent Societies
in	inch(es)
IOM	International Organization for Migration
IUU	illegal, unreported, and unregulated (fishing)
JPOC	Joint Planning and Operation Centre
JSDF	Japan Self Defense Forces

km/km ²	kilometer(s) / square kilometers
kph	kilometers per hour
LPG	liquefied petroleum gas
m/m ²	meter(s) / square meters
MDCCC	Municipal Disaster and Climate Change Committee
MHEWS	Multi-hazard Early Warning System
mi/mi ²	mile(s)/square miles
mm	millimeter(s)
MOCCA	Minister of Climate Change Adaptation, Meteorology & Geo-Hazards, Energy, Environment and Disaster Management
MoFA	Ministry of Foreign Affairs
MoH	Ministry of Health
MoIA	Ministry of Internal Affairs
mph	miles per hour
MTT	Mobile Training Team
Mw	moment magnitude (seismic)
NCD	non-communicable disease
NDC	National Disaster Committee
NDMO	National Disaster Management Office
NEOC	National Emergency Operations Centre
NGO	non-governmental organization
NHEOC	National Health Emergency Operations Centre
NOAA	National Oceanic and Atmospheric Administration (U.S.)
NZDF	New Zealand Defence Force
OCHA	Office for the Coordination of Humanitarian Affairs (of the UN)
OGCIO	Office of Government Chief Information Officer
ORSNET	Oceania Regional Seismic Network
PDCCC	Provincial Disaster and Climate Change Committee
PEOC	Provincial Emergency Operations Centre
PHT	Pacific Humanitarian Team
PICTs	Pacific Island Countries and Territories
PIF	Pacific Islands Forum
PMW	Police Maritime Wing
PP	Pacific Partnership (U.S. Navy)
PRG	Pacific Response Group
PV	photovoltaic
PWD	Public Works Department (Ministry of Infrastructure and Public Utilities)
RAAF	Royal Australian Air Force
RNZAF	Royal New Zealand Air Force
SATMO	Security Assistance Training Management Organization (U.S. Army)
SMART	Science Monitoring and Reliable Telecommunications
SMS	short message service
SOP	standard operating procedures

SPC	The Pacific Community
SPCZ	South Pacific Convergence Zone
SPDMM	South Pacific Defence Ministers' Meeting
SPREP	Secretariat of the Pacific Regional Environment Programme
TC	Tropical Cyclone
TRBR	Telecommunications Radiocommunications and Broadcasting Regulator
TTX	Table Top Exercise
U.S.	United States
UN	United Nations
UNDP	United Nation Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNELCO	Union Électrique du Vanuatu Limited
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOSAT	United Nations Satellite Centre
US PACOM	U.S. Pacific Command
USAID	U.S. Agency for International Development (reorganized into the U.S. State Department)
USAR	urban search and rescue
USCG	U.S. Coast Guard
VANGO	Vanuatu Association of Non-government Organizations
VanKIRAP	Vanuatu Klaemet Infomesen blong Redi, Adapt mo Protekt
VanMAT	Vanuatu Medical Assistance Team
VBTC	Vanuatu Broadcasting and Television Corporation
VHF	very high frequency
VHT	Vanuatu Humanitarian Team
VMF	Vanuatu Mobile Force
VMGD	Vanuatu Meteorology and Geohazards Department
VMHS	Vanuatu Meteorology and Hydrometeorological Services
VPF	Vanuatu Police Force
VRCS	Vanuatu Red Cross Society
VSZ	Vanuatu subduction zone
VUIL	Vanuatu Utilities and Infrastructure Limited
WASH	water, sanitation, and hygiene
WFP	World Food Programme
WHO	World Health Organization (UN)
WMO	World Meteorological Organization

Endnotes

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