

PACIFIC RISK PROFILE VANUATU



Basic Country Statistics

Land Area
12,281 km²

Pacific Community (SPC) Our Members at <https://www.spc.int/our-members/>

Maximum Height Above Sea-level
1,877 m

Pacific Community (SPC) Our Members at <https://www.spc.int/our-members/>

Number of Volcanoes & Per cent of Population at Volcanic Risk
14 volcanoes

53%

People live within 30 km of volcanoes

UNDRR (2015) Global Assessment Report Country Risk Profile at <https://www.preventionweb.net/english/hyogo/gar/2015/en/home/data.php>

Per cent of Urban Population

24%

SPC Pocket Statistical Summary 2020 at https://sdd.spc.int/digital_library/pocket-statistical-summary-resume-statistique-de-poche-2020

Per cent of Coastal Population

64%

People live within 1 km of the coast

94%

People live within 5 km of the coast

99%

People live within 10 km of the coast

SPC Statistics (Map) at <https://sdd.spc.int/mapping-coastal>



Total Population
(2020 Estimate)

294,691
persons



Total Male & Female Population
(2020 Estimate)

Male
148,379
persons or 50.35%

Female
146,312
persons or 49.65%

SPC Statistics (Population) at <https://sdd.spc.int/topic/population>

Gross Domestic Product (GDP) per Capita

US\$3,260
(2019)

SPC Pocket Statistical Summary 2020 at https://sdd.spc.int/digital_library/pocket-statistical-summary-resume-statistique-de-poche-2020



Population Density

24 persons/km²

SPC Pocket Statistical Summary 2020 at https://sdd.spc.int/digital_library/pocket-statistical-summary-resume-statistique-de-poche-2020



Disability Prevalence

12%

UNESCAP (2019) Disability at a Glance at <https://www.unescap.org/publications/disability-glance-2019>

Women's Share of Managerial Positions

28.5%

Women's Labour Force Participation Rate

61%

Women's Share of Wage Employment in the Non-agriculture Sector

41.3%

Ever-Partnered Women Experienced Violence by Intimate Partner

60%

ADB (2016) Gender Statistics for the Pacific and Timor-Leste at <https://www.adb.org/publications/gender-statistics-pacific-and-timor-leste>

Pacific Risk Profile is a snapshot of climate and disaster risk information that is collected from credible open data sources. It is intended to provide DFAT program managers and implementing partners with easy access to essential risk information. When employing risk information in specific program contexts, however, it is strongly encouraged to study the original risk information sources or even undertake proper risk assessments.

For more information or other technical support, you may contact the Australia Pacific Climate Partnership Support Unit at helpdesk@apclimatepartnership.com.au.

Published in July 2021

Hazard Likelihood



Earthquake
High Likelihood



Volcano
High Likelihood



Landslide
High Likelihood



Wildfire
Very low Likelihood



Coastal Flood
High Likelihood



Cyclone
High Likelihood



Water Scarcity
Very Low Likelihood



Tsunami
High Likelihood

Legend

■ Very low	■ Medium
■ Low	■ High

ThinkHazard! at <https://thinkhazard.org/en/report/262-vanuatu>

Economic Loss Due to Disasters

Total Average Annual Losses (AAL)

US\$166.96 million

UNESCAP (2020) The Disaster Riskscape across the Pacific Small Island Developing States at <https://www.unescap.org/sites/default/files/100-APDR-Subreport-Pacific-SIDS.pdf>

AAL as a Percentage of GDP

20.67%

UNESCAP (2020) The Disaster Riskscape across the Pacific Small Island Developing States

Adaptation Costs for Coastal Protection

US\$42~161 million per year

or 2~8% of projected GDP in 2040

World Bank (2017) Climate Change and Disaster Management (Pacific Possible Background Paper No.6) at <https://openknowledge.worldbank.org/handle/10986/28137>

Risk Index

World Risk index

Vanuatu is the country with the highest disaster risk worldwide

Ranked 1st

due to high exposure to extreme natural events and sea-level rise.

- Exposure - Very High
- Vulnerability - High
- Susceptibility - High
- Lack of Coping Capacities - High
- Lack of Adaptive Capacities - High

World Risk Report 2020 at <https://reliefweb.int/sites/reliefweb.int/files/resources/WorldRiskReport-2020.pdf>

Climate Risk Index for 1999-2018

Between 1999 and 2018, Vanuatu was the 38th country most affected by extreme weather events.

Global Climate Risk Index 2020 at <https://www.germanwatch.org/en/17307>



INFORM Covid-19 Risk

Vanuatu's risk level is high when assessing the potential humanitarian impacts of Covid-19 in combination with other pre-existing crisis risks.

INFORM Covid-19 Warning (beta version) at <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Covid-19/INFORM-Covid-19-Warning-beta-version>

Major Disasters 2011-2020



Total Population Affected

345,044
persons

Total Damage

US\$451.4
million

Number of Major
Cyclones in 2011-2020

6

EM-DAT Database (February 2021) at <https://www.emdat.be/>

Per cent of Disaster Type
(Major Disasters 2011-2020)



67%
Storm



22%
Volcano



11%
Epidemic

EM-DAT Database (February 2021) at <https://www.emdat.be/>

TC PAM (2015)

Tropical Cyclone Pam struck Vanuatu as an extremely destructive Category 5 cyclone, with estimated wind speeds of 250 km/h and wind gusts that peaked at around 320 km/h.

The total economic value of the effects caused by TC Pam was estimated to be approximately

US\$449.4
million

Of this, **US\$270.9 million** is attributable to damage, and **US\$178.5 million** is loss.

PDNA TC Pam, Vanuatu, 2015 at <https://www.gfdrr.org/sites/default/files/publication/pda-2015-vanuatu.pdf>



The tropical cyclone Pam destroyed crops on a large scale and compromised the livelihoods of at least 80% of Vanuatu's rural population.



An estimated
65,000

people were displaced from their homes.



Approximately
17,000

buildings were damaged or destroyed, including houses, schools, clinics, and other medical facilities.

Per cent of Economic Damage and Loss by Sectors from tropical cyclone Harold



11%
Infrastructure Sectors
(transport, water and sanitation, electricity, communications)



41%
Social Sectors
(education, health, housing)



43%
Productive Sectors
(agriculture, tourism, commerce)



4%
Cross-Cutting Issues
(environment, gender and social inclusion, culture, disaster risk reduction, etc.)

TC HAROLD (2020)

Tropical cyclone Harold tore across the northern and central islands of Vanuatu with sustained winds up to 270 km per hour, affecting **129,000 people** that is equivalent to around **42%** of Vanuatu's population.

The physical damage and economic losses are estimated at

US\$617 million

or approximately 61 per cent of the GDP in 2020.

PDNA TC Harold and COVID-19, Vanuatu, 2020 at https://dsppac.gov.vu/images/roc/pmo001-post-disaster-needs-assessment-volume-a_hr-single-pages_p41044.pdf

Climate Projection



Cyclone

Tropical cyclones are projected to be less frequent but more intense.

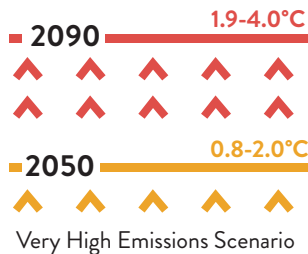


Rainfall

Mean annual rainfall could increase or decrease with the model average indicating little change, with more extreme rain events.

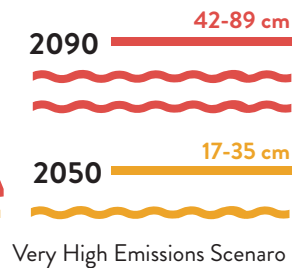
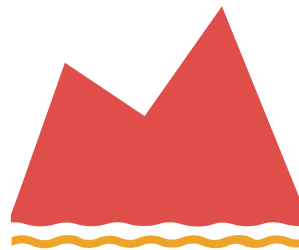
Temperature

Annual mean temperatures and extremely high daily temperatures will continue to rise.



Sea-level Rise

Sea level is expected to continue to rise.



Ocean Acidification

Ocean acidification is expected to continue.



Coral Bleaching Risk

The risk of coral bleaching is expected to increase.

El Niño / La Niña



El Niño and La Niña events will continue to occur in the future.

In both Port Vila and Aneityum, **El Niño** events tend to bring **drier conditions** as well as a late start to the wet season and cooler than normal dry seasons. The **opposite** occurs during **La Niña** events.