PACIFIC RISK PROFILE
VANUATU

Basic Country Statistics

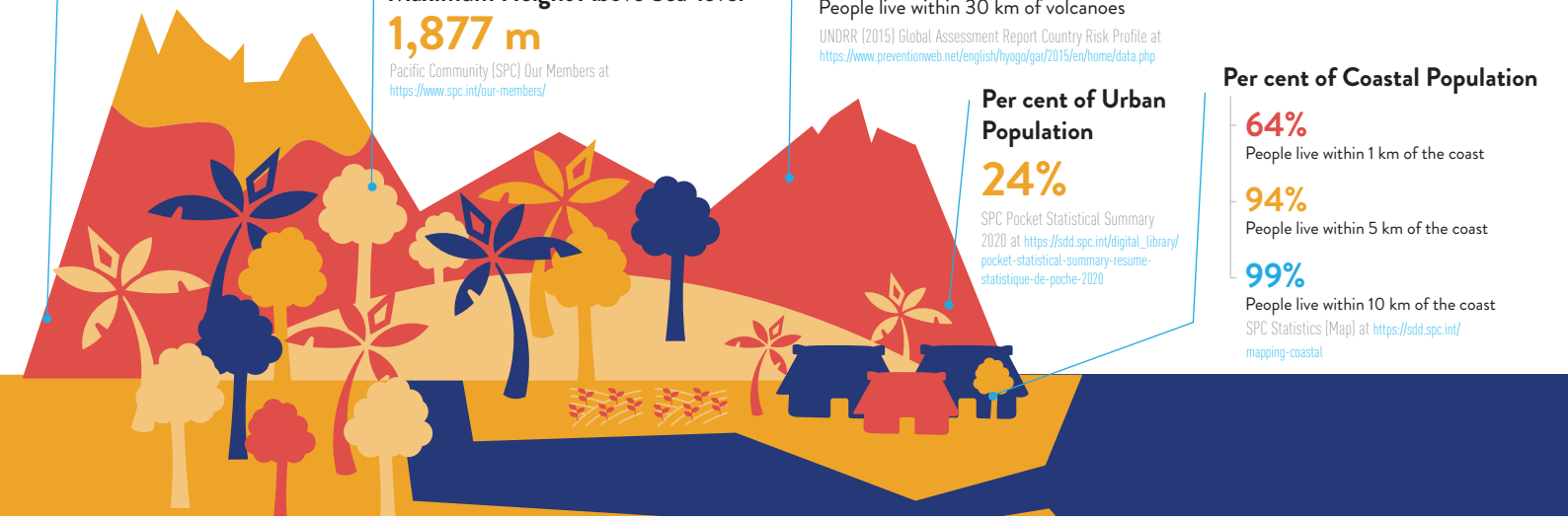
Land Area
12,281 km²
Pacific Community (SPC) Our Members at https://www.spc.int/our-members/

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
- Low
- Medium
- 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/d8files/IDD-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

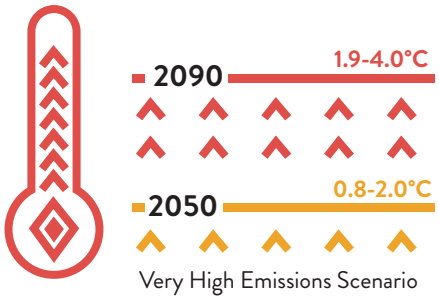
Tropical cyclones are projected to be less frequent but more intense.

Rainfall

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

Temperature

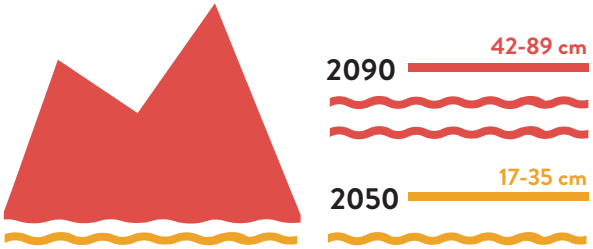
Annual mean temperatures and extremely high daily temperatures will continue to rise.



Very High Emissions Scenario

Sea-level Rise

Sea level is expected to continue to rise.



Very High Emissions Scenaro

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.

PACCSAP Country Brochures at https://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/15_PACCSAP-Vanuatu-11pp_WEB.pdf