

PACIFIC RISK PROFILE PAPUA NEW GUINEA



Basic Country Statistics

Maximum Height Above Sea-level

4,509 m

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

Land Area

462,840 km²

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

Number of Volcanoes & Per cent of Population at Volcanic Risk

56 volcanoes

↳ **17%**

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

13%

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

8%

People live within 1 km of the coast

21%

People live within 5 km of the coast

30%

People live within 10 km of the coast

SPC Statistics (Map) at <https://sdd.spc.int/mapping-coastal-de-poche-2020>



Total Population
(2020 Estimate)

8,934,474
persons



Total Male & Female Population
(2020 Estimate)

Male
4,604,071
persons or 51.53%

Female
4,330,403
persons or 48.47%

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

Gross Domestic Product (GDP) per Capita

US\$2,854
(2019)

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



Disability Prevalence
13.4%

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

Women's Labour Force Participation Rate

62%

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

Per cent of Children, Youth and Elderly

Children (<14)
37%

Youth (15-24)
19%

Elderly (60+)
5%



Population Density

19 persons/km²

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

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.

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Hazard Likelihood



Earthquake
High Likelihood



Volcano
High Likelihood



Landslide
High Likelihood



Cyclone
High Likelihood



Coastal Flood
High Likelihood



Wildfire
High Likelihood



Water Scarcity
Very Low Likelihood



Tsunami
High Likelihood

Legend

Very low Medium
Low High

ThinkHazard! at
<https://thinkhazard.org/en/report/192-papua-new-guinea>

Economic Loss Due to Disasters

Total Average Annual
Losses (AAL)

US\$295 million

UNESCAP (2020) The Disaster Riskscape across the Pacific Small Island Developing States at <https://www.unescap.org/sites/default/files/00-APDR-Subreport-Pacific-SIDS.pdf>

AAL as a Percentage of GDP

1.61%

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

Risk Index

World Risk index

Papua New Guinea is ranked 8th among the countries with the highest disaster risk.

Exposure - Very High
Vulnerability - Very High
Susceptibility - Very High
Lack of Coping Capacities - Very High
Lack of Adaptive Capacities - Very 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, Papua New Guinea was the 98th country most affected by extreme weather events.

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



INFORM Covid-19 Risk

Papua New Guinea'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://dmkc.jrc.ec.europa.eu/inform-index/INFORM-Covid-19/INFORM-Covid-19-Warning-beta-version>

Major Disasters 2011-2020

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



12%
Storm



30%
Flood



15%
Earthquake



12%
Volcano



4%
Drought



15%
Landslide



12%
Transport Accident



Total Population
Affected

3,447,766
persons

Total Damage

US\$148 million



Number of Major
Cyclones in 2011-2020

3

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

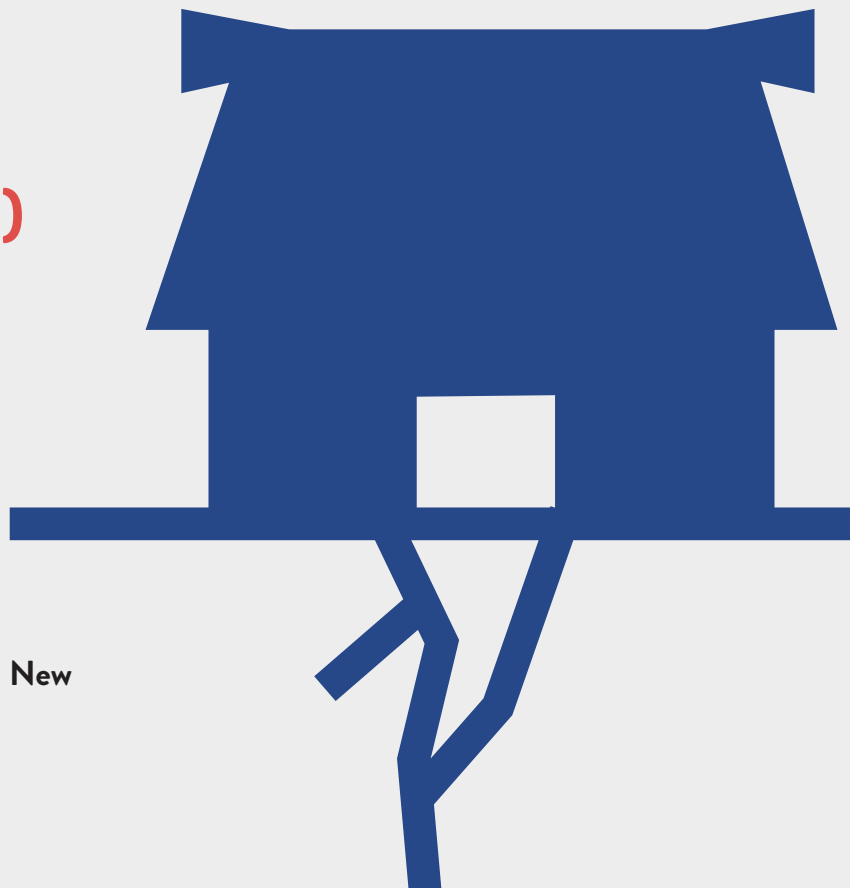
HIGHLAND EARTHQUAKE (2018)

On 26 February 2018, a M7.5 earthquake took place in the Highlands of Papua New Guinea affecting more than

544,000
people

The initial damage from the earthquake in Papua New Guinea's Hela Province alone is more than

US\$61 million



Climate Projection



Cyclone

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

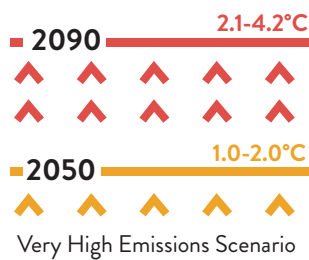


Rainfall

Average rainfall is projected to increase in most areas, along with more extreme rain events.

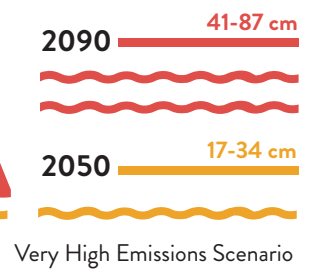
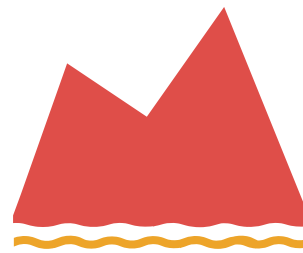
Temperature

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.

El Niño / La Niña



Coral Bleaching Risk



The risk of coral bleaching is expected to increase.

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

Generally in Papua New Guinea **El Niño** years are usually **drier than normal** while **La Niña** events are **usually wetter**. The dry season at Port Moresby is cooler than normal in El Niño years and warmer than normal in La Niña years, while the wet season tends to be warmer and drier than normal during an El Niño event.