# PACIFIC RISK PROFILE – SAMOA

## COUNTRY OVERVIEW

* [**1857 m**](https://www.spc.int/our-members/) maximum height above sea level
* [**2934 km²**](https://www.spc.int/our-members/) land area and [**68**](https://sdd.spc.int/digital_library/pocket-statistical-summary-resume-statistique-de-poche-2020) people per km²
* [**2 volcanoes and 78%**](https://www.preventionweb.net/english/hyogo/gar/2015/en/home/data.html) of people live within 30km of volcanoes
* [**18%**](https://sdd.spc.int/mapping-coastal) population is urban
* [**61%**](https://sdd.spc.int/mapping-coastal) of population live with 1km of coast, **97%** live within 5km of coast, and **100%** live within 10km of coast
* [**198,656**](https://sdd.spc.int/topic/population) total population
* [**102,356**](https://sdd.spc.int/topic/population) (51.52%) men and [**96,300**](https://sdd.spc.int/topic/population) women (48.48%) in 2020
* [**2.2%**](https://www.unescap.org/publications/disability-glance-2019) disability prevalence
* [**$4282**](https://sdd.spc.int/digital_library/pocket-statistical-summary-resume-statistique-de-poche-2020) USD gross domestic product per capita
* [**24%**](https://www.adb.org/publications/gender-statistics-pacific-and-timor-leste) women’s labour force participation
* [**47.3%**](https://www.adb.org/publications/gender-statistics-pacific-and-timor-leste) women’s share of managerial positions
* [**37.5%**](https://www.adb.org/publications/gender-statistics-pacific-and-timor-leste) women’s share of wage employment in the non-agriculture sector

## HAZARD LIKELIHOOD

(link: [**https://thinkhazard.org/en/report/212-samoa**](https://thinkhazard.org/en/report/212-samoa))

| **Wildfire** | **Landslide** | **Volcano** | **Earthquake** | **Coastal flood** | **Cyclone** | **Tsunami** |
| --- | --- | --- | --- | --- | --- | --- |
| Very low likelihood | Low likelihood | Low likelihood | Medium likelihood | Medium likelihood | High likelihood | High likelihood |

## ECONOMIC LOSS DUE TO DISASTERS

* [**$41.51m**](https://www.unescap.org/sites/default/d8files/IDD-APDR-Subreport-Pacific-SIDS.pdf) USD total average annual loss due to disasters, which is [**5.4%**](https://www.unescap.org/sites/default/d8files/IDD-APDR-Subreport-Pacific-SIDS.pdf) of GDP.

## ADAPTATION COSTS FOR COASTAL PROTECTION

* [**$7-$21m**](https://openknowledge.worldbank.org/handle/10986/28137) USD adaptation costs for coastal protection per year, which is [**0-1%**](https://openknowledge.worldbank.org/handle/10986/28137) of projected GDP in 2040.

## RISK INDEX

* [**Samoa is ranked 98th**](https://reliefweb.int/sites/reliefweb.int/files/resources/WorldRiskReport-2020.pdf)among countries with medium disaster risk
  + Exposure – medium
  + Vulnerability – high
  + Susceptibility – medium
  + Lack of coping capacities – high
  + Lack of adaptive capacities – medium
* Between 1999 and 2018 [**Samoa was ranked 71st**](https://www.germanwatch.org/en/17307) among countries most affected by extreme weather
* Samoa’s risk level is [**low**](https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Covid-19/INFORM-Covid-19-Warning-beta-version) when assessing the potential humanitarian impacts of COVID-19 in combination with other pre-existing crisis risks.

## MAJOR DISASTERS 2011-2020

(link: [**https://www.emdat.be/**](https://www.emdat.be/))

* **2** major cyclones
* **15,639** people were affected
* **$133m** USD total estimated damage
* **50%** of disasters were storms, **25%** were drought and **25%** were epidemic.

## TC EVAN (2012)

(link: [**https://www.gfdrr.org/sites/default/files/publication/SAMOA\_PDNA\_Cyclone\_Evan\_2012\_0.pdf**](https://www.gfdrr.org/sites/default/files/publication/SAMOA_PDNA_Cyclone_Evan_2012_0.pdf))

* Tropical Cyclone Evan caused widespread damage across Samoa, with heavy rainfall and flash floods and maximum sustained winds up to 90 knots (166.7 km/h)
* **5** people were killed
* **4763** were displaced from their homes
* **$203.9m** USD estimated economic value of the impact, including the value of damage estimated at **$103.3m** USD
* Per cent loss by sector: **37%** infrastructure, **35%** productive, **16%** cross-cutting issues, **12%** social.

## CLIMATE PROJECTION

(link: [**https://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/3\_PACCSAP-Samoa-10pp\_WEB.pdf**](https://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/3_PACCSAP-Samoa-10pp_WEB.pdf))

* **Rainfall**: little change in mean annual rainfall is projected, with more extreme rain events
* **Cyclones**: less frequent but more intense
* **Temperature**: annual mean temperatures and extremely high temperature days will continue to rise
* **Sea level**: expected to continue to rise
* **Ocean acidification**: expected to continue
* **Risk of** **coral bleaching** expected to increase
* **El Niño/La Niña**: likely to continue, in Samoa, **El Niño** events tend to bring wet seasons that are drier than normal, while **La Niña** events usually bring wetter and cooler than normal conditions.