

Data Collection and modelling for adaptation

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Matagaluega o Punaoa Faanatura ma le Siosiomaga

Presentation Outline

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- Samoa Climate Early Warning System (CLEWS)



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Background Information

- Samoa, officially the Independent State of Samoa (formerly known as Western Samoa and German Samoa), is a country governing the western part of the [Samoa Islands](#) in the South Pacific Ocean.
- It became independent from New Zealand in 1962.
- The two main islands of Samoa are [Upolu](#) and one of the biggest islands in Polynesia [Savai'i](#).
- The capital city [Apia](#) and [Faleolo International Airport](#) are situated on the island of Upolu.
- The 1960 [Constitution](#), which formally came into force with independence from New Zealand in 1962, is based on the British pattern of [parliamentary democracy](#), modified to take account of Samoan customs
- The unicameral legislature ([Fono](#)) consists of 49 members serving 5-year terms. Forty-seven are elected from territorial districts by ethnic Samoans; the other two are chosen by non-Samoans with no chiefly affiliation on separate electoral rolls

Geography

- The country is located east of the international date line and south of the equator, about halfway between Hawai'i and New Zealand in the Polynesian region of the Pacific Ocean. The total land area is 2934 km² (1133 sq mi) (slightly smaller than the U.S. state of Rhode Island), consisting of the two large islands of Upolu and Savai'i which account for 99% of the total land area, and eight small islets: the three islets in the Apolima Strait (Manono Island, Apolima and Nu'ulopa), the four Aleipata Islands off the eastern end of Upolu (Nu'utele, Nu'ulua, Namua, and Fanuatapu), and Nu'usafe'e (less than 0.01 km² - 2½ acres - in area and about 1.4 km (0.9 mi) off the south coast of Upolu at the village of *Vaovai*).^[1] The main island of Upolu is home to nearly three-quarters of Samoa's population, and its capital city is Apia.

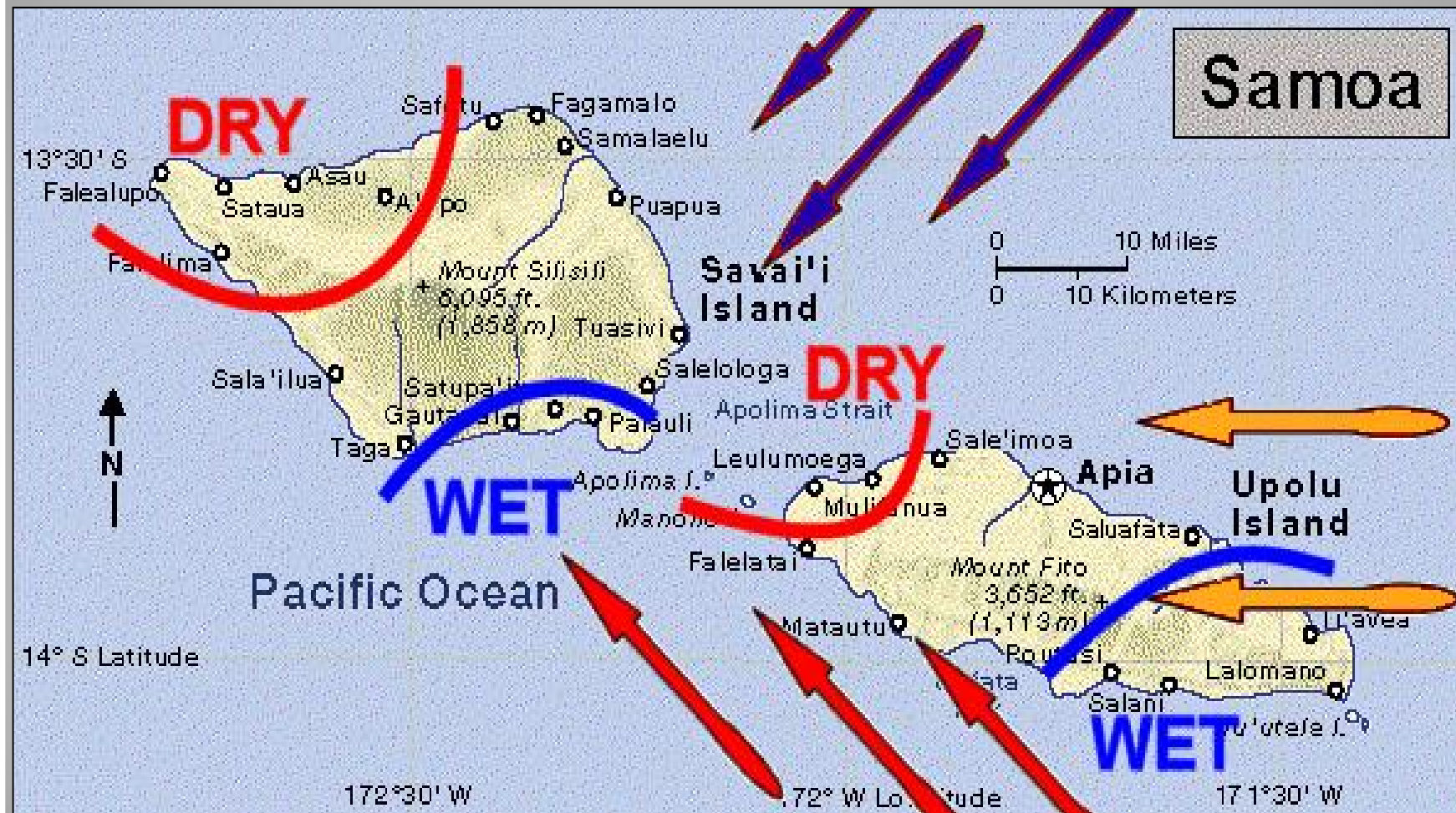


Samoa Islands

Climate of Samoa

- The climate is tropical, with an average annual temperature of 26.5°C (79.7°F).
- The hot and rainy season (wet) from November to April, also the Tropical Cyclone Season.
- About 70% of total rainfall is recorded during this time
- Cool and dry season is from May to October.
- Driest month is August.

Climate of Samoa



Impacts of CC in Samoa

- Samoa is vulnerable to CC because 77% of its population and infrastructure are located in low lying coastal areas
- Sea level rise causing coastal erosion
- Higher frequency and severity of tropical cyclones
- Higher frequency of droughts incl Forest Fires
- Depletion of quality water for consumption and energy production
- Impacts on agricultural production
- Impacts on biodiversity (terrestrial and marine)
- Higher frequency of health problems (water and air borne diseases)

