

ClimateWatch

Shannon Anstee
Biodiversity and Climate
Manager











About Earthwatch

Empowering people to save the natural world

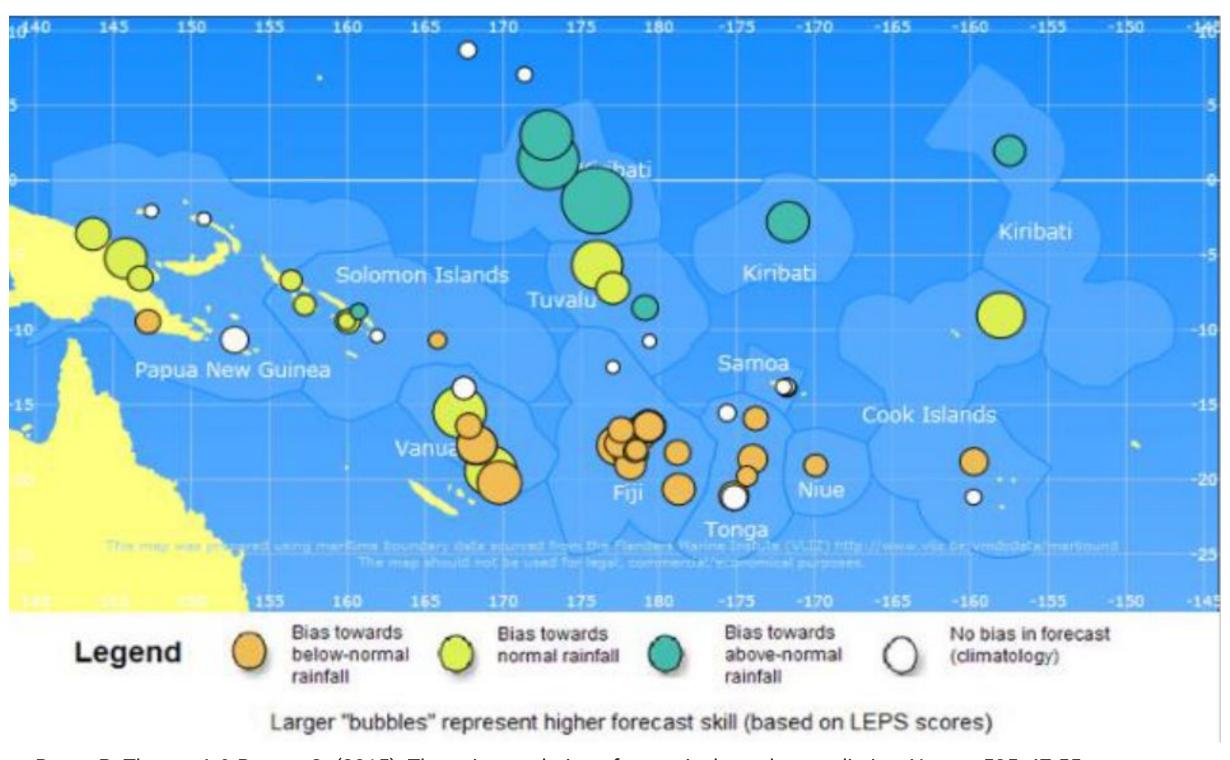
We are a global environmental charity aiming to create a society that lives in balance with nature. Our citizen science model is a sophisticated, efficient and engaging solution that actively involves people from all sectors of the community.



Across the Globe...

Elders and Communities are sharing traditional knowledge about plants, animals and weather with scientists and meteorolgical organisaitons ClimateWatch explores the impacts of developing robust meteorological forecasts by combining contemporary and Traditional Knowledge forecasting

Meteorological forecasts are very good across the Pacific...



Bauer, P., Thorpe, A & Brunet, G. (2015). The quiet revolution of numerical weather prediction, Nature, 525, 47-55.

The majority of Pacific Communities still rely on their own Traditional Knowledge (TK)



>70% overall relied on TK
forecasts alone and less
than 5% used contemporary
forecasts alone

Chambers et al. 2019 Traditional or contemporary weather and climate forecasts: reaching Pacific communities

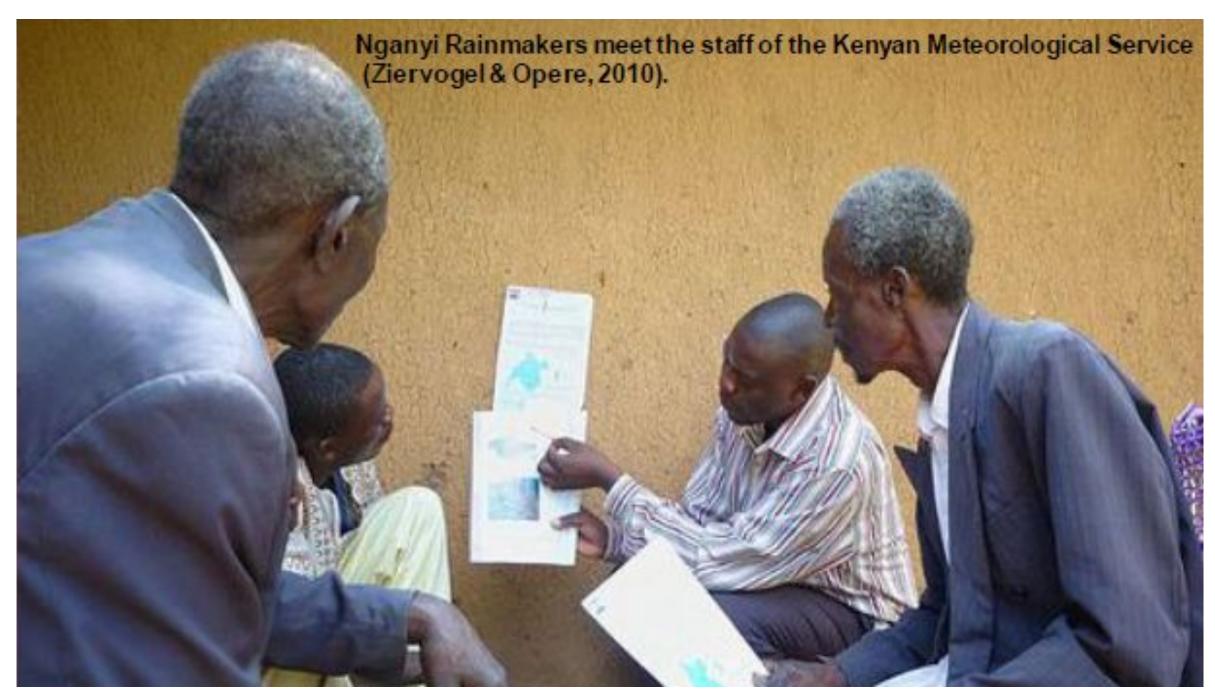
And the vast majority of communities would like to see TK combined with scientific forecasting

Country	No. of responses	Yes	No
Niue	31	24 (77%)	2 (6%)
Samoa	9	7 (78%)	1 (11%)
Solomon Islands	62	61 (98%)	0 (0%)
Vanuatu	55	55 (100%)	0 (0%)

Community support, or otherwise, for the combination of contemporary and traditional forecasts.

Malsale et al. 2018 Protocol and partnerships for engaging Pacific Island communities in the collection and use of traditional climate knowledge.

In Kenya, Climate Communication is improved when combined with Indigenous Biodiversity Knowledge



Ziervogel, G & Opere, A. (2010) Integrating meteorological and indigenous knowledge-based seasonal climate forecasts for the agricultural sector. IDRC Report, 19pp.



As we know....

Pacific Islands are amongst the most sensitive to climate variability

There is much Traditional Knowledge across the Pacific and in Vanuatu that can be used to improve Climate Forecasts and prepare for Climate Change

TK Reliability Concerns

"The trees are flowering much earlier now and they don't tell us what they used to"

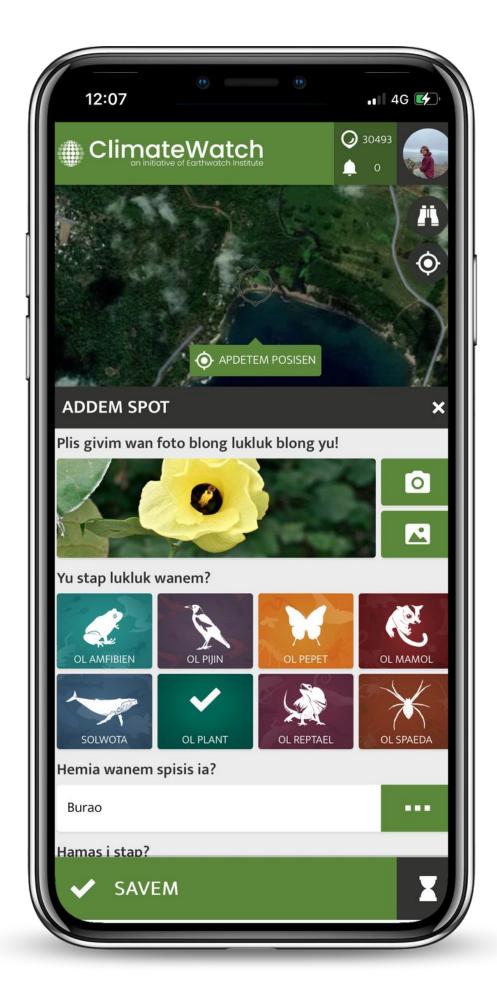
- Generation loss
- Climate change
- Land use change



ClimateWatch

- Developed by <u>Earthwatch Australia</u>, <u>Bureau of</u>
 <u>Meteorology</u> and <u>University of Melbourne</u> in 2009
- Adapted for Vanuatu in 2023!
- Free to use
- First app in Bislama

Now everyone in Vanuatu can be a "citizen scientist" and help collect data on TK species



Monitoring species







Plants Marine Birds





Naval



Mango



Natongtong (Tall-stilt Mangrove)



Mandari



Bredfruit



Nabanga (Banyan)



Banana



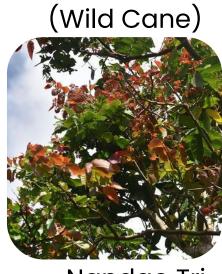
Nakavika (Malay Apple)



Namambe (Polynesion



Wael Can



Nandao Tri (Pacific Lychee)



Aranis (Orange)



Naviso



Burao



Naus (Polynesian vi-apple)





Leta Bak Totel



Hoksbel Totel



Palolo Worm



Gren Totel





Sot leg (Pacific Emerald Dove)

This will not only help VMGD to provide better early warnings to communities it will also:

- Help to keep TK alive, showing its relevance to the next generations
- Assist with response and preparedness (food security, cyclone shelters etc)
- Provide much needed biological monitoring data to assist other agencies (agriculture, forestry, fisheries, conservation)

Using ClimateWatch



Step 1. Download

Download the ClimateWatch app for free at the App Store and on Google Play





Step 2. Register





Observations to Vanuatu Meteorology & Geo-Hazards Department





Step 5. Validate

ClimateWatch community check your spot



Step 3. Study

Familiarize yourself with the ClimateWatch plants and animals



Step 4. Spot!

Add your photo of a species to the ClimateWatch app



ClimateWatch | SPOTTERON



Expanding across the Pacific

Pacific Island countries have Traditional Knowledge

Traditional Knowledge monitoring across the Pacific through ClimateWatch can be used to improve Climate Forecasts and prepare for Climate Change

ClimateWatch Requirements

Country requirements for ClimateWatch development

- Active meteorological organisation in country
- Current work undertaken to capture Traditional Knowledge
- In country phone network, internet connection and smart phone access

Join a ClimateWatch walk

Download the app and join the team for a ClimateWatch walk

Date: Today (Wednesday 18th)

Time: 4:30pm

Meeting Point: Registration Table outside of

the Farea Pacifik Conference Hall



Download for Apple

Download for Android

