

# CTCN Regional Forum for NDEs

**Nuku'alofa**

**24 February 2016**

Dr Netatua Pelesikoti, Director, Climate Change Division, SPREP  
[netatuap@sprep.org](mailto:netatuap@sprep.org)



# Prioritising adaptation response needs through adaptation planning processes

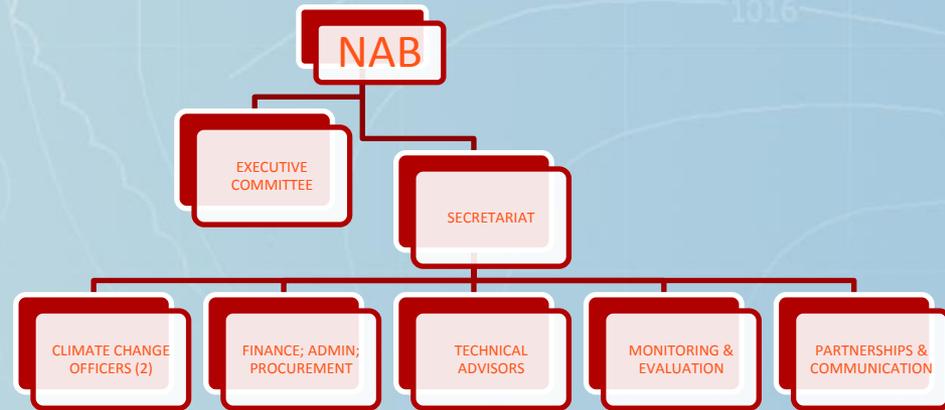
## Vanuatu and Fiji Community Participatory 3D Mapping



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Environment Programme

# National Planning Example: Vanuatu NAB

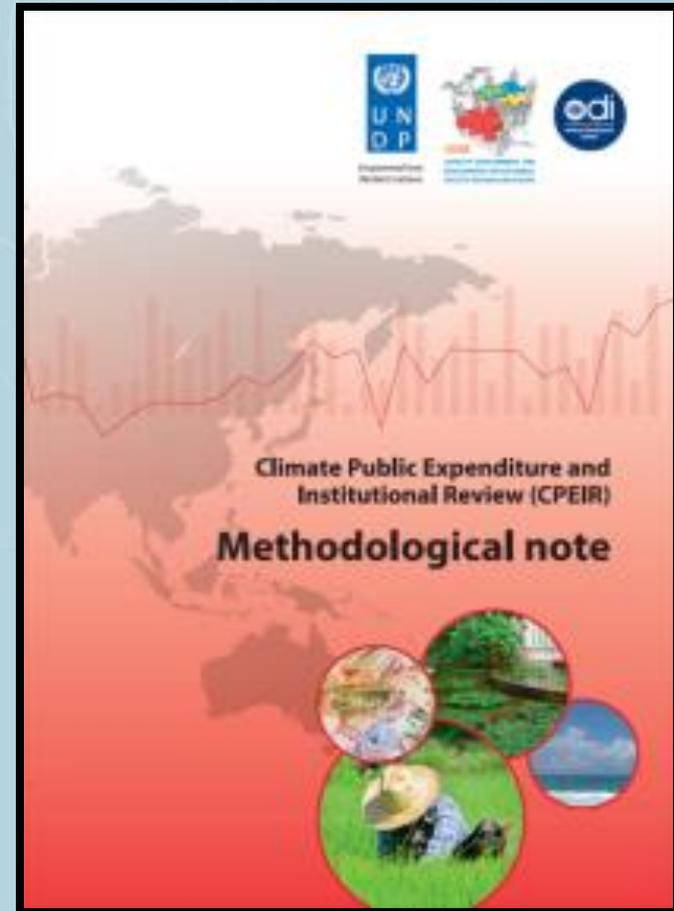
- National Advisory Board on Climate Change and Disaster Risk Reduction



# Regional Methodologies and Guides

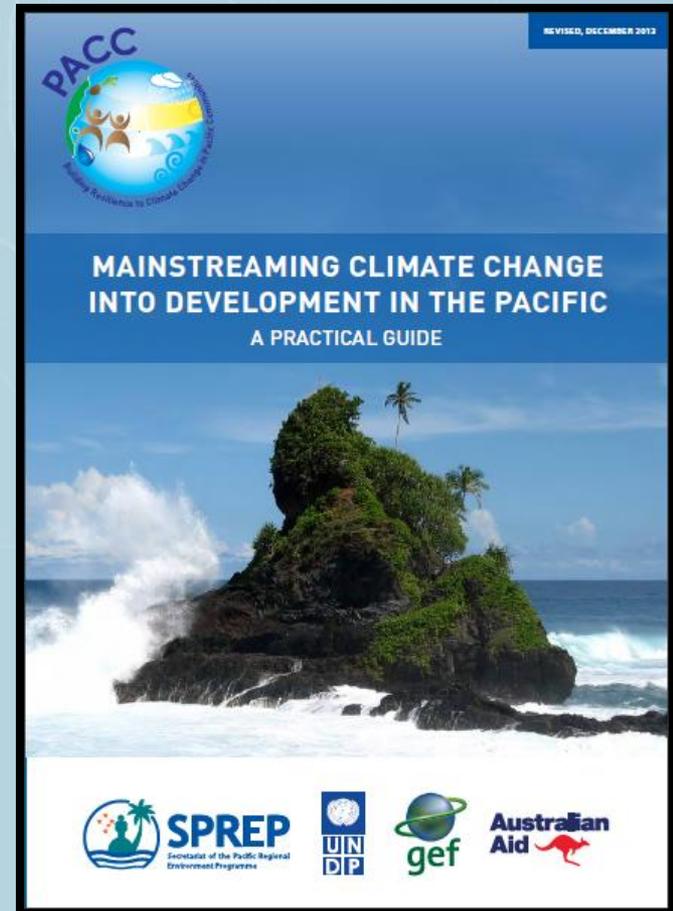
## Example: Climate Finance - Samoa

- Samoa's Climate Public Expenditure and Institutional Review (CPEIR)
- To inform the development of the national response to climate change



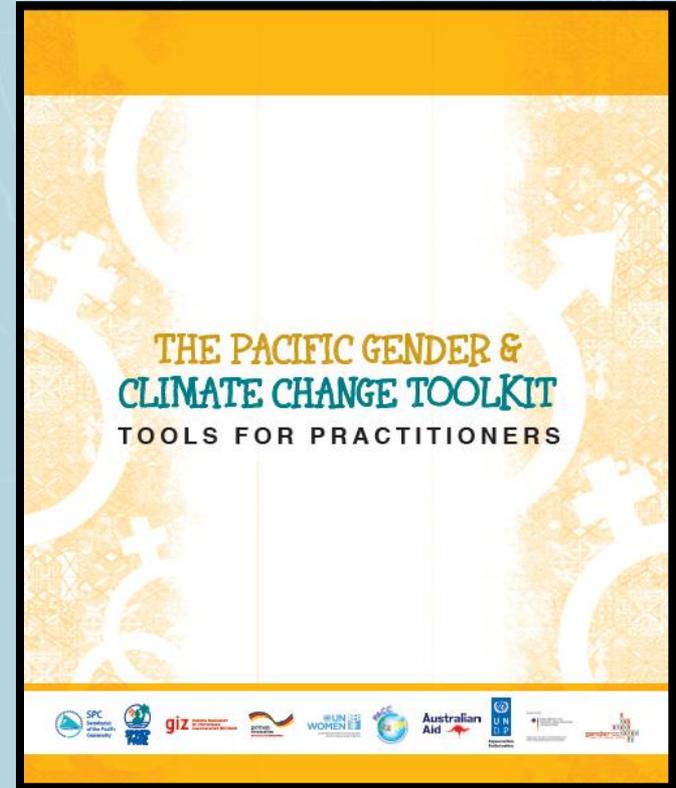
# Guide Example: Mainstreaming - Regional

- Based on experiences from 14 Pacific Island Countries to advance CC mainstreaming efforts
- Partners: UNDP, GEF, AusAID, GIZ, and Pacific Island Countries and Territories (PICTs)

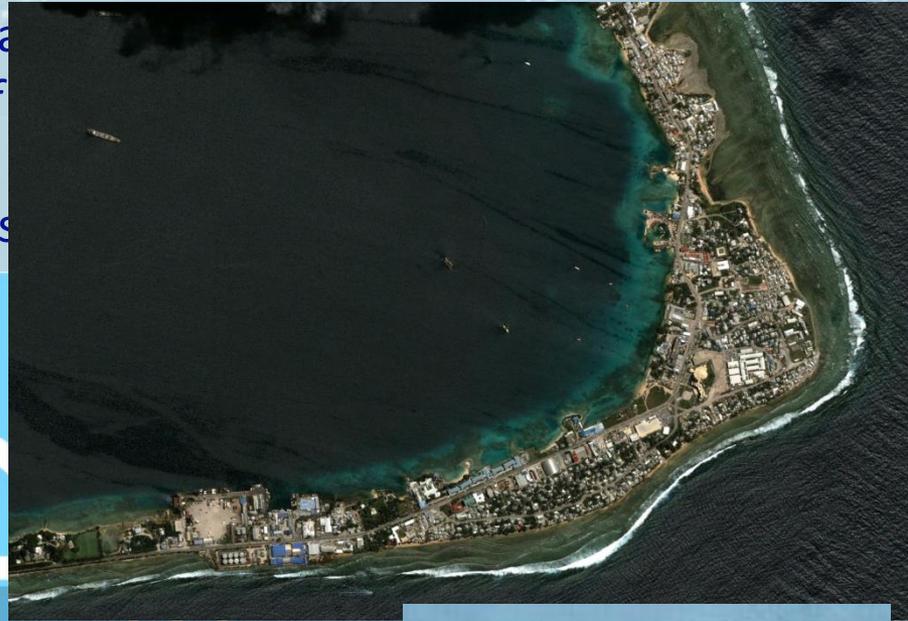


# Toolkit Example: Gender & Climate Change

- to support climate change practitioners to integrate gender into all aspects of policy, programming and project work.
- SPC, GIZ, SPREP, UNDP, IUCN, WHO, UN WOMEN, MOH Fiji, Vanuatu, Palau, Tuvalu



Climate Change Adaptation in the Pacific Islands  
*Definition 4: Actions that reduce the risks of even if they are also justified in the absence commonly known as 'no-regrets approaches*



### Climate Change & Adaptation

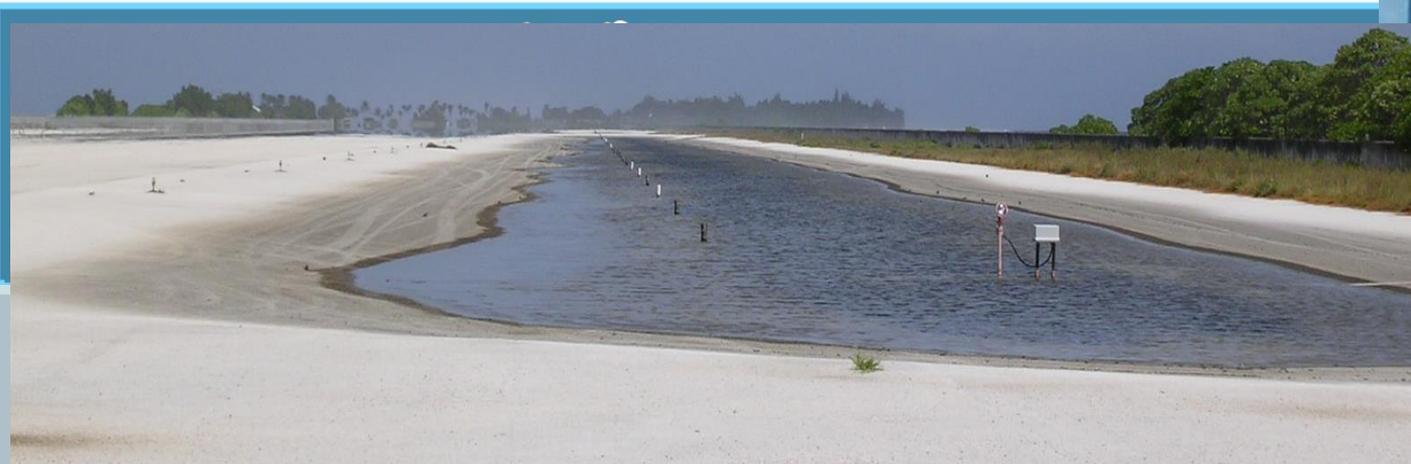
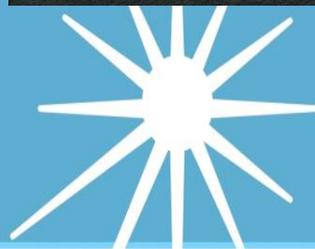
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2



### Natural Hazards & Variability



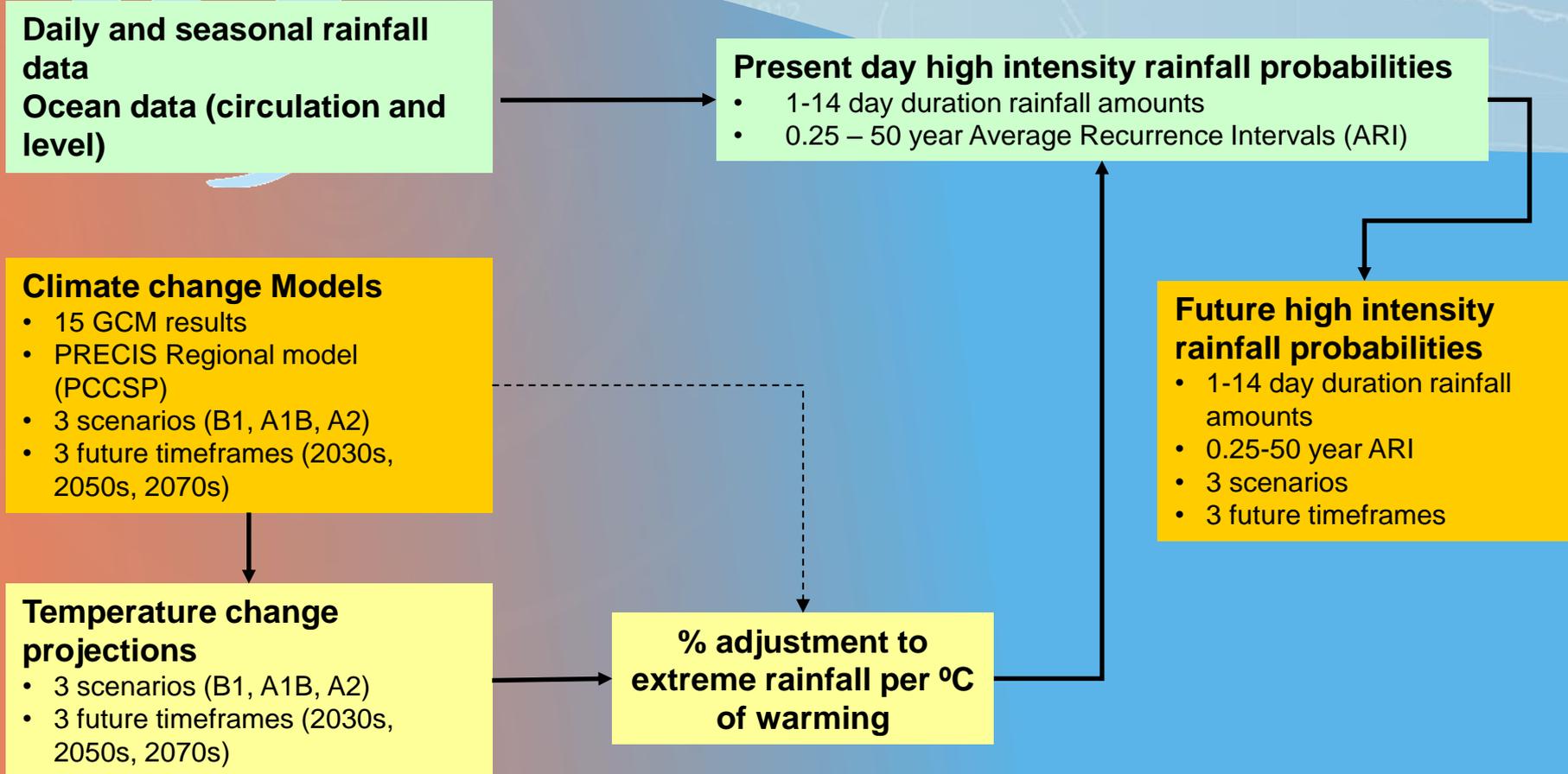
M. W. S. C.  
**WATER DAYS**  
SCHEDULE  
HOURS

Day	Hours
SUNDAY	CLOSED
MONDAY	OPEN
TUESDAY	CLOSED
WEDNESDAY	CLOSED
THURSDAY	CLOSED
FRIDAY	OPEN
SATURDAY	CLOSED

6:30AM - 1:30PM \* 4:30PM - 1:30PM



# Integrated with climate information & scenario (current and projections)



**PACIFIC ADAPTATION TO CLIMATE CHANGE**

[www.sprep.org/climate\\_change/pacc](http://www.sprep.org/climate_change/pacc)



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# Lata – Solomon Islands

Action	Choice of crop to meet immediate food security needs	Whole-farm planning and management	Drought- and salt-tolerant crops improvement	Drainage infrastructure	Community relocation
DRR and CCA focus	Food security needs as a determinant of vulnerability	Current weather-related disaster risks	Current and projected climate risks	Projected climate risks	Projected climate risks
Planning horizon	Now	5 years	10–20 years	>30 years	>50 years



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# Science and social science to inform adaptation work

- Translating climate science to simple to understand language 14 PICTs & NMS, USP PACE-SD, IFRC, SPREP, Finland Met Services and WMO
- Adaptation demonstration guides – capturing the application of science and social science information to inform adaptation designs (PACCSAP → PACC)



**FINPAC**  
Climate and disaster ready communities through improved national meteorological services

The Finnish-Pacific project (FINPAC) is a four-year, 3.7 million Euro regional project funded by the Government of Finland and coordinated through the Secretariat of the Pacific Regional Environment Programme (SPREP) with a range of partners. FINPAC aims to improve livelihoods of Pacific island communities by delivering effective weather, climate and early warning services. The project commenced in 2013.

**WHAT WILL FINPAC DO?**  
There are two key components to FINPAC:

- providing National Meteorological Services (NMS) with the capacity and tools to deliver and communicate accurate, appropriate and timely weather and climate services to rural communities,
- working with communities to strengthen their ability to use and apply meteorological data and information and to develop appropriate plans to address climate change and disasters.

**HOW WILL FINPAC BENEFIT NATIONAL METEOROLOGICAL SERVICES?**

- Improved capacity of NMSs to implement Quality Management Systems for aviation weather services
- Access to lightning data for severe weather forecasting
- Improved capacity in the development and communication of Climate Services
- Introduction of new weather forecasting and warning products and tools
- Improved standard of selected regional weather observation stations

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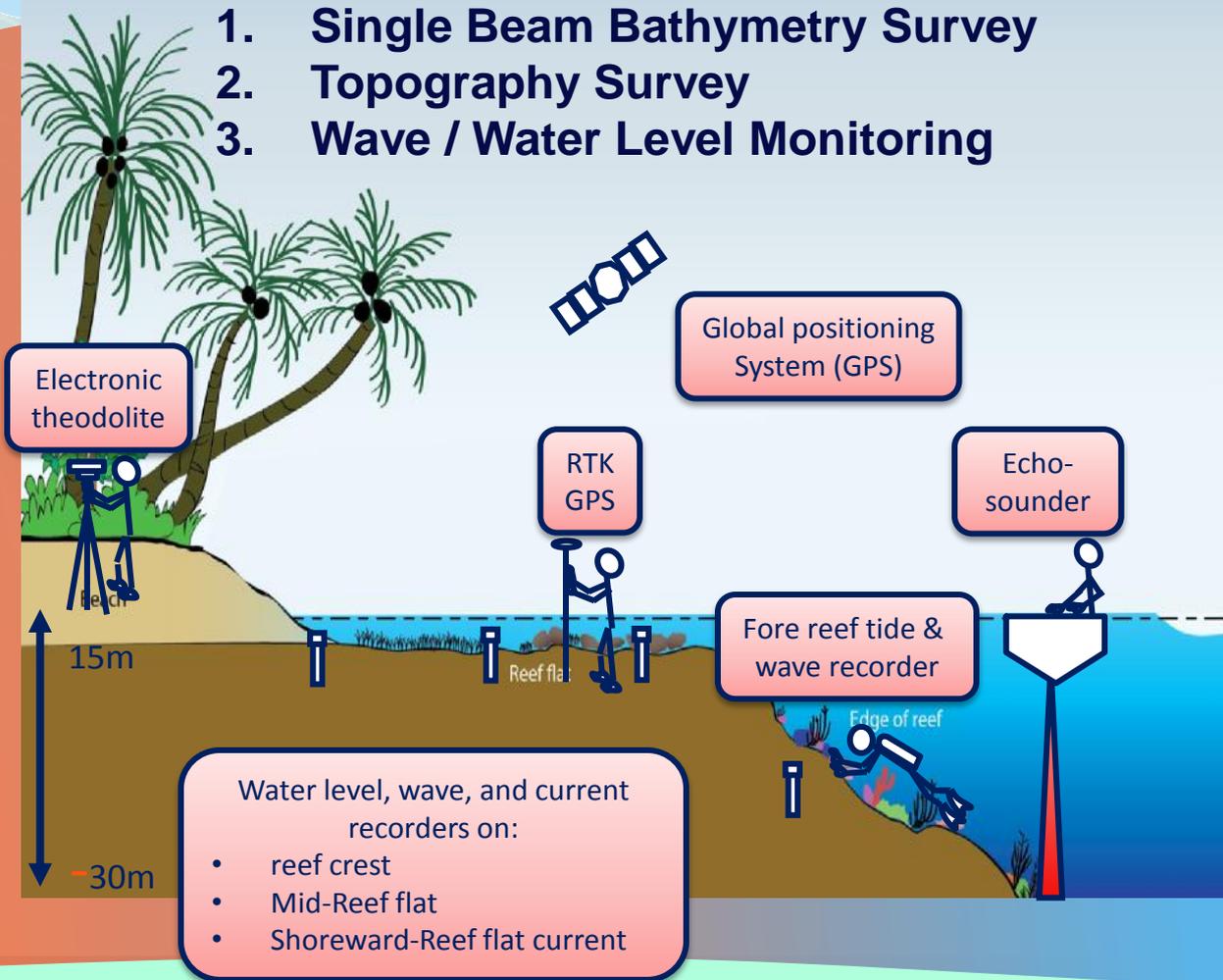
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Secretariat of the Pacific Regional Environment Programme

**FINLAND**  
MINISTRY FOR FOREIGN AFFAIRS OF FINLAND

**FINNISH METEOROLOGICAL INSTITUTE**

# Integrated Assessment – Cook Islands

1. Single Beam Bathymetry Survey
2. Topography Survey
3. Wave / Water Level Monitoring



PACIFIC ADAPTATION TO CLIMATE CHANGE

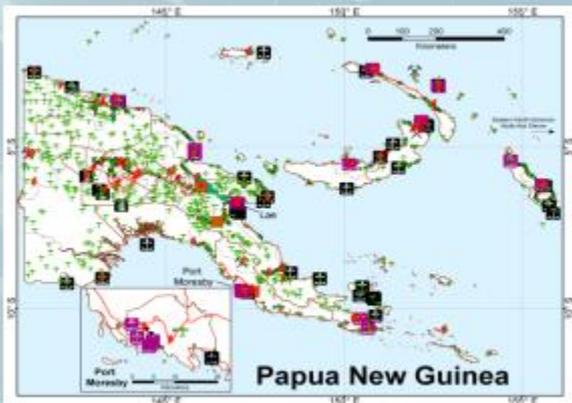
[www.sprep.org/climate\\_change/pacc](http://www.sprep.org/climate_change/pacc)



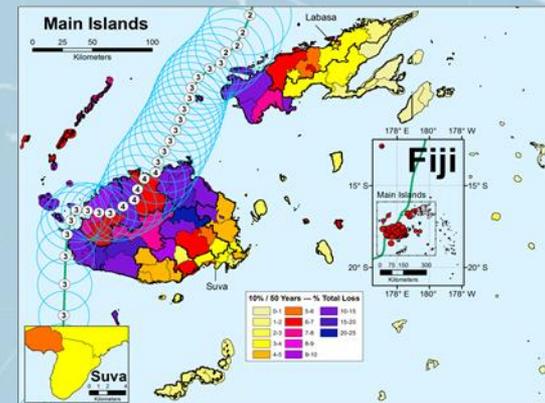
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Hazard monitoring and Forecasting



Exposure & Vulnerability



Risk

# Multi-hazard EWS

Communications and Dissemination

Preparedness and Response

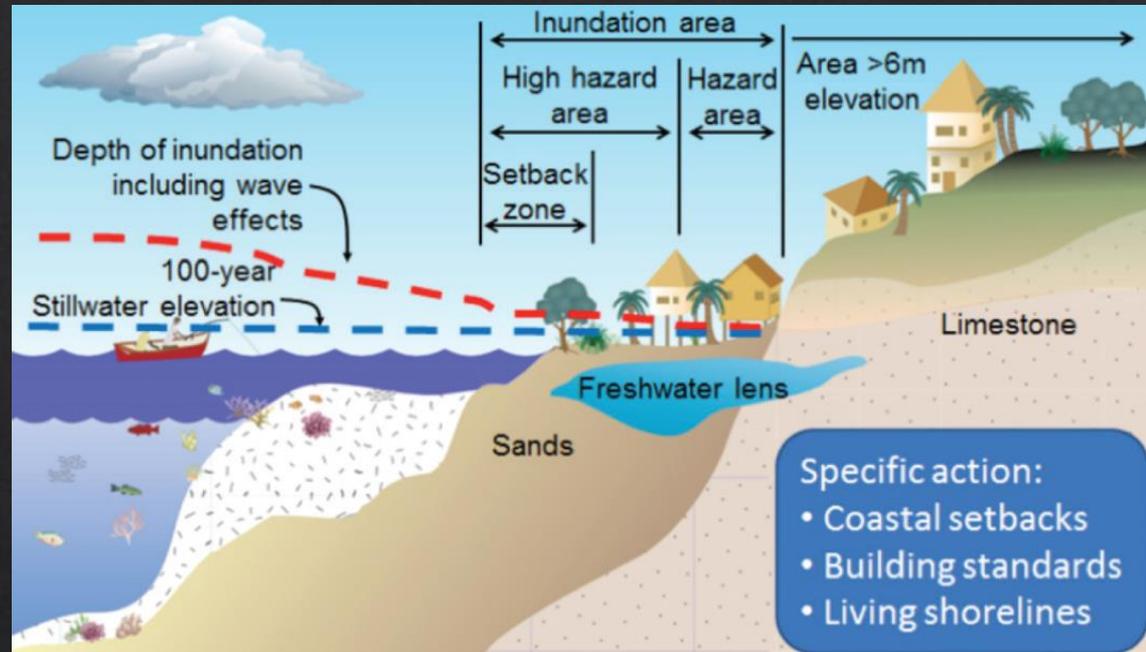
Planning & Investments



# Opportunity to 'build back better'

- opportunity to revisit the 'managed retreat' option (adaptation)
- World Bank supporting Tonga to 'build back better' by using risk information/hazard mapping:

- guide post-event reconstruction and recovery
- mitigate future climate and disaster risk



need to be the mainstream approach to recovery efforts in near future:

- valuable opportunity to support
- understand what worked
- how do we make it work better

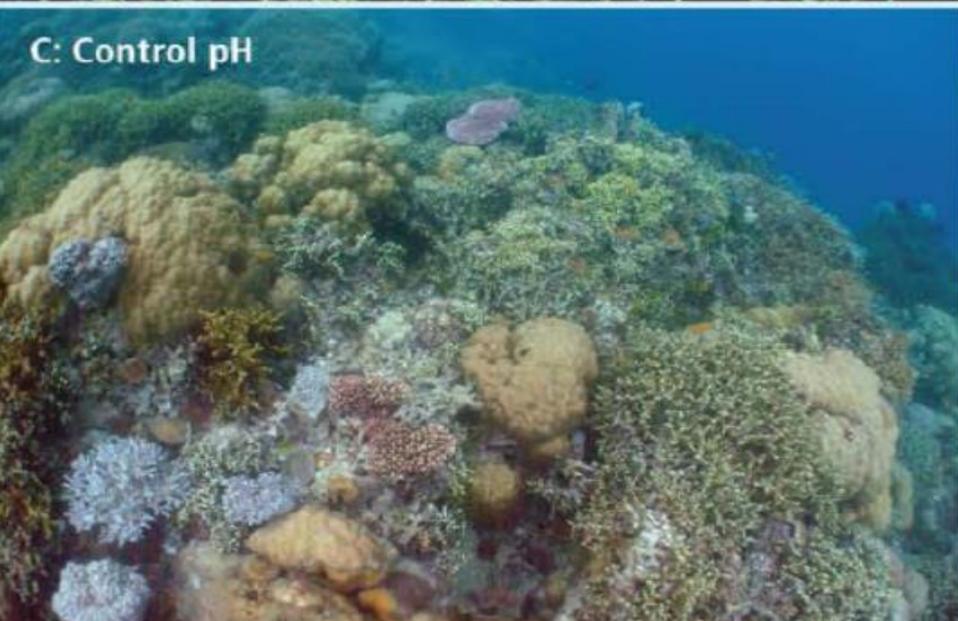
A: Before bleaching



B: After bleaching



C: Control pH



D: Low pH



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COUNCIL**

# Some examples of adaptation projects in the Pacific Islands region today.

- There are significant opportunities in the Pacific Region to leverage international assistance in adaptation.
- Whilst there are excellent opportunities to implement adaptation there is no one-size fits all approach.
- Mal-adaptation (increasing vulnerability) is also an increasing risk in the region, work which is often undertaken with the best of intentions, however is ill advised and not well designed or planned.

Beach mining has become a major threat to coastal stability and is causing pervasive erosion. In 2006, 74% of South Tarawa's householders indicated they mined beach sand and gravel, totalling some 70,000m<sup>3</sup> per year. Given sea level rise and the threat this poses, preventing beach mining is an excellent no-regrets adaptation response.



# Nauru, Tuvalu, Tonga ....

- Water demand and management practices
- CBA
- Sources of water
- Increase water reservoir capacity (ground water)
- Water distribution to households
- House hold water meter and user pay (first time)
- Community water committee CB
- Water conservation awareness and education
- Fresh water management (water tanks, maintenance of gutters, mosquito screening, management of domestic animals etc
- National water policy
- Coastal programme (2 phase)



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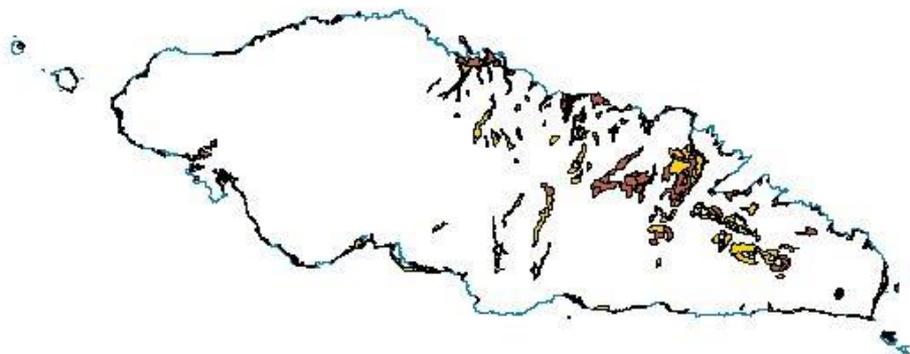
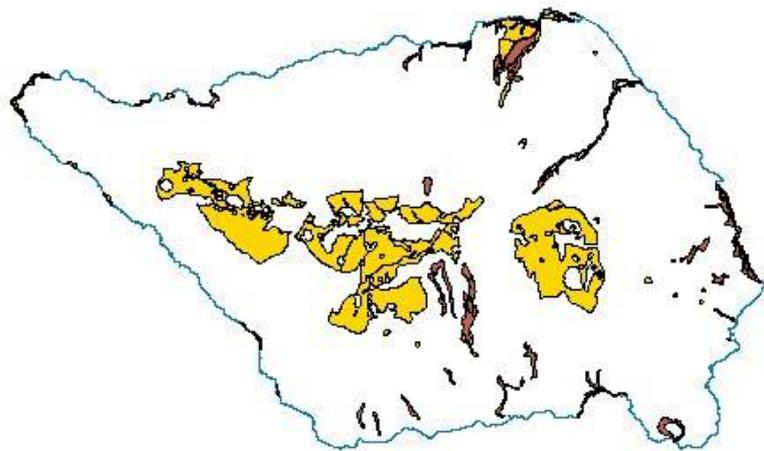
# Climate change vulnerability assessment

## Choiseul Province, Solomon Islands



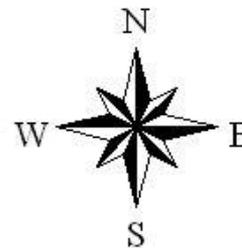
# NAPA 1 – Integrating Climate Change Risks into Agriculture and Health Sectors ( ICCRAHSS)

## Chillies Suitability Map



### Legend

-  High Suitability
-  Moderate Suitability
-  Low Suitability
-  Coastline



Financial and technical success does NOT mean the adaptation outcomes will be achieved.

Integrated approaches incorporating appropriate community involvement, awareness, policy and support must be implemented to avoid failure.

**BEFORE**



**AFTER**



Qaraniki Creek, Namosi, Suva Fiji, PACC Project ( 2009 – 2015)



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Beach mining has become a major threat to coastal stability and is causing pervasive erosion. In 2006, 74% of South Tarawa's householders indicated they mined beach sand and gravel, totalling some 70,000m<sup>3</sup> per year. Given sea level rise and the threat this poses, preventing beach mining is an excellent no-regrets adaptation response.



# **SPREP/ADB SPCR Component 3:**

**Output 1: Regional Technical  
Support Mechanism (RTSM)**

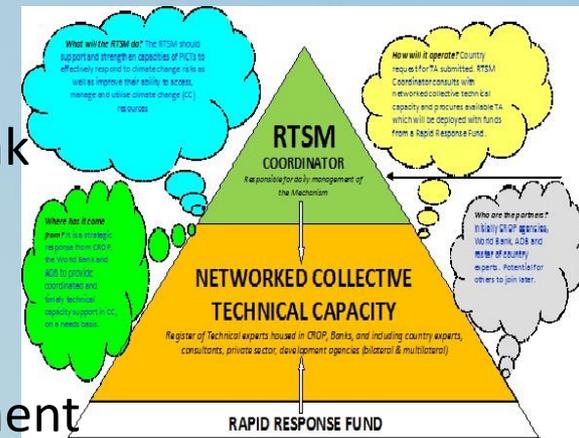
and associated

**Output 2: Rapid Response Fund  
(RRF)**



## Overview

- **RTSM** support and strengthen capacities of PICs to effectively respond to CC risks and improve ability to access, manage & utilise CC resources;
- **Strategic response** from CROP agencies, World Bank and ADB to provide coordinated & timely technical capacity support in CC, on a needs basis;
- **Countries request** TA (RTSM) who will consult with networked experts (CROP agencies, MDBs, Development Partners, National Country Experts, Independent Consultants) and procure available TA to deploy into requesting country. Paid for by the RRF;
- **Initial partners** – CROP agencies, World Bank, ADB, GIZ/EU. Potential for more development partners to join



## Overview of RRF

- Managed through the RTSM. Revolving fund basis
- Finances rapid deployment of experts into PICs on request.
- USD\$1.1million currently available. Funded through ADB by Strategic Climate Fund (SCF) of the Climate Investment Fund (CIF),
- Supports approved<sup>3</sup> TA for 14<sup>4</sup> PICs
- RTSM & RRF established with oversight and coordination of the WARD<sup>5</sup> & under the guidance of the **CES-CCRD<sup>6</sup>**
- Could evolve into a regional climate change financing facility





# Programmatic Approach and Structure:



Climate Change

Biodiversity and Ecosystem Management

Waste Management and Pollution Control

Environmental Monitoring and Governance

**TARGETS**



## 2011-2015 SPREP Strategic Plan

**Climate Change**

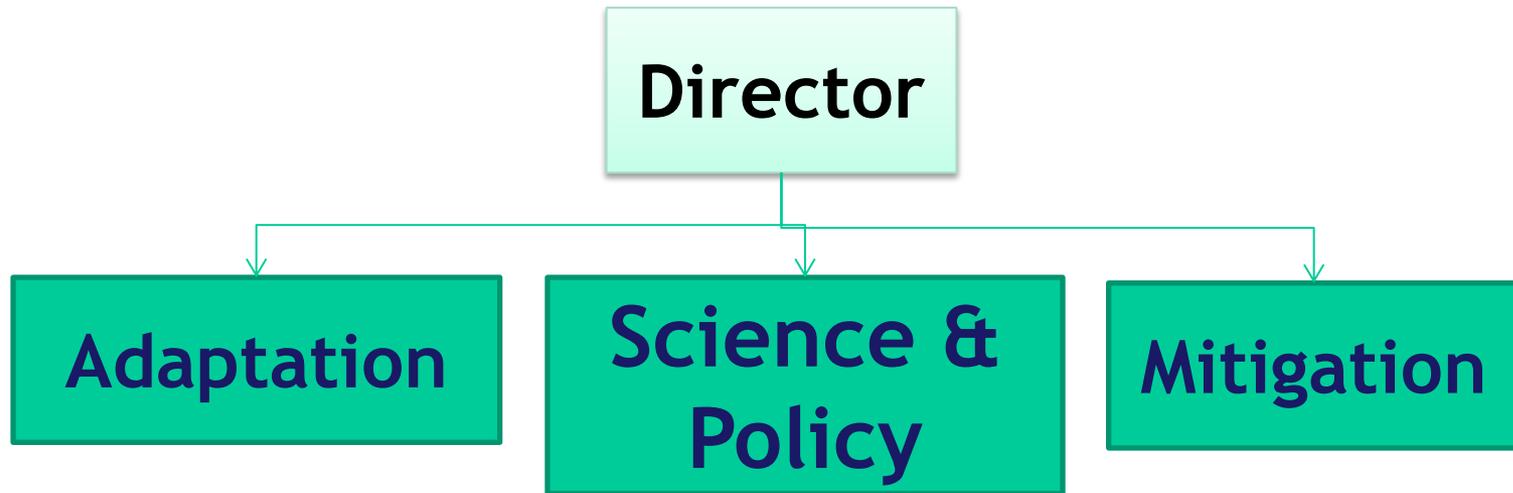
**Implementing adaptation measures**

**Improving capacity, knowledge, and understanding of climate change and risk reduction**

**Contributing to global green house gas (GHG) reduction**



# Climate Change Division



# Accessing Climate Change Funds

- **GCF**
- **AF**



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# Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP)



# PIGGAREP Outcomes

- Wind energy resource assessments in Samoa, Solomons and Vanuatu
- Hydro data collection in Samoa, and feasibility studies done in Solomon islands and Vanuatu
- Solar energy feasibility studies in Niue, Samoa, Tuvalu, Tonga



# PIGGAREP Plus – SIDS DOCK

- Joint initiative of UNDP and WB, developed in close consultation with AOSIS).
- Aims to SIDS transition to low carbon economies through development and deployment of RE and resources and promotion of greater EE.
- In the Pacific – a regional project (using PIGGAREP) arrangements through UNDP and executed by SPREP



# PIGGAREP Plus – SIDS DOCK

- Solomon Islands: Solar PV-Powered Rural Telecommunication Systems
- Tonga: Solar PV-Powered Well Water Pumping Systems in Haapai Islands
- Tuvalu: Energy Efficiency Demonstration House
- North Pacific Region: Sustaining Renewable Energy and Energy Efficiency Measures in Micronesia (SREEM) – comprised of PIGGAREP+ sub-components in FSM, RMI and Palau

