

CONCEPT NOTE

Webinar – Understanding Current & Future Climate Change: Science-based Application for Pacific Resilience

Thursday 14 October 2021 (2-4pm Samoa Time)

1. Context

The **Intergovernmental Panel on Climate Change (IPCC)** recently released the Working Group (WG) 1: Physical Science Basis report which provides the latest assessment of scientific knowledge about the warming of the planet, projections for future warming and assessing impacts on the climate system. Globally the findings of WG 1 report are ‘concerning’ but ‘not surprising’ as it reconfirms ‘*it is unequivocal that human influence has warmed the atmosphere, ocean and land*’ (IPCC, 2021). The report concludes:

- global surface temperature will continue to increase until at least the mid-century under all emissions scenarios considered, and
- global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO₂ and other greenhouse gas emissions occur in the coming decades.

As Pacific islanders, we are well familiar with experiencing firsthand devastating effects of climate change on our vulnerable islands exacerbated by our island size, geographic isolation and limited resources. The World Meteorological Organization¹ State of the Climate Report 2020, recorded two of the strongest cyclones (category 5 – highest level) in the South-West Pacific; Cyclone Harold which struck Fiji, Solomon Islands, Tonga and Vanuatu triggering an estimated 99,500 displacements, destroying more than 17,000 homes and 30 deaths along the cyclone path. The second cyclone, Cyclone Yasa was one of the most intense cyclones ever recorded with widespread damages occurred in Fiji. Similarly, Tuvalu recorded its lowest rainfall on record for January 2021 and is continually facing shortage of water due to prolong drought.

Whilst Pacific Island communities are resilient and adaptable, coping with climate change remains a challenge and the single greatest threat facing the Blue Pacific. This consequently calls for urgent action and better scientific understanding of current and future climate change as evidence to inform climate action and associated decisions today and in the future. As countries prepare for the 26th Conference of the Parties (COP), this webinar will discuss opportunities, innovation and share supporting materials around ‘NextGen’ climate change science and services for countries to inform policy development, future action plans, risk assessments, resource allocations and associated financial investments.

2. Purpose

¹ Source: https://library.wmo.int/doc_num.php?explnum_id=10618

The purpose of the webinar is to discuss the state of scientific understanding of current and future climate change for the Pacific, in particular looking at the latest IPCC AR6 WG1 science and the recently updated country climate change projections for the Pacific. It is also an opportunity to discuss with experts on how this information could inform policy dialogue such as the upcoming Conference of the Parties negotiation, sector plans and future innovation working with private sector and other key stakeholders in the region.

The webinar will be based around two complementary, thematic panel discussions with invited experts, together with an open forum Q&A session.

3. Specific Objectives for the Panel Sessions

- Raise awareness on practical application of climate change science and services in decision making at all levels (international, regional, national and sub-national level)
- Unpacking the IPCC AR6 report on WG 1 report and the updated 'NextGen' country reports, and what it all means for the Pacific.
- Sharing practical solutions on using science to inform services with key development sectors like agriculture, fisheries, infrastructure, tourism, water, energy, DRM and others.
- Identify opportunities to partner with the private sector to harness innovation and technology to cope with climate change.

4. Audience

- As wide and varied, and as many people as possible. Invitations will be shared far and wide.

5. Format of the panels

The interactive panels will be in two parts (i) *Climate Change Projections & Development* and (ii) *Application of Climate Change Science to Inform Services*.

Each panel will comprise of five panelist and a moderator from SPREP or CSIRO. The session will start with brief introduction of speakers followed by responses from the speakers on the pre-determined questions to instigate discussions. Each of the session will be allocated 50minutes and will conclude with a question-and-answer session with the audience and final statements from each of the panelists.

6. Panel Arrangements:

Panel 1: Climate Change Science and Services

Moderator: Program Manager, CSIRO Climate Resilient Enterprise, **Dr. Geoff Gooley**

Panelists:

- i. Senior Research Scientist, CSIRO Climate Science Centre, **Dr. Michael Grose**
- ii. Climate Analytics, **Dr. Fahad Saeed**
- iii. Microsoft Asia Lead, Sustainability Science, **Dr. Trevor Dhu**
- iv. Group Leader, Climate Extremes and Projections, CSIRO Climate Science Centre, **Dr Kathleen McInnes**

Panel 2: Application of Climate Science

Moderator: SPREP Meteorology and Climate Advisor, **Mr. Salesa Nihmei**

Panelists:

- i. Climate Change Knowledge Broker, CSIRO Climate Science Centre, **Dr. Leanne Webb**
- ii. Acting Director Fiji Meteorological Services, **Mr. Terry Atalifo**
- iii. COSPPac Traditional Knowledge Officer, **Ms. Siosinamele Lui**
- iv. Chairman of National Determined Contribution Hub, **Mr. Tutii Chilton**
- v. Senior Lecturer Disaster Risk Management at University of the South Pacific, **Dr. Viliamu Iese**

7. Proposed key guiding questions:

Panel 1:

- What science and services are currently available? (IPCC AR6 WG1/Atlas + Pacific NextGen)
- What is in the pipeline? (IPCC AR6 WG2/3/synthesis + Pacific NextGen 2.0 + PCCM/regional & national reports)

Panel 2:

- What are the needs of sectoral decision-makers for science-based services to inform climate action in the Pacific?
- What are some good examples of practical application of the science to inform climate impacts at a sectoral level in the Pacific?

Agenda

2.00-4.00pm Apia Time

Welcome Remarks (5mins) Director Climate Change Resilience Programme, SPREP

Ms. Tagaloa Cooper

Remarks (5mins): Director of Pacific Climate Change, Australia Department of Foreign Affairs & Trade

Ms. Kirsty McNichol

Panel 1 (40mins):

Panelists:

- i. Senior Research Scientist, CSIRO Climate Science Centre, **Dr. Michael Grose**
- ii. Climate Analytics, **Dr. Fahad Saeed**
- iii. Microsoft Asia Lead, Sustainability Science, **Dr. Trevor Dhu**
- iv. Group Leader, Climate Extremes and Projections, CSIRO Climate Science Centre, **Dr Kathleen McInnes**

Questions & Answers (10mins)

Panel 2 (40mins):

Panelists:

- i. Climate Change Knowledge Broker, CSIRO Climate Science Centre, **Dr. Leanne Webb**
- ii. Acting Director Fiji Meteorological Services, **Mr. Terry Atalifo**
- iii. COSPPac Traditional Knowledge Officer, **Ms. Siosinamele Lui**
- iv. Chairman of National Determined Contribution Hub, **Mr. Tutii Chilton**
- v. Senior Lecturer Disaster Risk Management at University of the South Pacific, **Dr. Viliamu Iese**

Questions & Answers (15mins)

Closing (5mins) Director of Climate Change Resilience, **Ms. Tagaloa Cooper**