

Side-Event

Preparing for Weather Events of the Future: *Is the Pacific Prepared enough to face the weather of the Future brought about by climate change?*

1:00pm – 2:00pm, 04 September 2023

Taumeasina

Agenda

Concept

The Intergovernmental Panel on Climate Change (IPCC) is very clear. The world is not on course to meeting the 1.5 degree Celsius target that the Pacific is advocating.

Under the future climate brought about by the global warming and climate change, the IPCC emphasised the following;

- Pacific will face fewer but more intense tropical cyclones
- The Pacific will face increased heat stress with an increased number of days where combined heat and humidity are harmful to human health
- Extreme Rainfall, Storm Surge, Heat Stress will become more frequent, more intense and more widespread
- Drought Conditions increasing in the Pacific
- Sea Level Rise will lead to increased frequency and intensity of storm surge events, increased coastal inundation and the intrusion of sea water into fresh water supplies
- Marine heatwaves and ocean acidification will become more frequent and intense

The impacts of these extreme events will be catastrophic for small island states as outlined in the IPCC Second Working Group Report.

Pacific island countries are already vulnerable to a wide range of weather, climate, hydrological, ocean and other related environmental extreme and high impact events, including tropical cyclones and typhoons, strong winds, high waves and seas, earthquakes, volcanic eruptions, drought, coastal inundation (including storm surges, waves, swell and tsunami) and flash floods. Already in the 2020-21 cyclone season, Fiji has been devastated by two severe tropical cyclones, causing loss of life and widespread damage, whilst Samoa was badly affected by flooding and landslides in December 2020. Economic losses from cyclones and flooding in the South Pacific region in 2020 were around \$1 billion with at least 71 lives lost.

Further, the risks posed by extreme events are increasing as the Pacific region is particularly vulnerable to climate change and it is likely that extreme events will become more intense and/or frequent in coming decades. Pacific Island countries will be significantly affected by sea level rise, which will greatly increase the risks posed by coastal inundation events. Climate change and disaster risks undermine the ability of the Pacific region to reach Sustainable Development Goals.

The forecasts and warnings provided by National Meteorological and Hydrological Services (NMHSs) are essential to the safety and well-being of Pacific people and communities, protection of property and contribute to sustainable development. During the past decade, there has been significant investment in weather, climate, hydrological and ocean related capacity and infrastructure in the

Pacific region, which has resulted in improvement in the capacity and capabilities of NMHSs as outlined in the Pacific Islands Meteorological Strategy (2017-2026). However, critical gaps remain: governance arrangements, mandate, strategic plans and institutional support are lacking in some countries; the observation network is patchy and the ability to invest in and maintain modern observational infrastructure is limited; similarly, computational infrastructure and capacity is not up to global standards; forecasting systems in use are highly variable in approach and quality; there are insufficient qualified meteorological and technical staff to develop and deliver accurate, localised and impact-based forecasts and warnings. This creates challenges for NMHSs in providing the information needed by government, communities and industries (e.g. agriculture, fisheries, aviation, tourism) to better prepare for extreme events and manage the subsequent impacts on livelihoods and economies.

To address these critical gaps, a decadal response is needed urgently to enable Pacific island countries and territories to better anticipate and respond to high impact and extreme weather, hydrological, climate, oceanic and other related environmental events and their associated risks. In particular, empowering Pacific NMHSs to engage credibly with the communities, customers, partners and stakeholders contributes to more informed local and regional decision making, potentially saving lives and livelihoods. Further, enhancing capability builds a stronger platform for the region to manage the impacts of climate change and equipping countries with valuable information to inform adaptation and resilience strategies.

At its fifth biennial meeting in Apia, Samoa in August 2019, the Pacific Meteorological Council (PMC) recommended the Secretariat of the Pacific Regional Environment Programme (SPREP) commission a study to scope the feasibility for a Decadal Program of Investment to enable the Pacific Small Island Developing States to better anticipate, prepare for and respond to those risks. This report is the result of the scoping project and it provides a Decadal Program of Investment to underpin the ability of NMHSs to deliver effective and timely forecasts and warnings to Pacific communities and industries. It is also complementary to regional initiatives that aim to enhance resilience to climate change and disasters such as the Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP).

The Weather Ready Pacific Decadal Programme of Investment was unanimously endorsed by the Leaders of the Pacific Island Forum in 2021

Session Outline	
Session Title	Preparing for Weather Events of the Future: A Weather Ready Pacific
Coordinators	Nihmei Salesa (SPREP)
Details of the Session (Structure, Outcomes, Approach, Speakers/Presenters, etc)	
Session Description	<p>This session will be setup for a Panel discussion. Pacific Island Countries are widely acknowledged and accepted as the ‘frontline’ countries to the impacts of climate change and natural disasters. Since 2011 several Pacific Island Countries have consistently featured amongst the top ten most ‘at risk’ countries in the world to climate change impacts and natural disasters, with Vanuatu, Solomon Islands, and Tonga most recently making up the top three.</p> <p>To Start this session, the moderators will introduce the Pacific Meteorological Council, and the process that has been undertaken to reach this far.</p>

	An overview will be provided on the challenges that we face ahead in the climate change world and the weather of the future and how the Pacific Meteorological Council developed an Investment plan for a Weather Ready Pacific
Intended Outcomes	<ul style="list-style-type: none"> • Create awareness SPREP members of this WRP programme • Opportunity to provide input into the weather ready Pacific discussion
Speakers (or the type of speakers)	<p>Mr Terry Atalifo and Naheed Hussein, Moderator of the side event</p> <ul style="list-style-type: none"> • Salesa Nihmei (PMC Secretariat), provide an overview of the Future Weather Events and the Weather Ready Pacific • Luteru Tauvale (ACEO of the Samoa Met Division), discuss the needs of the NMHSs and what was discussed at the PMC • Melchior Matakai (Permanent Secretary, Solomon Islands) Discuss the outcomes of the Ministerial Meeting and the transformation WRP can bring to the region) • Tagaloa Cooper (Director, Climate change Resilience, SPREP) Ways forward to getting the initiative operationalise
Approach (i.e, panel discussion or a learning session or a stakeholders creative approaches or a video session)	<p>This session will adopt a ‘Talanoa’ styled approach of story-telling. The discussion and interaction amongst speakers will be free-flowing as you find within a ‘Kava-Tanoa’ setting.</p> <p>The session moderator will introduce the session explain the Talanoa approach to the panellists and audience. The moderator will have pre-drafted questions/prompts to guide the discussions, allowing for each panellist to convey their respective responses. Questions will be shared with panellists well in advance of the Event.</p> <p>At the conclusion of the discussion, the moderator will open the floor to the audience for initial Q&A, and if required, direct open questions to the most applicable panellist.</p> <p>The moderator may ask questions of the panellist and invite them to share any final reflections. The moderator will then wrap up the session and thank the presenters and the participants.</p>
Audio-Visul Aids or other Requirements	The session will start with a Video

Initial Potential Guiding Questions:

- **Mr Terry Atalifo and Naheed Hussein of SPREP – Moderator of the side Event**
 - Introduce the Panel members
 - Provide a brief background on the Pacific Meteorological Council as a subsidiary body of SPREP
- **Mr Salesa Nihmei, PMC Secretariat**
 - provide an overview of the Future Weather Events as outlined by the IPCC
 - Outline some of the future challenges the Pacific may face
 - Outline the Weather Ready Pacific Initiative

- Why it is necessary for the Pacific to coordinate in addressing extreme weather events
- **Luteru Tauvale (ACEO of the Samoa Met Division),**
 - discuss the needs of the NMHSs and what was discussed at the PMC
 - Some of the Challenges NMHSs are facing such as capacity building
 - Follow up question..
- **Melchior Mataki (Permanent Secretary, Solomon Islands)**
 - Discuss the outcomes of the Ministerial Meeting and the transformation WRP can bring to the region)
 - Every year we observe the costs of damage caused by extreme weather events. Tell us about the impacts of these extreme events in Solomon Islands?
 - As the Permanent Secretary of Solomon Islands, and having attended the PMM-3 why should SPREP members support this initiative?
- **Tagaloa Cooper (Director, Climate change Resilience, SPREP) Ways forward to getting the WRP operationalise**
- What are the ways forward from here and what should we expect?
 - Working Group on the WRP to deliver activities in September and October
 - Leaders Meeting
 - Review of the Met Strategic Plan to reflect the WRP and TK
 - Inclusion of Gender and DRR in the WRP Programme
 - PMC-7 in Vanuatu in 2024
- Follow up question

General Question;

In November, the Weather Ready Pacific will be championed by the Chair, the Government of Cook Islands as one of its priorities for genuine partnership, how would you like to see this Weather Ready Pacific Programme addressed by Donors