

*Rugby team in Tonga assisting with  
transport of a water tank  
Photo: PACC Tonga*

# CLIMATE CHANGE MATTERS

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## Director's Note



**Dr Netatua Pelesikoti**

Climate Change Division Director  
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Dear Readers,

Three inter-related events are happening in November that all drive home our vulnerability to the effects of climate change.

First, **UNFCCC 19th Conference of the Parties (COP)** is to be held in Warsaw Poland from 12 - 22 November 2013.

It is important for the Pacific Island Countries to effectively participate in the negotiations as key agenda items affecting our environment and development will be discussed in relation to addressing the emissions gap, process for development of a legally binding treaty, climate change finance, ADPI and ADP2, loss and damage, 2013-2015 Review, Nairobi among other important items.

Secondly, the **IPCC WGI 5th Report on Climate Change: Physical Science Basis AR5** confirms the following:

- That substantial and sustained emission reductions needed
- Continued emissions of greenhouse gases will cause further warming and changes in all components of the climate system
- Limiting climate change will require substantial and sustained reductions of greenhouse gas emissions (IPCC AR5 SPM – headline statement)

Thirdly, **November is also the beginning of the cyclone season in the south.** We have observed an increase in extremes of weather and climate since about 1950 .

AR5 reported that the global frequency of tropical cyclones will either decrease or remain essentially unchanged.

- Activity of intense tropical cyclones is “more likely than not” set to increase in the Western North Pacific and North Atlantic – but uncertainties still large
- A likely increase in both global mean tropical cyclone maximum wind speed and rain rates
- More extreme precipitation near the centres of tropical cyclones making landfall are likely in many Pacific islands.

The 19th COP negotiations, the IPCC AR5 WGI report on Science and the cyclone season are intertwined issues, tracing back to increasing green house gas emissions and the vulnerability of the Pacific Island Countries and Territories.

SPREP has conducted several preparations for the COP for Pacific island countries supported, by the British High Commission, Embassy of the Republic of Germany, Wellington and the LDC, SIDS High Level Support Mechanisms on Climate Change.

We have faith in the combined voices of SIDS in AOSIS with the Government of Nauru at the chair and we have faith in the global process that our issues will be heard and matched with timely and affirmative action.

*Enjoy reading this CCM!*

## About Us

**SPREP's Climate Change Division (CCD) is made up of three programmes:**

1. Adaptation; 2. Mitigation; and 3. Policy and Science.

The work of the CCD is directed by the SPREP Strategic Plan 2011-2015 based on the climate change priorities of SPREP Members and consistent with the *Pacific Islands Framework for Action on Climate Change 2006-2015 (PIFACC)* and other relevant and approved policy drivers such as the Pacific Plan and the Framework for Action on Disaster Risk Management.

**SPREP's three (broad) climate change strategic priorities for 2011-2015 are:**

1. Implementing adaptation measures; 2. Improving members' capacity, knowledge and understanding of climate change, and risk reduction; and 3. Contributing to global greenhouse gas reduction.

Please visit our website at: [www.sprep.org/Climate-Change/climate-change-about-us](http://www.sprep.org/Climate-Change/climate-change-about-us)

## Pacific Ministers prepare for climate change negotiations in Poland

A two day gathering took place in November to help strengthen the capacity of Pacific Ministers to engage meaningfully at the climate change negotiations.

This was coordinated for the Small Island Developing States of the Least Developed Countries by SPREP in partnership with Climate Analytics, Charles and Associates and the Caribbean Climate Change Centre.

**"Ministers are often asked to attend negotiations with very little briefing or understanding of the salient points, I believe it is equally important to prepare Pacific Ministers so they can participate in the intense climate change negotiations."**

Hon. Tuilaepa Sailele Malielegaoi, Prime Minister of Samoa.

For the full article: [Click here](#)



Hon. Tuilaepa Sailele Malielegaoi, Prime Minister of Samoa  
(photo: SPREP)



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## Ecosystem-Based Management to be highlighted at 9th Pacific Nature Conference



The relationship between the people of the Pacific and their environment has always been very strong - with high dependency on the services that the local ecosystems provide, such as food and freshwater. The utilisation of natural resources also underpin the economies of most Pacific Island countries and territories.

Over time, climate change will undermine the capacities of many ecosystems to continue to provide these services.

Furthermore, it is not just climate change that threatens the productive ecosystems of the Pacific; environmental degradation associated with poor natural resource management continues to limit the options for future generations of Pacific Islanders.

Hon. Jackson Kiloe, Premier of Choiseul Province, Solomon Islands, will be drawing on his long experience as Premier to present on the challenges in taking a sustainable development approach and the pressure on natural resources, at the 9th Pacific Islands Conference on Nature Conservation and Protected Areas.

He will be one of many panel speakers at the conference focusing on this year's theme of *Natural Solutions - Building Resilience for a changing Pacific*.

The conference will be held at the USP Campus in Suva, Fiji from 2 - 6 December.

**More information on the 9th conference speakers and events can be found on the conference website:**

[www.sprep.org/pacificnatureconference](http://www.sprep.org/pacificnatureconference)

From ridge to reef in Choiseul Province  
(photos: Paul Donohoe and Carlo Iacovino)

## Neutral ENSO conditions continue in the Pacific



Breadfruit in Kiribati, an important local food that can be threatened by drought (photo: Carlo Iacovino)

The usual rainfall for this time of year is expected across the Pacific for the next three months.

The major driver of rainfall is the El Niño-Southern Oscillation (ENSO), which is expected to remain in a neutral phase over the coming three months.

Warmer sea surface temperatures than usual are expected in the southern Pacific around the dateline, which could influence Tonga, Niue, and the Southern Cook Islands.

Slightly drier than usual conditions are expected for Western and Eastern Kiribati, Tuvalu, Tuamotu, Marquesas islands and Pitcairn Island.

Slightly wetter than usual conditions are expected for FSM, Papua New Guinea, Tonga and Southern Cook Islands.

For more information, see the [NIWA Island Climate Update](#)

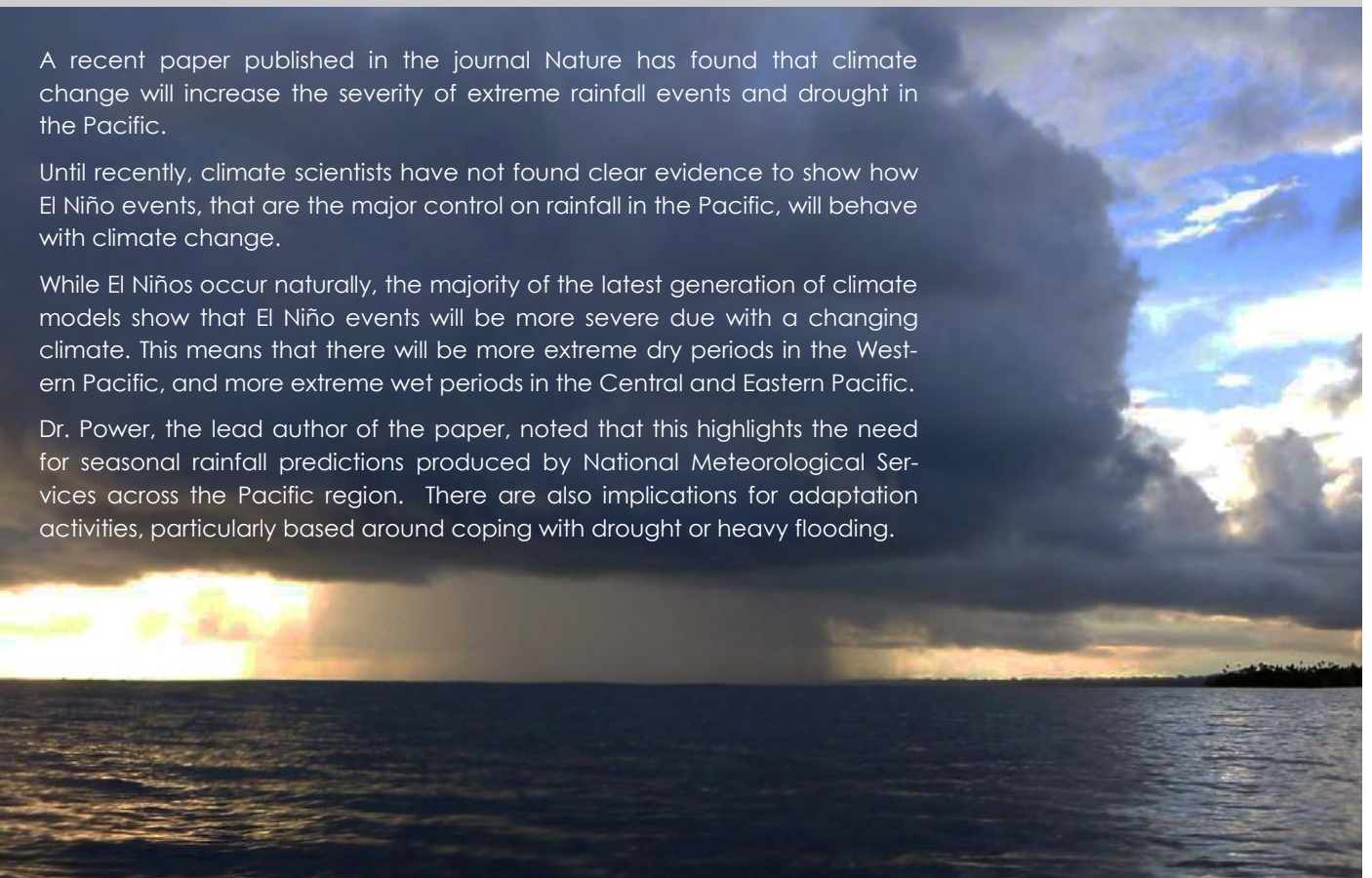
## More extreme rainfall and droughts in store for the Pacific

A recent paper published in the journal Nature has found that climate change will increase the severity of extreme rainfall events and drought in the Pacific.

Until recently, climate scientists have not found clear evidence to show how El Niño events, that are the major control on rainfall in the Pacific, will behave with climate change.

While El Niños occur naturally, the majority of the latest generation of climate models show that El Niño events will be more severe due with a changing climate. This means that there will be more extreme dry periods in the Western Pacific, and more extreme wet periods in the Central and Eastern Pacific.

Dr. Power, the lead author of the paper, noted that this highlights the need for seasonal rainfall predictions produced by National Meteorological Services across the Pacific region. There are also implications for adaptation activities, particularly based around coping with drought or heavy flooding.



Rainstorm in Samoa (photo: Carlo Iacovino)



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## Tonga scores a try for climate change adaptation

Adapting to climate change is a community affair, as demonstrated recently in Hihifo district in Tonga when the local rugby club pitched in to help.

The men were called upon to assist with moving three giant water tanks, which are a measure to improve water supply brought in by the Pacific Adaptation to Climate Change (PACC) project. Forty club members carried the tanks for over 300 metres, where bases had been fitted and were waiting to receive them.

**“The problem was the huge size of the tanks – they are seven metres in diameter and nearly two metres tall. We realised they were too big to move by vehicle to their installation site. It could have been a real problem if it hadn’t been for the helping hands of the players.”**

*Mr Paula Taufua, PACC national coordinator*

The Tonga PACC project is addressing water shortages that are affecting many villages in the Hihifo region, and which are set to worsen with climate change. The project is designed to increase the resilience of communities in the face of these changes, by upgrading water systems and infrastructure.



Players assisting with transport of one of three water tanks  
(photo: PACC Tonga)

As well as the three 45,000 litre tanks, the project has installed a 22,500 litre overhead tank and 30 individual household tanks that each hold 10,000 litres.

According to the district officer of the Western (Hihifo) district, Mr Sione Manumanu, the 30 household tanks were very gratefully received in six villages.

## PACC Cost Benefit Analysis



As part of the Pacific Adaptation to Climate Change (PACC) project, a Cost-Benefit Analysis (CBA) work program has been implemented.

The purpose of this work programme was to help improve selection and design of PACC pilot projects, as well as to build Pacific island country (PIC) capacity in the use of CBA. The PACC CBA work programme was the first substantive capacity building programme of its kind known to have been delivered to PIC governments.

Two technical reports have been prepared which document the activities, outputs, outcomes and lessons learned of the PACC CBA Work Program.

To access these technical reports: [Click here](#)

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The PACC Project consists of 14 member countries; it is implemented by the United Nations Development Programme (UNDP) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP). It is funded by the Global Environment Facility (GEF) and the Australian Agency for International Development with support from United Nations Institute for Training and Research (UNITAR) Climate Change Capacity Development (C3D+) Programme.



## Media and communications training for Pacific negotiators

Pacific negotiators were placed on the 'hot seat' by senior media in Samoa as part of a preparatory exercise as they gear up for the UNFCCC COP 19. Mock television, radio and print interviews were held to provide negotiators with feedback on how they can strengthen their interview skills.

It is hoped the one day training will help Pacific negotiators as they face international media at the UNFCCC COP 19 in Poland in November this year.

**"It's encouraging when we receive evaluation feedback saying the training provided practical support to help our Pacific officials with writing press releases and provides them with more confidence when doing interviews,"**

Nanette Woonton,

SPREP Media and Public Relations Officer



Media training (photo: Nanette Woonton)

The one day activity held on 15 October was funded by the British High Commission Suva. The day also shared tips on best ways to approach media interviews, how to draft national press releases, development of safelines and a review and critique of interview skills of the Pacific negotiators.

## Vanuatu gets ready for global climate change summit in Poland



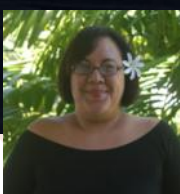
Role playing activity during the Negotiations training – participants had to prepare briefs and then verbally present these to the 'Deputy Prime Minister' (photo: Nanette Woonton)

Vanuatu are preparing for the UNFCCC COP 19 in Warsaw, Poland with a range of different activities this year. One of which included a three day negotiations skills training for the 15 member delegation and other interested professionals held from 21 - 25 October, 2013.

The training has helped strengthen the climate change negotiation skills by providing a platform to share experiences, undertake a realistic negotiation simulation activity and learn more about the key findings in the IPCC AR5 report. These were just a few of the activities facilitated by SPREP and the Vanuatu National Adaptation Board Project Management Unit (NAB PMU) over the course of the three day training.

A one day session for national media of Vanuatu was also held on 21 October to help support wide national coverage of climate change and the Vanuatu delegation at the COP. Plans were discussed on ways to help strengthen coverage in national media during this time as well as a sharing of information on climate change.

*"I learnt the difference between weather and climate, and how we adapt with the impacts of climate change. A key point I really found interesting and learnt was about ocean acidification,"* said Ms. Jeneza Hinge, a journalism student from the Vanuatu Institute of Technology.



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## Pacific Tropical Cyclone Outlook

The Pacific remains in a neutral ENSO state with the weak La Niña – like Sea Surface Temperature (SST) patterns present around the middle of the year now completely vanished. By this time of the year ENSO has pretty much settled in for the coming summer, and the international consensus indicates that neutral ENSO conditions are very likely (89 % chance) to persist for the until January 2014 and probably until April 2014.

While ENSO is the dominant natural driver of climate in our region, a neutral period does not guarantee a benign climate. A neutral ENSO period indicates that the equatorial Pacific Ocean is not shifting the odds towards either a particularly wet or dry period, and hence other influences may come into play such as the Madden Julian Oscillation (MJO). Weather extremes can and do occur during neutral ENSO phases, though they tend to be less widespread.

TC activity in ENSO neutral years confined mostly to west of the dateline. So basically we can expect below average activity east of the date line and average to above average west of the dateline for the coming season. On average 6.6 tropical cyclones occur in the south west Pacific between 160E to 120W during ENSO neutral years. This is fewer than in El Nino years (8.5) and about the same as during during La Nina years (6.5). Due to the presence of the warm SST anomalies around Fiji there is an increased risk of a SEVERE tropical cyclone around countries close to and west of the dateline including Fiji, Vanuatu, New Caledonia and Tonga.

Dynamical models indicate that the SPCZ will likely remain slightly south of normal for the coming three months to the end of January. As such rainfall will likely be slightly above average over countries further south such as Fiji, Tonga, Niue and the Southern Cook Islands during the early summer months, while countries to the north such as the Northern Cook islands, Samoa, Tokelau ad Tuvalu can expect slightly below average rainfall during the same period.

For further information, [click here](#)

## Events in November 2013

Event	Location	Date
UNFCCC COP 19	Warsaw, Poland	3-23 Nov
IPCC Working Group 1 of the AR5 Regional Workshop	Suva, Fiji	4-6 Nov
PPCR Partners Meeting	Suva, Fiji	7-8 Nov
2nd Joint Mission to Support Adaptation to CC in Abaiang, Kiribati	Abaiang, Kiribati	7-22 Nov
Pacific Waste & Weather Conference	Cook Islands	11-22 Nov