

# Climate and Oceans Support Program in the Pacific





Janita Pahalad, COSPPac Manager.

#### Manager's message

After more than a year of planning, COSPPac officially commenced its four year journey on 1 July 2012.

COSPPac isn't an entirely new program, but a couple of existing Pacific projects rolled into one—including the 20-year-old sea level project and the eight-year-old PICPP.

The new program is just in its first year and already the vibrant and well qualified COSPPac team have released a prototype ocean portal, updated the seasonal forecasting tool (SCOPIC), and delivered media and stakeholder training workshops in the Solomon Islands and Niue. In addition, the team has progressed on a number of climate application projects including malaria incidences in the Solomon Islands and hydro-power generation in Samoa.

We have much more on the way including the traditional knowledge project—collecting traditional data and attempting to integrate it with seasonal climate outlooks. We're also beginning work on the installation of a new tidal gauge in Niue.

We're all very excited to be part of this flagship program and look forward to working with you in the coming months and years.

Until next time.....

## Contact

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## Upcoming events

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May	• 2013–2014 COSPPac Planning Meeting, Nadi, Fiji
	Traditional Knowledge Project Scoping – Samoa
	Drafting Samoa's Learning and Development Plan
June	Activities to be confirmed
July	Science, Stakeholder and Media Workshop,
	location to be confirmed
August	• Science, Stakeholder and Media Workshop, Samoa

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Solomon's workshop participants.



A native plant found in Niue.

## Recent workshops

#### Science, Media and Stakeholders workshops— Solomon Islands and Niue

So far we have held two in-country workshops.

In February, the wonderful team at the Solomon Islands Meteorological Service hosted the first workshop, and in April, we were made very welcome by the great people at the Niue Meteorological Service.

The workshops are designed to support the delivery of consistent and high quality climate services by training the participants in climatology, climate prediction, and the use of predictive software—as well as community and media engagement.

We're thoroughly enjoying them and look forward to the next workshop.

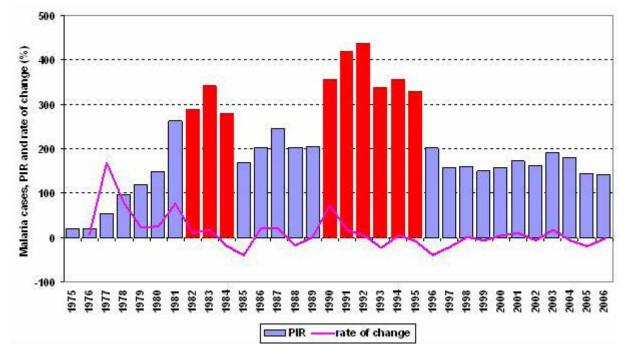
## How traditional knowledge can strengthen forecasts

Behaviour of plants, animals, stars and winds can communicate natural changes in the environment and climate. Many indigenous communities around the world can read these signs in their environment to make predictions about the weather and climate.

To assist Pacific Islands to adapt to the shifting environment and climate, COSPPac is partnering with a few Meteorological Services to explore how this knowledge can be used to strengthen forecasts and climate outlooks. We'll be working with them over the next three years to document local knowledge of weather and climate indicators.

We're currently building a database to house the information that's collected—and once we have enough data, we'll work with the Met Services to try to combine the natural observations of flora and fauna with modern science.

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### Using climate data to understand malaria season

Graph showing annual malaria incidence in the Solomon Islands from 1975-2006.

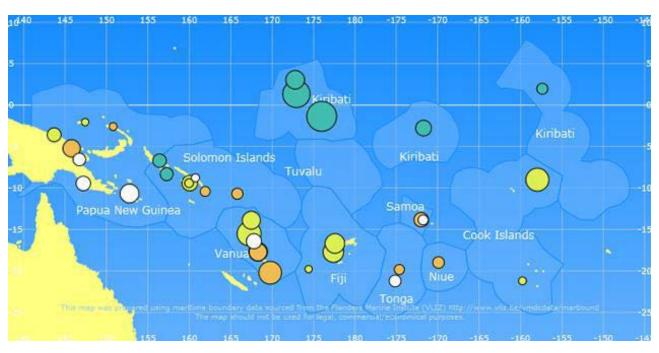
The Solomon Islands Meteorological Service and COSPPac are working together to research the links between climate and malaria to help develop a malaria early warning system. Malaria is one of the highest causes of deaths in the Solomons, and the warning system will help communities become more resilient and prepare against risks of the disease.

With annual malaria incidences peaking between February and May, the research aims to identify how changes in climate influence malaria—and how we can inform communities ahead of the malaria season. We are working with the National Vector-borne Disease Control Program to analyse climate and malaria incidence data for the period 1975-2006, to understand more about patterns between the two. Along with local data, we're also analysing data from similar regions, including Columbia and Guyana in South America, and Irian Jaya in Papua.

To date, the research has uncovered findings that during wetter than normal years, mosquito habitats are flushed out by fast-moving water—and during drier than normal years, less streamflows have led to an increase in mosquito habitats.

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## Seasonal climate outlooks tool to be redeveloped

The seasonal climate outlook tool, SCOPIC.

Now giving ten countries the ability to generate monthly seasonal outlooks for rainfall and temperature, the seasonal climate outlooks tool, SCOPIC, is currently being redeveloped.

Funded by the Bureau of Meteorology and AusAID, SCOPIC will soon be available in an open source environment to ensure its sustainable by being easier to use, distribute and access. Creating seasonal outlooks on a monthly basis, the tool takes historical data such rainfall, temperature and sea surface temperature, to generate forecast probabilities (e.g. chance or likelihood) and forecasts on regional maps.

SCOPIC, which was originally formed under the Pacific Island Climate Prediction Program, has been one of the main tools to produce seasonal outlooks in the Pacific Islands since 2003.

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Location of where the new tide gauge will be installed. Alofi Wharf, Niue.

## New tide gauge for Niue

COSPPac is currently working with the Niue Meteorology Service in preparation for a new tide gauge for Niue.

Climate and Oceans Support Program in the Pacific

Our Pacific Sea-Level Monitoring team visited Niue to complete a scoping study for the new tide gauge in April. While there they met with government stakeholders to discuss how to minimise the impact of the tide gauge's installation on local industries, wharf operations and tourism—as well as determine a suitable location for the tide gauge.

Tide gauges can provide countries with important information on tides and sea conditions for local shipping, fishing and tourism industries—and support emergency management response during storms and tsunami events.

Data gathered from tide gauges over periods of time can also be used to monitor the effect of climate change on sea levels in coastal areas.

We look forward to commencing design of the tide gauge in coming months.

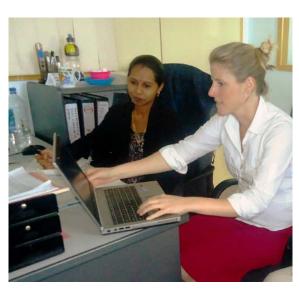
## Learning and development plans

Over the last six months, the Capacity Development team has been putting together Learning and Development plans for each of our partner countries....we're nearly there with only a few more to do.

To put the plans together we have interviewed the Climate staff in each Met Service to find out what climate outputs they need to deliver and what skills they would like to develop in order to deliver them.

Staff have told us they would like training in a huge variety of fields—oceanography, meteorology, media, stakeholder engagement and leadership, to name just a few.

Over the next few years we will try and address as many of these opportunities as possible through workshops, conferences, mentoring arrangements and attachment training.



Karen doing capacity mapping activity with Swastika from Fiji Met Service.





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## Profiles



#### **Bianca Stewart**

#### **COSPPac Project Support Officer**

Growing up on a farm in regional Victoria, Bianca is an active individual who loves all things outdoors—netball, running and hiking top her list! Bianca's most memorable hiking adventures include the 'Kokoda trail in PNG and climbing Mt Kinabalu in Borneo.'

With a background in policy, finance and administration, Bianca joined COSPPac as a Project Support Officer last year. Her favourite thing about being in the team is 'working with a large network of partners and stakeholders, and learning about the 14 Pacific Island countries within the program.'



#### **Mike Waiwai**

#### Vanuatu Meteorological and Geohazards Department

Mike Waiwai is a Senior Climatologist and Data Analyst who coordinates the traditional knowledge project in Vanuatu. His role is to identify local communities that use traditional knowledge for environmental forecasts, and collect the data from communities around the country.

Mike is also currently completing his post graduate degree in climate change.

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