

CLIMATE CHANGE MATTERS

Issue 11 — April 2013



Looking towards Nguna Island from the north coast of Efate, Vanuatu *Photo: Carlo Iacovina*

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SPREP

Secretariat of the Pacific Regional
Environment Programme

CLIMATE CHANGE DIVISION

SPREP, Apia, Samoa

T: +685 21929

E: climatechange@sprep.org

W: www.sprep.org

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Director's Note



Dr Netatua Pelesikoti
Climate Change Division Director
SPREP

Dear Readers

I am writing this note from Kiribati while leading a regional support team (SPC, UNDP, UNICEF and GIZ) in facilitating the development of the Kiribati joint implementation plan for climate change and disaster risk management. Reducing the impacts of climate change and disasters are challenges close to the heart of the people of Kiribati as it impinges on almost every daily activity. A fisherman is quickly casting his net as the tide is coming in. The women are smoking fish and drying octopus taking advantage of the good weather. A girl is trying to get water from an almost dry well, while a gentleman is watering his garden with a bucket of water.

Exacerbated impacts of climate change due to population increase, economic capacity and environmental resource depletion are some of the challenges that the Kiribati

joint implementation plan on climate change and disaster risk management is prioritising for immediate implementation.

Programmes to address the critical long term effects of climate change on coral reefs, sea level rise and ocean acidification are crucial. Assessment of the economic efficiency of adaptation investments that support national priorities and sustainable development for all people, including on outer islands, must be carried out.

As man-made accelerated global warming climate change combines with the harsh environment of the atolls, Kiribati is coping with climate change variability as part of the well established living conditions on South Tarawa. Growing support and attention for small scale community adaptation projects have been priorities and funding for them has come through the NAPA and many other sources.

Enjoy reading the diversity of articles in 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;
3. Contributing to global greenhouse gas reduction

Please visit our website at:

www.sprep.org/Climate-Change/climate-change-about-us

2013 Pacific Energy Summit

Helping Pacific Island Countries and Territories achieve their renewable energy targets was at the core of a two day Pacific energy summit hosted by the New Zealand Government and the European Union.

The event brought together Pacific heads of state, development partners and stakeholders to help forge a path to a Pacific that is less reliant on fossil fuel. Pacific Islands spend, on average, 10 percent of their gross domestic product importing petroleum products.

Pacific to work together to achieve renewable energy targets



Hon. Henry Puna, Prime Minister of the Cook Islands

The Cook Islands Prime Minister Hon. Henry Puna has called for a stronger, unified effort by the Pacific to break its dependency on fossil fuels.

During his opening keynote address at the Pacific Energy Summit in Auckland, the Prime Minister said an energy 'tug-of-war' was being waged in the Region as a result of a lasting dependency on diesel.

"The Cook Islands, like many Pacific nations, is enduring a predicament of trying to let go of a reliance on fossil fuels with one hand while reaching out with the other for a better energy future driven by clean technologies"

Hon. Henry Puna

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Pacific nations urged to call for global shift to renewable energy

A powerful challenge was made to the Small Island Developing States at the Pacific Energy Summit. Christiana Figueres, the Executive Secretary of the United Nations Framework Convention on Climate Change called upon the Pacific Small Island Developing States to use their voice to call for a faster transfer to renewable energy use across the globe.

"Traditionally the Small Island Developing States have used their voice to flesh out all the details of adaptation and loss and damage at the climate negotiations. Do not let up on this. In addition use your voice to bring a transformation to renewable energy"

[View full article](#)



Christiana Figueres, the Executive Secretary of the United Nations Framework Convention on Climate Change

Pacific solutions for Pacific problems in energy



A Pacific island renewable energy project coordinated by the Secretariat of the Pacific Regional Environment Programme (SPREP) adopts the partnership approach to help 11 island countries overcome barriers to achieving renewable energy.

Starting in 2007 and ending in December 2014, this project, valued at 5.25 million dollars, works as "many partners, one team". David Sheppard, Director-General of SPREP highlighted this when sharing lessons learned over the five years since the project began.

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UNFCCC Executive Director visits Fiji

As part of her visit to Fiji, Ms Christiana Figueres, United Nations Framework Convention on Climate Change (UNFCCC) Executive Secretary visited the UNDP offices in Suva.

Speaking to staff, Ms Figueres said that climate change is the most daunting challenge humanity has ever faced. She said that if we do not address climate change in a timely fashion, all the development gains will be wiped off because humanity will go back in education, health, environmental protection, women's rights and empowerment, human rights and gains in peace.

“Just imagine the consequences if we do not face climate change. Imagine the forced migration, the pressure on countries, conflicts around food, water, land.”

Ms Christiana Figueres, UNFCCC



Photo: Ms Christiana Figueres also visited a PACC site (pictured with PACC Fiji Project Coordinator, Ratullipi Tuwai and UNDP's Kevin Petrini) in the Tailvu-Rewa area where food production and security initiatives are being implemented.



FSM PACC—Sea level meters

Beginning on January 2013, Kosrae has available a new set of tide and sea-level forecasts, based on last year tide levels recorded at out tide sensors.

FSM PACC project has a permanent tide level sensor at Lelu Marina. This instrument records data every ten minutes and sends it via satellite to the National Institute of Water & Atmospheric Research Ltd (NIWA) in New Zealand. There the data is analyzed and the tide tables produced. These tide tables are distributed to the public and to the radio station, where they broadcast them twice a day. Our sensor recorded a one inch increase of the tide, the afternoon of the Solomon Islands earthquake and tsunami.

The tide tables can be accessed at kosraecoast.com

For more information, contact Taito Nakalevu ,PACC Regional Project Manager: taiton@sprep.com

A letter from Tokelau

Malo ni all

When our family members return to Tokelau for the happy holidays, our water supply does not last for more than 2 weeks. We previously had to fetch water from other families' water tanks for our water needs.

On my last family visit during Christmas 2012 we were amazed that our water supply lasted the whole holiday and still the water tank was more than half full. I am so thankful for the PACC+ project because without this project we would have continued to face this stressful problem during our holidays. My whole family are thankful for the PACC+ project - not only did the project provide our water tank but it has also installed first flush diverters that improved water quality.

PACC+ is one of the best projects that have had immediate positive impacts for the people on our island. As you know, water is a vital element for the survival of our people and PACC+ enabled us to fix many tanks, install water pipes and first flush diverters. All these activities improved both water quantity and quality on the island to provide healthy drinking water for everyone. The results of this project contribute directly to our Vision "Healthy and Active Communities with Opportunities for All".

*This letter was contributed by:
Mikaele Maiava, Tokelau*

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.



World Water Day 2013

Water - a precious resource limited in the Pacific region due to fragile landmass and vulnerability to ever increasing changes in our climate. According to the *ADB Asian Water Development Outlook 2013*, the future outlook of water availability for the Asia-Pacific region will continue to decline as a result of many factors.

World Water Day is an important event celebrated annually on 22 March as a means of focusing attention on the importance of freshwater and advocating for the sustainable management of freshwater resources.

This year, the 'International Year of Water Cooperation' was commemorated by SPREP members, the Ministry of Natural Resources and Environment (MNRE) and all the Water Sector partners in Samoa.

Over 500 participants took part in the event, including ten schools and representatives from private sector, government ministries, non-governmental organisations and members of the diplomatic corps and general public. Community responsibility and participation in water management was the key message advocated throughout the day by the various school students in their skits and songs. Displays, information sheets and project models were also showcased to commemorate this special event.



Mr Kosi Latu (centre) Deputy Director General of SPREP, with award winners

Niue and Tuvalu through the Pacific Adaptation to Climate Change (PACC) project also celebrated World Water Day this year to raise awareness to better manage water resources.

SPREP will endeavour to continue to support similar events in the future to further increase awareness in conserving and better managing water for the benefit of Pacific peoples.

Loss and damage a concern for Pacific Island countries

In the context of the FCCC, there has been a continued concern by Pacific Island Countries and other SIDS in AOSIS that mitigation actions will not result in sufficient reductions, and that resources required for adaptation will be inadequate or untimely. Some Parties even consider that there may be a limit to adaptation, short of wholesale migration and dislocation.

As early as 1991, PICs have suggested that there is a need for some sort of insurance mechanism, as proposed by Vanuatu on behalf of AOSIS. In the current negotiations, PICs have been focussing attention on a broader concept of risk reduction, sharing and transfer, insurance and rehabilitation, through an international mechanism. At the Doha COP a decision was made to establish a work programme, with an international mechanism as a possible outcome.

The issue is one of prominence, as emissions are not being reduced rapidly enough, and a number of slow onset climate change impacts are becoming apparent, such as ocean acidification. The permanent geographic displacement of tuna stocks is another impact to which PICs will have little recourse to remedy. Against this backdrop, SPREP joined several Pacific delegates, Caribbean and developed country Parties for a discussion on the way forward at a meeting in Montego Bay, Jamaica.

It is apparent that there is a lot of sympathy for the situation of those countries who have done the least to cause climate change, but who are going to experience the greatest impacts, even loss of country and sovereignty in some cases. There was broad support for implementing risk management measures and to assist in enhancing systems to adapt to impacts.



Damage to a church in Grenada, Cyclone Ivan, 2004. Photo: Leon Charles

Planned or existing insurance schemes were also supported, but there were differences of view on whether an international mechanism or arrangement was required, and clear opposition to any notion of liability on the part of the largest polluters.

For the Pacific the issue of loss and damage will remain an important negotiation to be completed this year, and because the scientific evidence is clearly indicating scenarios in which adaptation will be economically and physically difficult. Perhaps one thing the debate has clarified well is that reducing emissions is even more important now, so as to avoid entirely some of the situations raised by PICs at the meeting.

For more information, contact Espen Ronneberg (espenr@sprep.org)

Fiji's foreign ministry seeks media assistance in climate change

Fiji's Ministry of Foreign Affairs through its Climate Change Unit has sought the assistance of the media to educate Fijians on climate change issues. At a two-day media climate change workshop, Permanent Secretary, Amena Yauvoli, said the Fijian Government had developed a National Climate Change Policy.



Photo: workshop participants discussing climate change and the media

"We need the media because it speaks the language best understood by the people. It can breathe zeal and life into our policies and help us tell of the many stories and experiences about climate change our people confront on a daily basis." Amena Yauvoli, Permanent Secretary, Ministry of Foreign Affairs, Fiji

The workshop took place on 13 and 14 May and was supported by SPREP under the media outreach programme. Climate change resources and information were provided by SPREP as well as a night of hosting the Fiji media to thank them for their role in sharing awareness on climate change. SPREP's Communications and Outreach Adviser Ms. Seema Deo made a presentation to the participants on the role of SPREP and regional climate change initiatives.

"We are pleased to be able to support this, we have several other activities planned this year to help build capacity of Pacific media to report on climate change and the environment, so watch this space!" Nanette Woonton, SPREP Media and Public Relations Officer

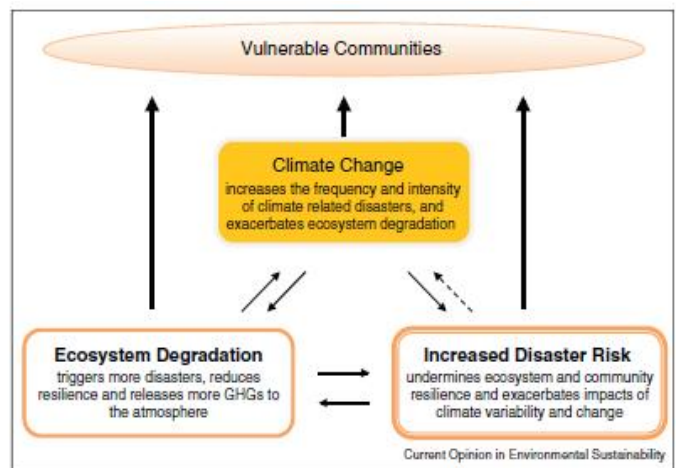
Literature Review: The role of ecosystem services in climate change adaptation and disaster risk

Munang R et al., (2013) recently published the article 'The role of ecosystem services in climate change adaptation and disaster risk', one that is most relevant to those involved in the integration of climate change and disaster risk management.

The article discusses the multifaceted linkages of how climate change intensify ecosystem degradation which consequently triggers more disasters and reduces nature's and societies 'resilience against climate change impacts and disasters. The authors use a simple rational diagram (figure 1) to explain the complicated interaction between climate change impacts, ecosystem degradation and increased risk of climate-related disasters. It also assesses the challenges for enhanced ecosystem management for climate change adaptation and disaster risk reduction and provides key messages including:

- Recognise the multiple functions and services provided by ecosystems at multiple spatial scales
- Link ecosystems-based risk reduction with sustainable livelihoods and development
- Address risks associated with climate change and extreme events and reduce their impact on the ecosystem
- Involve local stakeholders in decision making.

Figure 1: Interactions between climate change, ecosystem degradation and increased disaster risks



The paper concludes that political commitment at the highest level is urgently needed if ecosystem management is to have the adequate weight it deserves in a post-2012 climate change agreement. It is further recommended that adequate financial, technological and knowledge resources be allocated for integrating ecosystem management in the climate change and disaster risk reduction portfolios, including within a national policy setting, capacity building, planning and practices, particularly in developing countries vulnerable to climate change impacts and increased risks of climate-related disasters.

The full article is available on www.sciencedirect.com

Climate Update

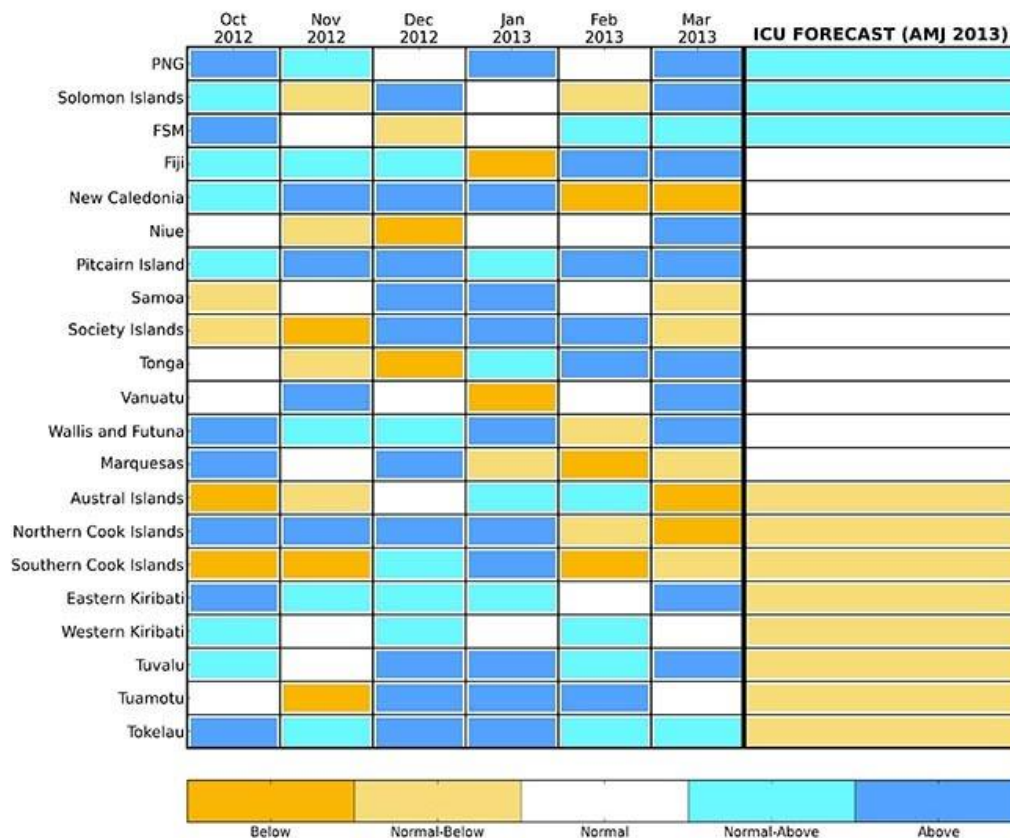
Climate indices show conditions remain within the neutral range for ENSO with neither La Nina no El Nino conditions prevailing at this time. The southern Autumn (March – April) is understood to be the time when ENSO can change its phase rapidly so at this time forecasts are much less reliable but the overwhelming view of the available climate model output suggests the near neutral conditions will continue in to the southern Winter months of June / July / August.

The most recent edition of the Island Climate Update points towards increased risk of below average rainfall for the April to June period in the central and eastern Pacific (see Figure 1) and close to average rainfall for the islands close to or just west of the dateline, and above average rainfall in the far west of the Pacific. This is consistent with conditions being slightly La Nina-ish although within the neutral range.

Satellite and OLR observations suggest a developing Madden-Julian Oscillation wave is pushing in to the eastern Indian Ocean near Indonesia over the weekend. Late last week enhancement of convective activity around the Maldives / Diego Garcia region saw a tropical cyclone form in the South Indian Ocean, and the new MJO wave will likely propagate east into the Coral Sea around the middle of the month, and may bring increased monsoonal activity to eastern Australia across the New Caledonia and Vanuatu.

Longer range forecasts suggest the high pressure over Cooks and Tahiti will keep the MJO from pushing as far east as Fiji or those countries east of the dateline, much as it held the last MJO wave in late Feb and March over the Coral Sea region. There is likely to be another 1 or more cyclones forming in our region before the end of the season but they will most likely stay closer to Australia and the Coral Sea region.

Figure 1. (from Island Climate Update)



For more information contact Neville Koop, Meteorology/Climatology Adviser: nevillek@sprep.org

Events in April 2013

Event	Location	Date
Kiribati JNAP	Tarawa, Kiribati	02 – 15 April
FAO Agriculture Ministers Meeting	Apia, Samoa	11 – 13 April
Climate Finance Workshop	Abu Dhabi, UAE	21 – 22 April
CBA Training Workshop for Vanuatu	Port Vila, Vanuatu	22 – 26 April
UNFCCC AWG Meeting	Bonn, Germany	29 April – 03 May