

CLIMATE CHANGE MATTERS

NEWSLETTER



Issue 6 – October 2012

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Director's Note



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The 23 SPREP Meeting was held last month in Noumea. The annual SPREP Meeting (SM) is the key decision-making meeting of SPREP member countries and territories.

Many key policy decisions were made and endorsed by the Environment Ministers' segment of the SM. One in particular, was the direction for a framework for monitoring and evaluation.

Monitoring and evaluation (M&E) is not only crucial to assess the impact of the Secretariat work both at the regional and national levels but is even more critical for assessing the capacity of Pacific island countries and their systems (socio-economic systems, ecosystems, governance systems and community based systems) to respond to natural and man-made drivers and pressures that shape these systems.

Another important aspect of monitoring and evaluation is the provision for accountability and reporting to donors on how and

where their funds are being used.

Monitoring and evaluation of SPREP's climate change adaptation and mitigation action plan are being carried out within the context of the regional Framework for Action on Climate Change (PIFACC).

Results of this M&E were reported to the SM and included on the ground progress made by the Pacific Adaptation to Climate Change (PACC) project in the area of food security, water management and coastal area management; and development in PICTs to reduce vulnerability to the effects of climate change and impacts of climate driven disasters.

For more information on PACC progress in each participating country, please contact Taito Nakalevu (taiton@sprep.org).

Enjoy reading CCM edition for October 2012!

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 contributing to global greenhouse gas reduction
3. Contributing to global greenhouse gas reduction
4. For more information visit our website at <http://www.sprep.org/Climate-Change/climate-change-about-us>

SPREP Launches the Pacific Climate Change Portal



Makelesi Kora-Gonelevu -Knowledge Management Officer at SPREP presenting Climate Change portal at the SPREP meeting.

The current features of the Portal include an events calendar, directory of experts, documents, national and regional committees, video library and links to virtual libraries in the Pacific that house information on climate change.

The Portal is a work in progress and will evolve with user needs. Currently in development is the Pacific Climate Change Projects Database which will act as a monitoring and evaluation tool for the Pacific Island Framework for Action on Climate Change (PIFACC). This will contain information on climate change projects in the Pacific between 2011 and 2015. One planned future development is a Geographical Information System (GIS) training module to be made available on the portal.

Read full article <http://www.sprep.org/success-stories/pacific-climate-change-portal> for more information contact Makelesi Gonelevu at makelesig@sprep.org.

Pacific Media Workshop to develop Emergency Plans

Chief Executives of Pacific broadcast corporations across the Pacific learnt how to form their Emergency Plans at a training workshop coordinated by the Secretariat of the Pacific Regional Environment Programme (SPREP) and the Pacific Media Assistance Scheme (PACMAS) in Apia, from 17 to 19 September.

Support was also provided by the National Disaster Management Office of the Government of Samoa.

By the end of the training Pacific broadcasters had an improved awareness and understanding of emergency and disaster planning, the role of the regional policies, the linkages between climate change and disaster risk management as well as the capacity to develop an emergency plan.

The training has come after requests from Pacific Broadcasters for support from SPREP and the SOPAC Division of the Secretariat of the Pacific Community to help form their disaster plans.

The training differentiates between the process and requirements for business continuity and a standard operations plan in the context of the national or provincial disaster management plan," said Dr. Netatua Pelesikoti, the Manager of the Climate Change Division at SPREP.

Read Full Article -<http://www.sprep.org/success-stories/pacific-media-meet-to-develop-emergency-plans>



Pacific Broadcaster Participants.



Dr. Pelesikoti addressing participants of the workshop

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.



Wind Monitoring towers and sensors Installation in Vanuatu completed

The PIGGAREP (Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project) is a continuation of the close collaboration between SPREP, UNDP and the GEF to build the capacity of the Pacific Island Countries (PICs) to deal with the challenges of Climate Change. The global environment and development goal of PIGGAREP is the reduction of the growth rate of greenhouse gas (GHG) emissions from fossil fuel use in PICs through the removal of barriers to the widespread and cost effective use of feasible renewable energy (RE) technologies. The specific objective of the project is the promotion of the productive use of RE to reduce GHG emissions by removing the major barriers to the widespread and cost-effective use of commercially viable RE technologies (RETs).

Vanuatu is one of the participating PICs in the PIGGAREP and one of the activities in its 2011/2012 Work Plan and Budget is a Wind Power Monitoring Development Project.

Read Full Article - <http://www.sprep.org/success-stories/wind-monitoring-towers-and-sensors-installation-in-vanuatu-completed>



The wind monitoring systems are expected to successfully record data for a minimum of two years.

For more information, contact PIGGAREP Regional Project Manager Mrs. Sili'a Ualesi at siliau@sprep.org

Seven Pacific Island Countries complete Cost Benefit Analysis of

The Cost Benefit Analysis (CBA) program of the Pacific Adaptation to Climate Change (PACC) project continues to play a major role in strengthening adaptation planning and enhancing effective capacity to design and implement adaptation options in the 14 participating countries of the Pacific.

Since February of this year, seven (7) countries have been working to implement workplans developed at training workshops between November 2011 and February 2012 to conduct CBAs of their PACC pilot/demonstration projects.

Solomon Islands has completed a CBA of their food security project in Ontong Java and Tuvalu has completed a CBA of their water sector demonstration project in Lofeagai village community on the main Funafuti atoll. Cook Islands, Niue, Palau, Marshall Islands and Samoa have completed draft CBA reports, and final reports are scheduled to be complete by October 2012. Copies of completed CBA reports as well as consolidated 'knowledge products' will be publicly available in early 2013.

Learning from these case studies, the next steps for the PACC CBA work program will be to conduct a Lessons Learned Workshop. Read full article—<http://www.sprep.org/success-stories/seven-pacific-island-countries-complete-cost-benefit-analysis-of-climate-change-adaptation-options-under-pacc>

For more information contact Aaron Bunclé, Environmental Resource Economist at aaronb@sprep.org

Tuvalu to host Pacific Training Workshop for Least Developed Countries

Tuvalu, as the current chair of the Least Developed Country (LDC) Expert Group (UNFCCC) (commonly known as the 'LEG'), will host a training workshop for Pacific LDCs at the end of September.

The workshop will bring together the five LDC's from the Pacific (Samoa, Vanuatu, Solomon Islands, Kiribati and Tuvalu) to provide expert training on issues related to mainstreaming climate change and national climate change adaptation planning,

Tuvalu has been the Chair of the LDC expert group since 2011. This group was established to provide technical support and advice to other LDC's to meet their requirements under the United Nations Climate Change Convention.

SPREP has been invited to participate in this meeting, with other Pacific regional agencies, to provide hands-on expert advice and help deliver the training programmes.

SPREP will be represented by Dr Netatua Pelesikoti, who will provide support specifically on mainstreaming climate change into national development planning and national adaptation planning - drawing upon the experience of developing the Joint National Adaptation Plans (JNAPs) which SPREP has been supporting.

Dr Pelesikoti welcomes this opportunity to provide direct support to LDC member countries, noting that this makes up the very core of the services that SPREP provides to its members.

For more information contact Diane McFadzien—

Climate Change Adaptation Adviser—dianem@sprep.org



Ms Pepetua Lautasi

Lowest Summer Arctic Ice Extent Since Records Began

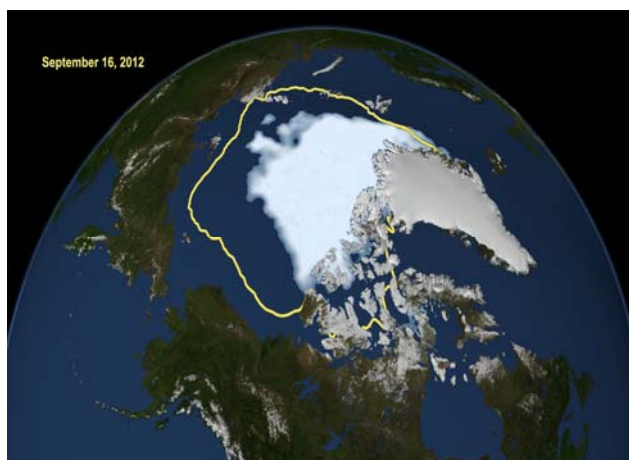
On 16 September, the least amount of summer sea ice was recorded in the Arctic ocean since satellite records began in 1979.

Although this does not have an immediate impact on the Pacific Islands (e.g. sea level has not risen because of this), it is another indicator of a dramatically changing global climate. The sea ice cover in the arctic grows during the northern hemisphere winter (from October to March), and melts in the northern hemisphere summer (from April to September), causing an annual cycle in coverage.

The previous minimum ice extent in 2007 was associated with wind patterns that contributed to ice loss. However in 2012, these winds were not as strong, yet there was 18% less coverage this year compared to 2007.

Read Article <http://www.sprep.org/success-stories/lowest-summer-arctic-ice-extent-since-records-began>

For more information contact phillipw@sprep.org



Summer ice coverage in the Arctic. The bright white shows the amount of ice on 16 September 2012, while the yellow line shows the average summer minimum ice coverage over the period 1979 to 2009.

Development of a Regional Technical Support Mechanism to assist in Climate

Recently a meeting of the Council of Regional Organisations of the Pacific (CROP) Chief Executives Sub-Committee Working Arm on Climate Change was held in Noumea, New Caledonia.

Further steps were made to operationalise the regional technical support mechanism on climate change. This work has been progressing since it was first mooted in a SPREP commissioned report on climate change financing in 2011, and discussed at the Pacific Climate Change Roundtable in Niue.

The concept has also been incorporated in a regional project proposal to

be financed under the Pilot Programme on Climate Resilience implemented by the World Bank and Asian Development Bank in partnership with CROP.

The rationale for the RTSM is that expertise in the region cannot always be promptly deployed to countries that require this within certain timeframes. Specific expertise, for example on meteorology in the region, is held within SPREP, SPC, WMO and national weather services. But if a particular country requires support for a meteorology issue at a particular time, then the expertise may not be available for that timeframe, or there could be a lack of funds to send the exper-

tise. The RTSM will undertake a stocktake of existing expertise within the region, both at the national and regional levels and which could be made available through this system upon request from countries and develop a system to match up requests for assistance with funded expertise in the region. Read article - <http://www.sprep.org/success-stories/development-of-a-regional-technical-support-mechanism-to-assist-pics-further-in-climate-change>

For more information contact Espen Ronneberg (Climate Change Advisor) at espenr@sprep.org

Pacific Island Scientists Investigate Deep Ocean Currents

Two Pacific Island scientists recently took part in a research cruise to investigate deep ocean currents between the south and north Pacific.

Tessa Tafua, who works for the Ministry of Natural Resources and Environment (MNRE) in Apia, Samoa, and Deepika Goundar, a post-graduate student at the University of the South Pacific in Suva, Fiji, joined with a world leading research group headed by Matthew Alford, from the University of Washington.

They spent six weeks on board the Research Vessel Roger Revelle, and conducted studies on the deep ocean currents below 4000 metres depth in the Samoan Passage, which is 300 kilometres north east of Samoa.

The water flowing through the Samoan Passage plays a critical role in global circulation, as it is the deepest channel linking the South Pacific basin to the North Pacific basin. All of the deep oceanic water in the North Pacific sinks

from the surface in icy Antarctica, flows northwards at great depth in the South Pacific, and is then squeezed through the Samoan passage before making it up into the North Pacific basin.

During the voyage, the research team measured the properties (e.g. temperature and chemistry) and volume of water flowing through the Samoan passage, and made sensitive measurements of the turbulence and mixing of the water as it travels north. These measurements are important because by monitoring the currents over time, we can understand the strength of the global ocean circulation, and how it is changing.

Read full article- <http://www.sprep.org/success-stories/pacific-island-scientists-investigates-deep-ocean-currents>



Tessa Tafua in an emergency immersion suit, ready to take on the giant squid.

For more information contact Dr Phillip Wiles at phillipw@sprep.org

Global Meeting on Carbon Dioxide and Ocean Acidification

The Third International Symposium on the Ocean in a High CO₂ world is underway this week in Monterey California. Ocean Acidification is a critical topic for Pacific Island countries. As the amount of carbon dioxide (CO₂) in the atmosphere increases, it is absorbed into the ocean which makes the ocean more acidic. There has already been a measureable 0.1 decrease in the pH of the ocean over the past century.

This is certain to have an impact on the ecology of Pacific Islands, particularly on coral reefs and plankton species. However it is unclear how severe this impact will be.

The conference brings together researchers from around the world to look at how the marine ecology will modify because of these changes and how communities like the Pacific Islands can adapt.

Researchers have stressed that policymakers need to take urgent action to reduce global CO₂ emissions.

(See <http://www.highco2-iii.org/> for more details)

The existence of healthy Staghorn corals and their associated ecosystems, such as shown here off Manono, Samoa, are threatened by ocean acidification. [photo credit Lucy Jacob].



For more information contact:

Dr. Philip Wiles at philipw@sprep.org

Development of Vanuatu Meteorological and Geo-Hazards Department (VMGD) Strategy Plan

The Vanuatu Meteorological and Geo-Hazards Department (VMGD) of the Ministry of Infrastructure and Public Utilities (MIPU) hosted a team of experts from 10 to 14 September 2012, to assist in the development of its Strategy and Implementation Plan for the next 5 to 10 years.

The VMGD had previously had a Strategy and Implementation Plan that ran from 2000 to 2009. Under that Plan, the VMGD, or the Vanuatu Meteorological Service as it was then known, was able to achieve many development goals, the most visible perhaps of which is now a Department housed in a modern earthquake and cyclone proofed facility, with an Internet Communication Technology (ICT) capacity able to support a fully expanded weather, climate, climate change, and geo-hazards operation.

The experts worked with the VMGD staff to capture as accurately as possible the current priorities and future development direction desired for the VMGD.

“As we had been successful in achieving much of what we had planned in the previous strategy, we wanted to continue our successes under a new plan. This helps to focus our priority areas of development for ourselves, and also for our government, which is supportive of this type of initiative. Ultimately it leads to better service to all our stakeholders,” said Mr. Jotham Napat, Director of VMGD.

Read full article- <http://www.sprep.org/success-stories/development-of-vanuatu-meteorological-and-geo-hazards-department-vmgd-strategy-plan>

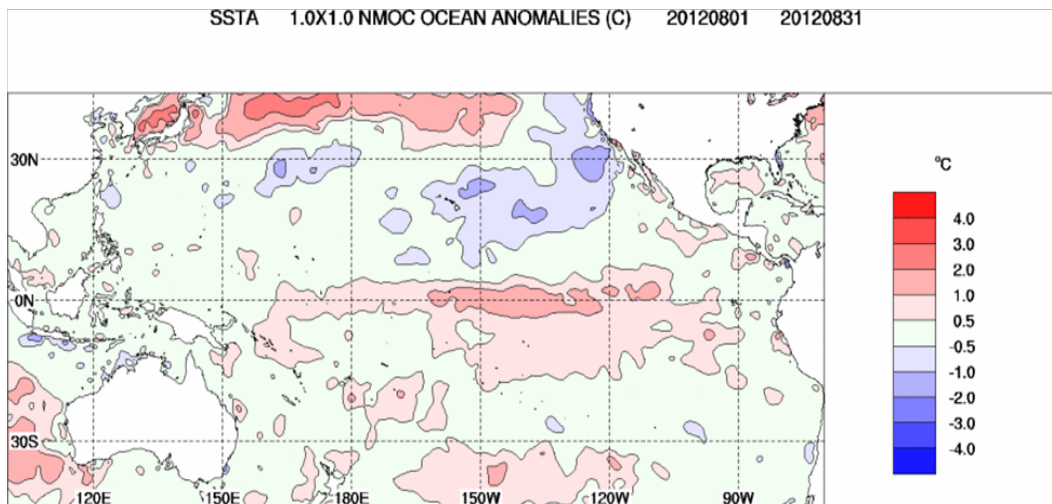
For more information contact: Henry Taiki at htaiki@wmo.int

Pacific Islands Climate Update

An unexpected development during the month of September was that tropical Pacific Ocean temperatures have generally cooled along the central equatorial region, easing towards neutral values (ie. neither El Niño nor La Niña). At the same time atmospheric ENSO indicators such as the distribution of air pressure as measured by the Southern Oscillation Index (SOI) as well as tropical cloud patterns, have remained at neutral levels. One manifestation of this aspect of the atmospheric response was the location of the SPCZ which remained near stationary over Vanuatu and Fiji for a week or so bringing some significant rain to these locations.

Given that September is the time of year when El Niño events usually consolidate, this recent cooling is considered somewhat unusual. In addition to this, climate models continue to predict that sea surface temperatures in the tropical Pacific Ocean will maintain values around typical El Niño thresholds for the remainder of 2012. For that reason we are reluctant to shift from the previously held view that a weak El Niño will evolve in the latter quarter of 2012 and into the start of 2013, hence the risk of an El Niño event developing remains. Despite the shift towards neutral conditions, the tropical Pacific remains warmer than average. When combined with the patterns of cloud and ocean temperatures in the Indian Ocean, conditions continue to favour below average spring and early summer rainfall over the western Pacific.

Recent months have seen below average rainfall over Tonga and Niue. Some recent rain has helped reduce rainfall deficits in these locations however, rainfall remains below average in these locations and will likely continue to do so over coming months. Samoa, Cook Islands, French Polynesia and Tuvalu have also experienced below average rainfall (between 10% and 60% of average rainfall) between early August and mid-September. Meanwhile, Papua New Guinea and the Solomon Islands continue to experience above average rainfall.



Sea Surface Temperatures (SSTs) in the central Pacific Ocean region remain up to 2 degrees warmer than average along the equator. Weak El Niño conditions are predicted to continue over the Pacific Ocean region through the southern hemisphere spring months.

Upcoming Events for October

Event	Location	Date
Regional Training Workshop on Adaptation for the Pacific Least Developed Countries	Tuvalu	28 Sept- 3 Oct
IPCC Lead Authors Meeting	Argentina	21-27 Oct
Pre- COP UNFCCC Meeting	Samoa	22-23 Oct
Climate Change Communications Training	Samoa	24th Oct
APAN Climate Change Financing Workshop	Samoa	25-26 Oct