



CLIMATE CHANGE MATTERS

Issue 4 — August 2012

PHOTO: Mangaia, Cook Is © SPREP/S. Tavanabola

INSIDE THIS ISSUE:

Directors Note	2
Marshall Islands install bulk meters to enhance adaptive capacity	3
Cost Benefit Analysis help identify adaptation options for Solomon Islands	3
PACC engage Science Campers to learn about climate change adaptation	3
Renewable Energy activities supported by PIGGAREP in Tonga	4
Cook Islands secure adaptation funds for outer island communities	4
Ecosystem based Adaptation to Climate Change in Solomon Islands	4
Technical visit to PACC Marshall Islands	5
GEF Extended Constituency Meeting	5
Climate Prediction and Disaster Risk Reduction	5
Coral Reef Scientists Issue Call for Action	5
PACC FSM Newsletter Available Online	5
Weather Outlook for July	6
Upcoming Events	6

“The Pacific Environment—sustaining our livelihoods and natural heritage in harmony with our cultures”



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

ISSN: 2227-6947

Director's Note



*Dr Netatua Pelesikoti,
Climate Change Division Director
SPREP*

Dear Readers

Although hydro-meteorological hazards such as floods, droughts and tropical cyclones afflict many regions of the world, their impact in terms of lives lost and livelihoods disrupted tends to be felt heavily in small, fragile and developing countries such as the Pacific Island Countries and Territories (PICTs).

Climate change threatens to heighten these impacts in many areas, by changing the frequency and intensity of extreme events, and bringing changes in mean conditions that may alter the underlying vulnerability of communities to hazards. The result in the decades to come may be an increase in the global and national burden of weather-related disasters: events that can threaten the sustainability of development processes and progress.

Integrated management of disaster risk requires action to reduce impacts of extreme events before, during and after they occur, including technical preventive measures and aspects of socio-economic development designed to reduce human vulnerability to hazards. Approaches toward the management of climate change impacts also have to consider the reduction of human vulnerability under changing levels of risk.

A key challenge and opportunity therefore lies in building a bridge between current disaster risk management efforts aimed at reducing vulnerabilities to extreme events and efforts to promote climate change adaptation.

There has been some advancement in the Pacific where the Secretariat of the Pacific Regional Environment Programme (SPREP) and the Secretariat of the Pacific Community (SPC) through the Pacific Adaptation to Climate Change (PACC)

Project and the Regional Disaster Facility have supported their members both at the national and community levels to mainstream climate change and disaster risk management in national and community strategic planning and through project level implementations.

Tonga, Tuvalu, Niue, Cook Islands and Marshall Islands have completed and approved their Joint National Action Plan for Climate Change and Disaster Risk Management (JNAP) and several countries are underway including Nauru, Solomon Islands, Vanuatu, Fiji and Federated States of Micronesia.

At the regional level, SPREP, SPC and the United Nations International Strategy for Disaster Reduction (UNISDR) are facilitating the development of a single regional integrated framework for climate change and disaster risk management to replace the two separate frameworks, the Pacific Framework for Action on Climate Change (PIFACC) and the Regional Framework for Action on Disaster Risk Management both ending in 2015.

The World Bank recently launched 'Acting today for Tomorrow: a Policy and Practice Note for Climate and Disaster Resilient Development in the Pacific Islands Region' that adds to the national and regional drive to integrate climate change and disaster risk management. It provides policy and practical recommendations on how to advance the integration to build and maintain development progress and benefits for PICTs.

[\(View the WB Policy Note\).](#)

I hope you enjoy reading this edition of *Climate Change Matters* and look forward to hearing from you with either feedbacks or an article for the next edition.

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

For more information visit our website at <http://www.sprep.org/Climate-Change/climate-change-about-us>

Marshall Islands install bulk meters to enhance adaptive capacity

27 July 2012



Bulk Meter installed at the RMI Airport Reservoir. Photo: MWSC

Bulk Water Meters are being installed in the Marshall Islands to help the nation manage droughts. The Pacific Adaptation to Climate Change Project (PACC) has installed these at the national Airport Reservoir with plans in place to install these at the Laura Water Plant also.

The meter will accurately show the amount of leakage through the velocity, volume and drops in water flow measurements and can locate any leaking points.

According to recent assessments and studies in the In-Country Consultation Report (2009) for PACC, climate change has direct impact on rainfall patterns in the Marshall Islands. This atoll nation has very limited groundwater supplies and any reduction in rainfall puts the nation at a high risk of drought.

[View full article](#)

For more information, contact PACC Marshall Islands Coordinator, Mr Joseph Cain at jsphcain4@gmail.com

Cost Benefit Analysis help identify adaptation options for Solomon Islands

30 July 2012

The Solomon Islands has completed a cost benefit analysis for the project in Ontong Java and Sikaina as part of the Pacific Adaptation to Climate Change Project (PACC).

The analysis is a systematic process for calculating and comparing the benefits and costs of a project, decision or government policy determining which project options will confer the greatest benefits for the community.

The CBA highlighted three broad options for the PACC Project in Solomon Islands to improve the ability of isolated island communities' address food production and food security issues impacted by climate change.

[View full article](#)

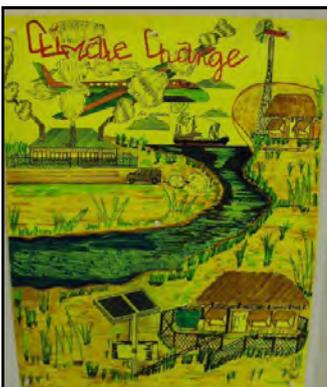


Community of Ontong Java unloading food bought from the main land

For more information, contact PACC Solomon Islands Coordinator Mr Casper Supa at ckasie@gmail.com

PACC engage Science Campers to learn about climate change adaptation

20 July 2012



Every year the University of the South Pacific in Marshall Islands hold a Summer Science Camp bringing together more than 50 students to engage in environmental discussions.

Through the support of the Pacific Adaptation to Climate Change (PACC) Project, the issue of climate change and the need to adapt was incorporated into a science fair where students had to put together displays illustrating climate change and other environmental concerns. PACC National Coordinator Joseph Cain said this was part of the PACC project's communication support to reduce vulnerability and increase resilience to climate change particularly in Majuro. [View full article](#)

PHOTO: The winning poster by Johnsey Latdrik from Marshall Islands High School

For more information, contact PACC Tuvalu Coordinator Ms Loia Tausi at jesekielu@yahoo.com

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.



Renewable Energy Activities supported by PIGGAREP in Tonga

23 July 2012

Tonga has embarked on a major renewable energy campaign with a target of having 50 percent of its electricity from renewable energy sources by 2015.

The Government sees the impact of the volatile world fuel price that filters through to the retailing outlets and electricity tariff rates charged by the Tonga Power Limited (TPL) and recognises its moral duty to mitigate the build up of anthropogenic greenhouse gases.

Every year the country undertake an inventory on its Net Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases (GHGs) not controlled by the Montreal Protocol. This is part of their obligation since it was acceded to the United Nations Framework Convention on Climate Change as a Non-Annex 1 in 1998.

Non-Annex 1 Parties are developing countries recognised by the Convention as being vulnerable to the adverse impacts of climate change, including those with low-lying coastal areas and those prone to desertification or drought; others include those heavily reliant on income from fossil-fuel production and commerce.

Tonga is working to achieve its campaign goal through one of its major renewable energy projects, the Pacific Islands Greenhouse

Gas Abatement through Renewable Energy Project.

"Productive Use of Renewable Energy" (PURE) is one of the country's major strategic priority that PIGGAREP is aiming to attain as well. Since its inception in 2007 PIGGAREP in Tonga has implemented five incremental activities as value added to its country-initiated renewable energy programmes.

These activities include technical training and awareness on Photovoltaic Technology Applications for solar water pumping and solar street lighting, Tonga Solar Home System technical inspection and standardization, National Renewable Energy Survey, Feasibility Study on the rehabilitation of the Mango and Mou'unga'one Photovoltaic projects, and Financial Management Training for Renewable Energy Service Company in Tonga.

PIGGAREP comprises of 10 other island countries in the Pacific pursuing the same end goal to reduce carbon dioxide emissions by at least 30% by 2015.

The project is funded by the Global Environment Facility and implemented by the United Nations Development Programme and the Secretariat of the Pacific Regional Environment Programme.

[Click here for more information.](#)

For more information, contact PIGGAREP Mr Nixon Kua at nixonk@sprep.org

Cook Islands secure adaptation funds for outer island communities

20 July 2012

Eleven outer island communities of the Cook Islands will strength their resilience to climate change impacts across key development sectors, with support from the Kyoto Protocol Adaptation Fund.

A five million dollar Climate Change Adaptation Programme will be implemented from 2012 to 2017 with the guidance of the *Pa Enua* or outer island communities, targeting sectors such as the water, health, agriculture and marine resources.

The Inception workshop held in July pulled together key stakeholders from the *Pa Enua* and government ministries to confirm the working arrangements for the five-year Adaptation Programme. [View full article.](#)



Joseph Brider (R) and Mii Matamaki (L) from Cook Islands National Environment Service working with stakeholders to seek input into project governance structures

For more information, contact Climate Change Adaptation Adviser Ms Diane McFadzien at dianem@sprep.org

Ecosystem based Adaptation to Climate Change in Solomon Islands

20 July 2012



Community consultations in Loimoni Village, Choiseul Province, Solomon Islands

A project using natural adaptation methods to address climate change has received a warm welcome by villages in Choiseul Province, Solomon Islands.

Funded by USAID the Ecosystem based Adaptation Project is coordinated by the Secretariat of the Pacific Regional Environment Programme (SPREP) in collaboration with GIZ, The Nature Conservancy, Lauru Land Conference of Tribal Communities and the Choiseul Provincial Government.

The partners are working together to undertake village level vulnerability and adaptation consultations in order to align climate change adaptation strategies with village and Government needs in Choiseul Province.

"After visiting 11 villages in North Choiseul, villagers told us clearly that they are feeling the effects of climate change, and also non-climate change related stress, on resources that are vital to their livelihoods," said Mr. Paul Donohoe, SPREP's Ecosystem based Adaptation to Climate Change Officer. [View full article.](#)

For more information, contact Ecosystem based Adaptation to Climate Change Officer Mr Paul Donohoe at pauld@sprep.org

Technical visit to PACC Marshall Islands

23 July 2012



Photo: Majuro airport water reservoir during a drought month

Secretariat of the Pacific Regional Environment Programme Climate Change Adviser Mr Espen Ronneberg provided technical backstopping support for the PACC project implementation in the Republic of the Marshall Islands (RMI).

Having worked for the national Government from 1992-2000, he was well placed to understand the challenges and seek solutions to assist the national PACC team.

In July 2012, a visit to RMI coincided with that of the Cost-Benefit Analysis (CBA) consultant creating an opportunity to discuss the scope of the CBA assessment with the project team.

For more information, contact Climate Change Adviser, Mr Espen Ronneberg at espenr@sprep.org

GEF Extended Constituency Meeting

23 July 2012

Pacific Islands Countries and Territories had the opportunity to meet bilaterally with the Global Environment Facility representatives at a constituency meeting to review problems countries currently face with existing proposals and in developing new ones.

The meeting held on the 10th of July in Nadi, Fiji was to brief the region on the status of their GEF funds allocations and discuss potential project concepts with the GEF Secretariat.

Each year GEF arranges an extended constituency meeting for the PICT's who are part of a constituency that includes Indonesia and the Philippines.

There is an annual rotation amongst the three therefore, Indonesia who is currently the GEF Council Member, will rotate with the Philippines in November this year.

GEF seeks to sponsor a wide range of delegates from each PICT, typically including representatives from the political and operational focal point that is usually the Foreign Affairs the Environment Departments respectively, and from line ministries that may be executing GEF projects.

Several civil society representatives were present at the meeting to provide interaction between departments who in some cases seldom meet to discuss GEF issues in detail.

A mock project development exercise was carried out to have participants go through a fictional scenario note and develop and present a project proposal.

A regular constituency meeting is scheduled for late October in Manila to prepare for the November 2012 GEF Council meeting.

For more information, contact Climate Change Adviser, Mr Espen Ronneberg at espenr@sprep.org

The discussions provided a clear direction of the project efforts on how PACC will comply with the "whole of island" approach in the PACC project, and at the same time accede to the wishes of communities in Laura and the main capital area.

In the past few years the country has heavily relied on the Laura wells to supply water to the capital areas of Delap-Uliga-Darrit (DUD) during drought. Laura landowners were not comfortable with the sustainability of this approach, as their water supplies became very low at the worst of the last drought.

Thus the focus of the PACC Project and the National Water Policy to be developed will be to separate the Laura section from the capital areas. The efficiency of the Laura water supply and the airport water catchment will be enhanced, as well as the reticulation system for the capital area.

This has not been articulated until now, although it is clear from the vulnerability and adaptation assessment and the community consultations that this should be the way forward. The technical visit was successful in getting this consensus to move ahead. In addition, support was provided to various technical and reporting aspects of the PACC project in RMI to enhance its overall effectiveness.

Article on Climate Prediction and Disaster Risk Reduction

Below is an article focusing on the American Territories, but has relevance across the Pacific.

The ICU plays the same role to the independent Pacific as the Pacific Enso Application to Climate (PEAC) Centre does to the United States territories.

[Click here to view article](#)

Coral Reef Scientists Issue Call for Action

The article below by Dennis Normile is an interesting milestone for Pacific Island ecosystems at the 12th International Coral Reef Symposium that was held in Cairns.

This affects all Pacific Island countries and highlights that human impacts, both climate change related and non-climate change related, are having very serious impact on a vital part of Pacific Island ecosystems.

[Click here to view article](#)

PACC FSM NEWSLETTER AVAILABLE ONLINE:

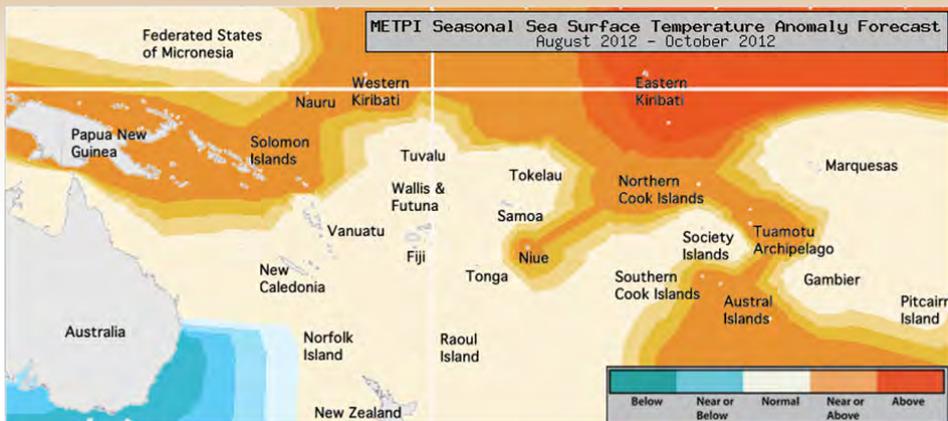
Content:



1. Mainstreaming Environmental Impact Assessment
2. Loss and Damage
3. A visit to the Pilot Site
4. Developing the capacity of senior citizens
5. Promoting the project
6. FSM PACC Blogsite
7. Youth Summer Camp Program

Weather Outlook for August

The Pacific Ocean is on the Brink of El Niño



Predicted sea surface temperatures around the Pacific for the coming months of August to October. Warmer than usual waters in the equatorial Pacific (orange to red) indicate El Niño conditions, which brings more rainfall to islands in the central equatorial Pacific, and less rainfall to other regions.

The Pacific is about to enter an episode of El Niño, however the signal is mainly being seen in the ocean temperature, and not yet in the atmospheric circulation, according to the latest *Island Climate Update*.

El Niños are usually characterised by reduced easterly trade winds and warmer sea surface temperatures around the dateline in the equatorial Pacific. Monitoring buoy and satellite measurements have shown that the ocean is warmer than usual in the central Pacific (by 0.7°C), but that the easterly trade winds in the central Pacific are still blowing at their usual strength for this time of year.

This could indicate that the predicted El Niño will not be as strong as other recent events, so reduces the expected extreme droughts and rainfall. Over the coming three months, normal or below normal

rainfall is forecast for Fiji, Samoa, the Society Islands, the Tuamotu Archipelago and Wallis & Futuna. Normal to above normal rainfall is expected for Western and Eastern Kiribati, Tonga and Pitcairn Island.

The *Island Climate Update* is a monthly publication prepared by the Pacific National Meteorological Services, NIWA and SPREP. It provides a review of current and forecast weather in the Pacific region.

For more information, please contact your local National Meteorological Service, the National Institute of Water and Atmospheric Research (NIWA) - nicolas.fauchereau@niwa.co.nz, or the Secretariat of the Pacific Regional Environment Programme (SPREP) Meteorology/Climatology Adviser, Mr Neville Koop at nevillek@sprep.org

Upcoming Events

Event	Location	Date
2012 Smaller Islands States and Pacific Plan Action Committee Meeting	Fiji	30 July – 3 August
Integrated Water Resource Management (IWRM) Multipartite Review Meeting (MPR)	Fiji	30 July – 4 August
Cost Benefit Analysis Guideline development	Auckland, New Zealand	6 – 7 August
Renewable Energy and Energy Efficiency Trade and Investment Forum	Nadi, Fiji	7 - 9 August
PACC 3 rd Multipartite Regional Meeting	Nauru	6 - 15 August
PIGGAREP 5 th Multipartite Regional Meeting	Savaii, Samoa	20 - 24 August
Media and Climate Change Training	Cook Islands	20 - 24 August
CDM Regional Workshop	Samoa	27 - 29 August
UNFCCC Ad Hoc Working Group on the Durban Platform Meeting	Bangkok, Thailand	26 August - 5 September