Pacific-Australia Climate Change Science and Adaptation Planning program

International CLIMATE CHANGE ADAPTATION Initiative

Report on PACCSAP Technical Training Workshop, Honiara, Solomon Islands 18 - 22 March 2013

Participants from the PACCSAP Technical Training Workshop, Honiara 2013

Introduction

The Pacific-Australia Climate Change Science and Adaptation Planning (PACCSAP) Science Program conducted the PACCSAP Technical Training Workshop in Honiara, Solomon Islands, from 18th to 22nd March 2013, as part of the Program's ongoing work to develop science capacity in National Meteorological Services (NMSs) and other key stakeholders in the Pacific and East Timor. Such enhanced capacity is expected to facilitate active in-country collaboration for purposes of undertaking climate research and for better understanding and communicating climate science to meet the broader needs of key regional and partner country stakeholders.

One of the key objectives of the PACCSAP Science Program is to develop the capacity of Pacific island scientists, decision-makers and planners to access and apply scientific climate information and digital tools to facilitate use of science-based evidence to inform in-country climate adaptation responses. The workshop was an opportunity for NMSs and representatives from regional organizations and sectors to engage in technical training for tools and services being designed and utilized under PACCSAP, and to engage in further discussion with the Science Program team about scientific achievements and technical training opportunities under PACCSAP so far. The event was specifically targeted at NMS technical representatives, but with provision for limited other participants also, and aimed to provide an efficient and effective capacity development and networking opportunity.

This program is funded by AusAID through the Australian government's International Climate Change Adaptation Initiative, and managed by the Australian Department of the Environment (formerly the Australian Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education/Climate Change and Energy Efficiency) in partnership with the Australian Bureau of Meteorology (the Bureau), the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and partner Pacific island countries and regional organisations. The Technical Training Workshop was delivered jointly by the Bureau, CSIRO and GeoScience Australia, specifically as part of the PACCSAP Science Program, and was run as an adjunct activity to the PACCSAP Science Symposium run immediately prior in Honiara during March 2013.

Participants

PACCSAP supported the participation of 17 attendees from the Pacific, including partner country NMSs as well as some limited representation from regional organizations and sectors in partner PICs (Appendix 1). Of these 17 participants, six were female and 11 were male, giving an approximate f:m ratio of 1:2. The workshop was very much hands-on and tailored to the needs of participants, and the limitation on overall numbers was to ensure that all participants were adequately supported by sufficiently qualified and experienced personnel from the PACCSAP Science program, including from the Bureau, CSIRO and GeoScience Australia.
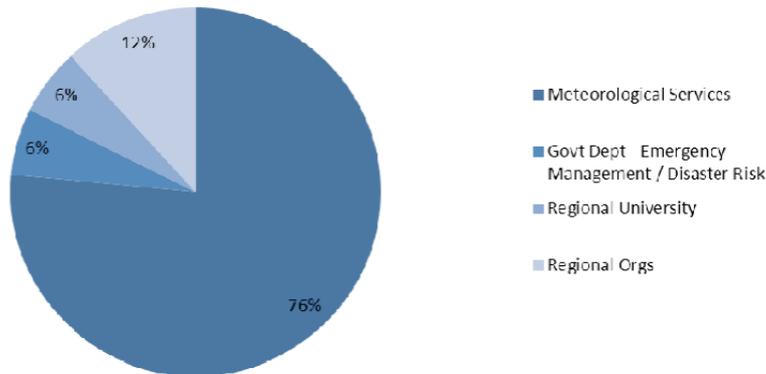
Participant Breakdown

Figure 1. Summary breakdown of participants at PACCSAP Technical Training Workshop, Honiara, Solomon Islands, March 203 (see also Appendix 1 for further details).

Technical Training Workshop Program

All participants attended all sessions of the one week Technical Training Workshop, with the program running from 9am to 5pm daily. Each day of the workshop had a distinct focus, centring on the tools designed and utilised under the previous Pacific Climate Change Science Program (PCCSP) and the more recent PACCSAP Program. Each day contained a mix of presentations and activities to help consolidate understanding of key information, with an emphasis on hands-on training. The Technical Training Workshop Agenda is attached (Appendix 2).

Day One began with an introduction to PACCSAP and to the Technical Training Workshop itself. Participants then received training in the PACCSAP Tropical Cyclones Portal, and spent the remainder of the day training in the PACCSAP Seasonal Prediction Tools (in climate, sea level and sea-surface temperature). This included lectures on the main features of each of the portals, introduction of new functionality and practical exercises using participant- derived case studies. As many of these tools are quite new, it was also a valuable opportunity to gather participant feedback and brainstorm suggestions for improved functionality.

Day Two focussed on the GeoScience Australia Tropical Cyclone Risk Model (TCRM) tool. This was delivered as a continuation of an initial training workshop in Melbourne during PAdClim (Pacific Advanced Climate training program, October 2012). The Melbourne workshop gave participants the foundation to carry out more 'hands-on' training during the second workshop in Honiara. Participants were enthusiastic to be learning how to use TCRM and QGIS software and about how they would apply this knowledge back in their workplace.

Day Three saw participants training in the Pacific Climate Change Data Portal. This included a demonstration of the portal and provision of exercises on producing historical mean and extreme temperature and rainfall trends (as will be presented in pending new PACCSAP Technical and Synthesis Reports scheduled for publication later in 2013).

The afternoon of day three was reserved for an optional Advanced Software training.

Somewhat unexpectedly, all participants opted to participate. The plan was to cover the basics of statistical analysis with R software, including:

> manipulating and analysing climate data sets with 'cdo', and an introduction for producing maps of climate data with 'NCL'

Due to the high demand to participate, progress was much slower than expected with significant variations in attendees capability in these areas, so the training only covered the use of R. The interest in the training was very high, so much so that because of the excitement among participants in the progress they made, the session ran more than an hour over schedule.

Day Four delivered training in the Pacific Climate Futures tool. All but one of those attending had previously taken part in advanced training in the tool. Participants used Pacific Climate Futures in combination with Microsoft Excel and historic datasets to produce plausible future datasets for one or more impact assessment case studies. Example case studies were provided from the agricultural (growing degree days), health (heatwaves) and public works (storm water) sectors.

Day Five focussed on training in the Climate Data for the Environment (CliDE) tool. This training was intended to get the users thinking about the software in a more 'big picture' setting so they can see what should be part of the application and what cannot be part of it. Areas covered included Metadata Fields in CliDE, CLIMAT message creation and managing CLIMAT Normals, and Key-Entry Profile set-up.

Further networking

With most participants arriving in Honiara the week prior to the workshop, PACCSAP organised two weekend excursions where participants had the opportunity to observe and explore the local surrounds. Unfortunately the Island Tour had to be cancelled due to poor weather, however those that participated in the Tour of Honiara and the karaoke night gave very positive feedback on their experience.

The official workshop dinner on Day two of Technical Training Workshop encouraged relationship building between PACCSAP staff and partner country participants which will assist with the effective implementation of the program.

ParticipantEvaluation

All participants were given an evaluation form on which they could provide feedback on their personal experience during the Technical Training Workshop. Evaluation responses demonstrated that the majority of participants found all training sessions to be interesting and useful. Evaluations also provided information based on questions about most/least favourite and useful components of the training sessions and new skill uptake and application. Feedback on the provision of logistical support from PACCSAP coordination staff was also provided. All participants completed the evaluation.

General summary of feedback is noted below.

Day One – Monday 18 March

Training in all of the portals was viewed to be incredibly useful and will support the update of the use of these portals in partner countries.

Comments included:

> *"The skills will be utilised for the analysing and/or study of the impact and the prediction of the change of temperature, rainfall and other to the sector of Agriculture, Forestry, Infrastructure, Health and other important sector"*

> *"Have to share knowledge to staff since the portals are user-friendly so could easily understand. Stakeholders such as fisheries, water department could be highly benefit from the product we are able to provide them with from those portals products"*

Day Two – Tuesday 19 March

Participants found the training in the TCRM tool to be very useful and particularly helpful to have hands on training to install and use the software and to produce valuable and useful outputs.

Comments included:

> *"TCRM : even though the software is quite difficult to use for the beginners, the tools is very useful for running wind hazard analysis, which can be very useful to apply for other sector: Agriculture, infrastructure, tourism and other."*

> *"It was useful working with QGIS to overlay TC tracks and wind gusts onto the surface map to see the impacts"*

> *"It will be useful in working together with disaster officer as disaster preparedness and awareness programs"*

Day Three – Wednesday 20 March

Participants indicated that it was very useful to have hands on training with the data portal, as well as working with the R Software, which is something many have requested training in previously.

Comments included:

> *"The skill that I learn today will be used in my field of interest such as Agriculture, environment and the livestock sectors, where very much affected by change in climate"*

> *" Very helpful as we would like to provide data/documentation to all sectors of Palau that request and utilize"*

Day Four – Thursday 21 March

The majority of participants have had training in Climate Futures previously, however found

that there is always more to learn and really benefited from it.

Comments included:

> *"The most useful part of today's training was the exercises where we developed climate projections for the Agriculture and Health sectors based on the taro example and malaria. This really helped me learn how to apply climate futures to real life situations"*

> *"Will employ the skills gained to assist various government departments with tailored projections suited for their needs and priorities. Will also use the skills to train others at home on how to do tailored projections including associates and staff"*

Day Five – Friday 22 March

Participants found the CliDE training to be very useful and the majority indicated that they would like training to continue.

Comments included:

> *"CliDE management and train staff back home. We rely on CliDe as our main database and the skill I've learnt will be used in my daily work from key entry to climate summary etc"*

> *"CliDE will change our work procedures at the office; Improve our data digitization work/project; add value to what we provide to our end users"*

Conclusion

Overall, the PACCSAP Technical Training Workshop was very successful in achieving the objectives of further developing the technical capacity of participants, particularly with regard to tools developed and disseminated under the PCCSP and PACCSAP programs. Additionally, the workshop was a valuable opportunity for PACCSAP scientists and partner country representatives to engage in discussion and continue to build strong collaborative relationships.

Appendix 1: Technical Training Participants

Table of participants by country and organisation.

Country	Participant
Cook Islands	Mr Nitoro Bates – Cook Islands Meteorological Service
FSM	Mr Wallace Jacob – National Weather Service Office (Pohnpei)
Fiji	Ms Arieta Baleisolomone – Fiji Meteorological Service
Kiribati	Mr Ueneta Toorua – Kiribati Meteorological Service
Marshall Islands	Mr Nover Juria – National Weather Service Office
Niue	Ms Rossylynn Pulehetoa – Niue Meteorological Service
Palau	Ms Kiku Ngirmekur – National Weather Service Office (Koror)
Papua New Guinea	Mr Kasis Inape – PNG National Weather Service
Samoa	Mr Sunny Seuseu – Climate Meteorology Division, MNRE
Solomon Islands	Ms Lucy Waiaraha – Solomon Islands Meteorological Service
Solomon Islands	Mr Lloyd Tahani – Solomon Islands Meteorological Service
Timor-Leste	Mr Matias Travers – National University of Timor
Tonga	Ms Selu Finaulahi – Tonga Meteorological Service
Tuvalu	Ms Hilia Vavae – Tuvalu Meteorological Service
Vanuatu	Mr Brian Philips – Climate Change & Disaster Risk Reduction Project Management Unit
SPREP	Mr Salesa Kaniaha
SPREP	Mr Philip Wiles

Appendix 2: TechnicalTrainingWorkshopAgenda

PACCSAP Technical Training Workshop 18 – 22 March 2013 – Honiara, Solomon Islands

Table showing schedule of sessions.

	Mon 18/03	Tues 19/03	Wed 20/03	Thurs 21/03	Fri 22/03
	Chairperson: Yuriy Kuleshov	Chairperson: Craig Arthur	Chairperson: Simon McGree	Chairperson: John Clarke	Chairperson: Rod Hutchinson
8:45am-9:00am	Introductions				
9:00am-11:00am	TC Portal	TCRM Training	Data Portal	Climate Futures	CliDE
11:00am-11:30am	Morning Tea	Morning Tea	Morning Tea	Morning Tea	Morning Tea
11:30am-1:00pm	Seasonal Prediction Tools	TCRM Training	Data Portal	Climate Futures	CliDE
1:00pm-1:45pm	Lunch (45 mins)	Lunch (45 mins)	Lunch (45 mins)	Lunch (45 mins)	Lunch (45 mins)
1:45pm-3:00pm	Seasonal Prediction Tools	TCRM Training	Optional Advanced Software Training - Free afternoon for everyone else	Climate Futures	CliDE
3:00-3:30pm	Afternoon Tea	Afternoon Tea	Afternoon Tea	Afternoon Tea	Afternoon Tea
3:30pm-5:00pm	Seasonal Prediction Tools	TCRM Training	Optional Advanced Software Training cont.	Climate Futures	CliDE
6:30pm onwards		Course Dinner			