

Summary of Progress of the Pacific Regional Priority Action August 2011 - June 2013

Explanatory Note:

This report collates the number of activities implemented by the donor and implementing partners of the Pacific Meteorological Council (PMC) together with the Pacific Meteorology Desk Partnership (PMDP) Secretariat to address key regional priority action outlined in the Pacific Islands Meteorology Strategy (PIMS).

Each of the activities are reported against Pacific Key Outcome (PKO) of the PIMS for monitoring purposes and although PMDP secretariat envisage to reflect activities implemented by the partners, there is potential of missing activities. Improvements can be done by reporting all activities implemented in PCT NMSs so they are captured for future reporting to PMC.

Pacific Key Outcome (PKO) 1: Aviation weather services in the PICTs region are improved.

Pacific Regional Activity: Coordinate capacity development on aviation weather services including quality management development

Action Taken	Implementing Partner
Support was provided through a series of training workshops on QMS under the FPPICS. The final workshop developed national roadmaps, and the development of a network for shared peer support amongst the QMS Managers.	BOM/FPPICS
The QMS workshops had positive impacts on climate data from GCOS stations in Pacific Islands and this is demonstrated, for example in the increased of data frequency and quality from Vanuatu. Such information provides the basis for enhancing understanding of climate change, particularly when coupled with the ICU and PCCSP outputs.	BOM/FPPICS
WMO and New Caledonia Meteorological Services provided financial support and expert services to assist Solomon Islands with QMS for aviation weather services, Honiara, Solomon Islands, 2-6 July 2012.	WMO/ New Caledonia Met Services
WMO and New Caledonia Meteorological Service provided financial support and expert services to assist Vanuatu with QMS for aviation weather services, Port Vila, Vanuatu, 21-27 July 2012.	WMO/ New Caledonia Met Services
WMO and New Caledonia Meteorological Service provided financial support and expert services to assist Samoa Meteorology Division with QMS for aviation weather services, Apia, Samoa, 24-28 September, 2012.	WMO/New Caledonia Met Services
AusAid-BoM PSLP funded phase 1 of quality management internal auditor workshop for Pacific Island Countries, Port Vila, Vanuatu, 26-30 November 2012.	AusAID/BOM
AusAid-BoM PSLP funded phase 2 quality management internal auditors from Pacific Island Countries doing real-time auditing alongside BoM experts at various BoM Offices, February – August 2013.	AusAID/BOM
Collaboration between Kiribati Meteorological Service, Air Pacific and WMO to have METAR and SPECI from Casidy international aerodrome regular transmitted to Fiji Meteorological Service.	Kiribati Met Service/Air Pacific/WMO

Rarotonga International Airport iSTAR Automatic Weather Station (AWS)/Aitutaki mSTAR AWS in compliance with ICAO Part 174 obligation & QMS ISO 9001 Certified.	US NOAA GCOS Program/ Cook Island NMS/
Henderson International Airport iSTAR AWS in compliance with ICAO Part 174 obligation and QMS ISO 9001 Certified	US NOAA GCOS Program/ Solomon NMS
Restoration and upgrade of Bauerfield GUAN facility, Bauerfield Airport Port Vila, Vanuatu	US NOAA GCOS Program/ Vanuatu NMS

Pacific Key Outcome (PKO) 2: Marine weather services in the PICTs region are improved.

Regional Activity: Coordinate regional capacity development in the fields of marine meteorology and oceanography

Action Taken:	Implementing Partner
Trained local staff at the Department of Marine and Wildlife in undertaking marine survey depth sounding work and assist in the setup of a nutrient analyser at the American Samoa Environmental Protection Agency.	SPREP/ American Samoa Environment Protection Agency
Aid study to determine the impact of landfill leaching on the coral reef in American Samoa	SPREP/American Samoa
Assist with circulation measurement and modeling around the island of Tutuila and Ofu in relation to leaching landfills.	SPREP/American Samoa
Provided financial support for participation of USP post-graduate student and one staff from Ministry of Natural Resource of Samoa (MNRE) to partake in an oceanographic research cruise for the US for 6 weeks.	SPREP/USP/MNRE
WMO and Government of Samoa supported a regional workshop for the Regional Working of Tsunami Warning and Mitigation System in the South West Pacific of the UNESCO-IOC's Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System, Apia, Samoa, July 2012.	WMO/ Government of Samoa
Chair of the Regional Working for Tsunami Warning and Mitigation System in the South West Pacific of the UNESCO-IOC's Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System, participation in the 14 th session of WMO Tropical Cyclone Committee for the South Pacific and South-east Indian Oceans (Apia, Samoa, 16-20 July 2012)	UNESCO-IOC

Pacific Key Outcome (PKO) 3: Public Weather Services in the PICTs region are improved.

Regional Activity: Coordinate assistance to improve public weather services for Pacific Island NMSs including technical assistance, infrastructure and capacity development

Action Taken:	Implementing Partner
An automated weather station was set-up to support medium to long term infrastructure development planning such as climate proofing of roads in Kosrae, FSM	US NOAA
Collaborations with CSIRO and BoM through PCCSP to provide capacity building to NMSs	CSIRO/BOM
In partnership with NZ NIWA a regular Island Climate Update was produced and disseminated to all PICTs, which assists NMSs in distributing targeted climate change information to communities..	NIWA

The Finnish Meteorology Institute funded project “Finnish-Pacific Project for Increased Capacity of SPREP and PIC NMS Staff to Meet the Growing Demand for Meteorological and Climatological Information in the Society (PFFICS)” successfully closed with the final meeting of the project board.	FMI
The Finland Ministry of Foreign Affairs, Finland Meteorological Services and SPREP launched the development of a new project to build the capacity of NMS and use of meteorology and climate data and information.	FMI/SPREP
Socio-economic survey conducted in the context meteorological services were collected for the development of FINPAC and for determining the value of Meteorological Services commissioned by WMO.	FMI/SPREP/WMO

Pacific Key Outcome (PKO) 4: Multi-Hazard Early Warning System (MHEW) for tropical cyclone, storm surges, waves and tsunami in the PICTs region are implemented.

Regional Activity: In partnership with other agencies (eg SPC-SOPAC) assist NMSs to establish and improve MHEWS and enhance integration across government agencies and communities

Action Taken:	Implementing Partner
Development of tropical cyclone seasonal forecast and longer term projection capabilities and tools, including four POAMA-based seasonal predictions tools (temperature and rainfall, SST, SLR and tropical cyclones), updated CMIP5 global climate model regional and national projections and downscaled simulations, Pacific Tropical Cyclone Data Portal, Tropical Cyclone Risk Model and downscaled simulations	PACCSAP
Development of wave hindcast dataset, projected wave climate database and ensemble of wave projections	
Analysis of historical extreme sea level events and assessment of projections of extreme sea level events for Fiji and Samoa and wave transformations for extreme sea level events in Tuvalu	
Establishment of working group on early warning system under the PPDRM	
14th Session of WMO RA V (Southwest Pacific) Tropical Cyclone Committee for the South Pacific and South-East Indian Ocean (TCC), hosted by the Government of Samoa in Apia 16-20 July 2012	Government of Samoa/WMO
SPC-SOPAC is represented in the 14th Session of WMO RA V/TCC	SPC-SOPAC/WMO
Tropical Cyclone operational plan for the South Pacific and Southeast Indian Ocean revised and updated	
UNESCO/IOC and SPC/SOPAC supported the national consultation(s) to review Samoa’s operational procedures for tsunami and tropical cyclones warnings, Apia, Samoa, March 2013.	UNESCO-IOC/SPC-SOPAC
Tropical cyclone operational plan for the South Pacific and Southeast Indian Ocean includes back-up system for early warnings for tropical cyclones	
Severe Weather Forecasting Disaster Risk Reduction Demonstration Project (SWFDDP)	NZ Met Service/US NOAA NWS/ PICTs NMSs/ NZ Min of Env/ WMO/ UK Met Office/ ECMWF/ Japan Met Agency (JMA)
Humanitarian and disaster management, meteorological forecasting and monitoring for the annual south west pacific cyclone season	NZ Ministry of Foreign Affairs & trade Aid Program/ Fiji Met Service/ NZ Met

	Service
Tsunami training and workshop for the Tonga Meteorological Service, the National Emergency Management Office and Stakeholders	US NOAA/ NZ Met Service/ Tonga Meteorological Service

Pacific Key Outcome (PKO) 5: Improved Early Warning System for Floods (EWS-Floods)

Regional Activity: In partnership with other agencies (e.g SPC-SOPAC) assist NMSs in developing and strengthening EWS-Floods

Action Taken:	Implementing Partner
WMO Fact-Finding Mission to Fiji to provide advice to Fiji Meteorological Services on the 26 July 2012	WMO
Fiji Integrated Water Resource Management Project on Early Warning for Floods	SPC-SOPAC/ LWRM/NIWA
Water Authority of Fiji meteo-hydrological monitoring upgrades	WAF/NIWA/ SPC-SOPAC/ Fiji Government
Samoa hydrometric data auditing and training	NIWA/MNRE

Pacific Key Outcome (PKO) 6: Climate information and prediction services, including drought prediction in the PICTs are improved.

Regional Activity: Promote and develop a plan for regional coordination of climate information and prediction services and drought prediction including the implementation of GFCS and establishment of RCCs for the Pacific Islands region.

Action Taken:	Implementing Partner
Coordinated and facilitated the Pacific climate change media training in May this year with support of SPREP communication team.	SPREP
Provide presentation and support to National University of Samoa (NUS) on response to regional questions about climate change, global warming and others	SPREP
Capacity mapping conducted with 5 of the 10 NMS - Fiji, Vanuatu, Solomon Islands, Niue and Kiribati. Which involved meeting one-on-one with each of the member of the Climate Services team to discuss outputs and skills required to deliver outputs. For each of the countries a Capacity Development Strategy is being prepared.	COSPPac
A member of the Samoan Climate Services team was sponsored to attend the 6th CAWCR Annual Workshop: 'Understanding and Prediction of Monsoon Weather and Climate' in November 2012.	COSPPac
Six Pacific participants were funded to attend PACCSAP's Advance Climate Course (PADClim) in October 2012.	COSPPac
COMP (Climate and Ocean Monitoring and Prediction) infrastructure and IT capacity mapping of PIC countries completed for Vanuatu, Fiji, Kiribati and Tuvalu.	COSPPac
SCOPI v3.0 was launched at the Pacific Advance Climate Change Science Program workshop on 19 October 2012. The modified version of SCOPI	COSPPac

(v3.0) was developed to mitigate bugs from previous versions of SCOPIC.	
SCOPIC seasonal forecast report has been translated to I-Kiribati language.	COSPPac
The first version of the Ocean Portal was launched on the external web in October 2012. This was well received from SOPAC, SPREP, Fiji National Met Service, Samoa NMS and Vanuatu NMS.	COSPPac
The Online Climate Outlook Forum (OCOF) has increased participants since July 2012. Highest record of participants (with preliminary calculations at approximately 54% female attendance) and a decreased running time. On average 16 climate officers participated each month.	COSPPac
Ongoing support for application of climate forecasting in water resource sector in Kiribati, renewable energy in Samoa, health sector in Solomon Islands.	COSPPac
Climate science tools was developed by the PACCSAP	PACCSAP
Provision of new information to enhance understanding of large-scale climate drivers and processes affecting climate variability and change in the Pacific	PACCSAP
Provision of updated (CMIP5-based) global climate model projections of selected climate parameters for western tropical Pacific partner countries	PACCSAP
Provision of new information and seasonal prediction tools (data portals and dynamical models) for selected climate extreme parameters	PACCSAP
Provision of new information to enhance understanding of ocean acidification and coral bleaching systems and processes and associated risks	PACCSAP
Development of regional science communication and capacity building products and support	PACCSAP
WMO RA V (Southwest Pacific) working group on climate services	WMO
WMO RA V (Southwest Pacific) working group on climate services developed and implement questionnaire on capabilities on needs for a RCC in RA V.	WMO
WMO RA V (Southwest Pacific) working group on climate services developed and implement questionnaire on climate services for agriculture in RA V	WMO
Representatives from Samoa and Vanuatu participated the WMO regional workshop on climate services at the national level for LDCs in Asia, Bangkok, Thailand, 8-10 October 2012.	WMO
USA NOAA funded Pacific Islands Climate Services Forum, Suva, Fiji, 21-25 January 2013.	WMO
UN NOAA PI-GCOS Climate Science and Technical Support Project (SCITECH TSP) to assist Cook Island, Fiji, Solomon Islands, Vanuatu and PNG National Meteorology Services.	NZ Met Service/NIWA/ Bodeker Science/ US NOAA/
Fiji Met Service Climate Monitoring upgrade program - capacity building and improving climate monitoring network to underpin weather early warning, climate and weather services	
Samoa Integrated Climate Change in the Agriculture and Health Sector project aiming to improve climate monitoring network and capacity building at national level	Samoa Met Service/ NIWA/ UNDP
Integration of climate change risks and resilience into forestry management in Samoa	Samoa Met Service/NIWA/UNDP

Pacific Key Outcome (PKO) 7: Improved quality of observations and coverage of networks in the Pacific Island region.

Regional Activity: Coordinate the development and implementation of a regional WIGOS plan, ensuring that all countries and territories are integrated.

Action Taken:	Implementing Partner
WMO RA V (Southwest Pacific) workshop on regional WIGOS Implementation Plan commenced in Jakarta, Indonesia, 8 November 2012.	WMO
1 st session of WMO RA V (Southwest Pacific) working group on infrastructure (WG/INFR) in Melbourne, Australia, 23-127 April 2013, included discussions on WIGOS.	WMO
1 st session of WMO RA V WG/INFR reviewed regional WIGOS implementation plan for RA V.	WMO
1 st session of WMO RA V (Southwest Pacific) working group on infrastructure (WG/INFR) in Melbourne, Australia, 23-127 April 2013, included discussions on WIGOS.	WMO
1 st session of WMO RA V WG/INFR started developing regional WIS implementation plan for RA V.	WMO
Improve Cook Islands GUAN and GSN Restoration	GCOS Secretariat/JMA/ US GCOS Program/ Met Office UK/ NZ Met Service/ Cook Island NMS

Pacific Key Outcome (PKO) 8: PICTs historical climatological data are preserved.

Regional Activity:

Action Taken:	Implementing Partner
Web page had been developed to coordinate all Climate information.	
Most NMS's have started their digitization program of their historical climate data stored in their archives.	NMS/COSPPac/PACCSAP
Development of CliDE climate data management system and Pacific climate data portals, and delivery of training and technical support for development and application of such tools and for rescue, digitisation, QA/QC, homogenisation and reporting of historical Pacific climate data records in collaboration with NMSs	PACCSAP

Pacific Key Outcome (PKO) 10: Regional and NMSs are more capable and effective

Regional Activity: Coordinate the development of a regional strategy for building capacity of meteorological services in the Pacific Island region.

Action Taken:	Implementing Partner
National Joint Action Plan on Climate Change and Disaster Risk Management (JNAP) enabled Tonga, RMI, Cook Islands and Tuvalu to access funding opportunities and TAs for the implementation of their JNAPs.	SPREP
Coordinate and fund NMS members to attend ICAO meeting in Bangkok (Samoa, Solomon Island, Kiribati and Tonga) with assistance from WMO	SPREP/WMO
Delivery of regional science forums including (but not limited to) Climate Extremes Workshop in Noumea Science Symposium and Technical Training Workshop in Honiara, delivery of PADClim and Climate Science Winter	PACCSAP

Schools in Melbourne, science mentoring and attachments in Melbourne and PICTs, science training and education events at USP in Suva, tools training in support for Pacific Climate Futures and CliDE throughout the Pacific etc, joint authorship of science publications and conference presentations and posters and support for attendance at ISCHMO 10 in Noumea and Climate Services Forum in Suva, all of which have involved high level participation and in many cases collaboration with NMSs.	
WMO provided financial assistance to the Government of Niue to drafting a policy and meteorology legislation for Niue, with the assistance of SPREP	WMO/SPREP
WMO provided financial assistance to the Government of Vanuatu to drafting a meteorology legislation for Vanuatu, with the assistance of SPREP.	WMO/SPREP
WMO providing financial assistance to the Government of Tonga to draft a meteorology legislation for Tonga.	WMO
BoM and WMO assisted the Government of Kiribati to develop a meteorological strategy and implementation plan for Kiribati.	WMO/BOM
WMO provided expert services to Vanuatu to develop a meteorological strategy and implementation plan for Vanuatu Meteorology and Geo-hazard Department	WMO
Some NMSs personnel from PICTs (Samoa, Solomon Islands and Tonga) attended ICAO meeting in Bangkok, Thailand, May 2013 with financial assistance from the WMO and the Commonwealth Secretariat.	WMO/Commonwealth Secretariat
PICT NMSs' Directors are expected to participate in the Road Meeting in Nadi, Fiji, 8-12 July 2013	PMC Partners
PMC-2 will be held in Nadi, Fiji, 1-5 July 2013.	

Pacific Key Outcome (PKO) 11: Education, training and capacity development activities in the fields of meteorology, climatology in the PICTs region are coordinated and improved.

Regional Activity: Work with donors to ensure scholarship allotment toward meteorology undergraduate and postgraduate courses, and relevant technical training.

Action Taken:	Implementing Partner
2011 WMO fellowships awarded to Mr Tom Natick (Vanuatu), Mr Ueneta Toorua (Kiribati), Mr Maccarios Auvae (Samoa) for the meteorologist training course at PAGASA, Manila, Philippines, November 2011 – October 2012; to Mr Rajneel Prasad (Fiji) for the meteorologists postgraduate diploma training course at BMTC, Melbourne, Australia, February – December 2011; and to Ms Katrina Mariner (Samoa) for a master degree in water resources management at Leibniz University, in Germany, January 2011 – September 2013.	WMO
Partial (in partnership with UNDP) 2011 WMO fellowships awarded to Mr Williams Bae Worwor (Vanuatu), Mr Konny Nato (Papua New Guinea), Mr Wilson Saega (Solomon Islands), and Mr Wilson Vaaua (Samoa) for the meteorology technician training course at the CIMH, Barbados, September 2011 – April 2012.	WMO
2012 WMO fellowships awarded to Mr Luteru Tauvale (Samoa) and Mr Jeremaih Malaibe (Papua New Guinea) for master degree in applied meteorology and management, at Reading University, UK, October 2012 – November 2013.	WMO
2012 BoM fellowship awarded to Mr Silipa Art Mulitalo (Samoa) for the meteorologists postgraduate diploma training course at BMTC, Melbourne, Australia, February – December 2012.	BOM

A hydrologists training course will be held at PAGASA, Manila, Philippines, July 2013 – June 2014.	WMO
US NAA PI-GCOS SCITECH TSP	US NOAA GCOS/ University of Hawaii/ IPRC JIMAR
Technical training attachment to NZ Met Service	MFAT/NZ Aid Programm/ Vanuatu NMS
Training for Vanuatu Meteorological Service climate officer	NIWA/MFAT/NZ Aid Program/ Vanuatu NMS

Pacific Key Outcome (PKO) 12: Donor funding is coordinated efficiently and effectively in PICTs.

Regional Activity: Advocate for Pacific Islands NMSs needs at high level donor coordination discussions

Action Taken:	Implementing Partner
A Pacific Voyage to Durban communications strategy, in consultation with Pacific Island countries, which identified key advocacy objectives and strategies to raise the Pacific interests in the international arena.	
Joint launch of PCCSP products at COP 17 in Durban as a side event in partnership with PMC, AusAID, CSIRO/BoM and PICs.	PMC/ AusAID/ CSIRO/BoM and PICs
SPREP and the Government of Finland signed the FINPAC project bringing EUR4M towards community based climate science capacity building aimed at mitigating the impacts of climate change at the village level.	FMI/SPREP
Met Office UK Pacific Trust Fund (PF) to assist Kiribati, Tuvalu, Cook Island, Pitcairn Island Met Services	Met Office UK/ NZ Met Service

Pacific Key Outcome (PKO) 13: Enhancing strategic partnerships and collaboration with UN, regional and national organisations and agencies.

Regional Activity:

Action Taken:	Implementing Partner
Arranged for new meteorology legislation to be drafted for Vanuatu. The Bill incorporates new areas of geo-hazards and climate change responsibilities consistent with the UNFCCC.	
Implementation of Honiara Climate Science Symposium and Technical Training Workshop involving SPREP and NMSs, and participation in/support for NMS involvement in Climate Services Forum in Suva	PACCSAP
WMO has been renewed MOU with SPREP	SPREP/WMO
Letter of Agreement between WMO and SPREP supporting the Pacific Met Desk Partnership (PMDP)	SPREP/WMO

Pacific Key Outcome (PKO) 14: PMC is an effective and efficient body

Regional Activity:

Action Taken	Implementing Partner
Establishment and operationalise of the PMDP	SPREP/WMO
AusAID is funding two positions to further strengthen the PMDP- Meteorology and Climate Officer and Technical Administrative Officer	AusAID
Planning and organising of PMC 2 Meeting in Nadi Fiji 1-5 July 2013	SPREP/WMO
Web-page has been developed to update all PMC related Calendar of Events (meetings, trainings and workshops) through the Pacific Climate Change Portal (PCCP) and SPREP website.	SPREP