WP4.0 Att3: Update from the current PMDP projects supporting Pacific National Meteorological and Hydrological Services

Purpose

1. To inform the meeting on the progress made by the Secretariat and its partners in relation to meteorology and climatology activities that are contributing to building the capacity of Member's National Meteorological and Hydrological Services (NMHSs).

Background

2. The Pacific Meteorological Council (PMC) is a subsidiary body of the SPREP Meeting and serves as the regional mechanism through which meteorological and hydrological services in the region coordinate their activities and are guided by the Pacific Islands Meteorological Strategy (PIMS). SPREP and the World Meteorological Organisation (WMO) provide secretariat support for the PMC and monitor progress in achieving the goals of the PIMS through the Pacific Meteorological Partnership Desk (PMPD). The PMPD is the modality adopted by SPREP and its partners for serving the needs of the national meteorological services, PMC and their bi-annual meetings. The 4th meeting the PMC and the 2nd Pacific Ministerial Meeting on Meteorology were held in Honiara, Solomon Islands from 14-18 August 2017, and the outcomes are presented in WP 9.2.3.

Finland-Pacific (FINPAC) Project on Reduced Vulnerability of Pacific Island Countries' livelihoods to the effects of climate change

- 3. The FINPAC Project is a partnership between SPREP and the Government of Finland supporting Pacific communities to reduce their vulnerabilities to the effects of climate change through improved National Meteorological Services (NMS). The four-year project covers 14 countries based on the growing needs of Pacific communities to prepare and respond to the changing weather patterns and climate trends. The project's focus is on providing NMS with the capacity and tools to accurately provide weather and climate services in a timely manner to support community adaptation planning and disaster risk reduction.
- 4. Lessons learnt from the FINPAC project were presented at the 27th SPREP Meeting in 2016 (WP 9.2.1). The project is now finished, and in addition to the outcomes presented at the 27th SPREP Meeting SPREP is also pursuing opportunities to replicate some of the successes of the project.

Republic of Korea- Pacific Islands Climate Prediction Services Project (RoK-PI CLIPS)

5. The Government of Korea through the Pacific Islands Forum has engaged SPREP and the APEC Climate Centre (APCC) to establish a Republic of Korea- Pacific Islands Climate Prediction Services Project (RoK-PI CLIPS) for 3 years (2015-2017). The project continue to strengthen the adaptive capacity of Pacific communities to climate risks at the seasonal timescales through strengthening the NMSs capacity to contribute to community resiliency and national development planning through the provision of tailored climate prediction information using a region-specific system known as CLIKP (CLImate ToolKit for the Pacific; http://clikp.sprep.org/). The project scope takes into account the unique geographical features of the Pacific and build upon APCC's real-time global climate prediction information and support from the Pacific Meteorological Desk Partnership; thereby enabling NMS to generate their own products for servicing demand from national sectors with climate information.

Climate and Ocean Support Services project in the Pacific (COSPPac) Project

- 6. The Climate and Ocean Support Services in the Pacific (COSPPac) project is funded by the Australian Department of Foreign Affairs and Trade, and implemented by the Bureau of Meteorology. The program works with Pacific Island stakeholders to analyse and interpret climate, ocean and tidal data to produce valuable services for island communities. This information helps island communities to prepare for, and mitigate the impacts of severe climate, tidal and oceanographic events.
- 7. COSPPac is partnered with fourteen Pacific Island countries¹ and is carried out with support from SPREP, SPC, USP, Geoscience Australia and Lands and Surveys Departments. The program consists of the fifth phase of the South Pacific Sea Level and Climate Monitoring Project, the third phase of the Pacific Islands Climate Prediction Project a new Capacity Development and Communications program and a Management Unit within the Bureau of Meteorology. The process that the BoM and DFAT had taken in the Climate and Oceans Support Program for the Pacific (COSPPac) project to ensure sustainability of the products and tools through a transition process to the region is well noted. COSPPac and SPREP continue to provide support to Seasonal Climate Prediction in the region through the Online Climate Outlook Forum (OCOF).
- 8. In 2016 the COSPPac program began a process of transitioning its tools and products to the region. SPREP is now managing the:
 - a. Seasonal Climate Outlook Prediction Software for the Pacific (SCOPIC) tool
 - b. Online Climate Outlook Forum (OCOF)
 - c. COSPPac Climate Bulletin
 - d. COSPPac Red Cross Alert
 - e. Traditional Knowledge database
 - f. COSPPac Capacity Development tools
- 9. The project will finish on June 2018.

Science-Based Climate Information Services in the Pacific: Communicating New Findings, supporting Application and Developing In-Country Capacity.

- 10. The Science-Based Climate Information Services in the Pacific: Communicating New Findings, Supporting Application and Developing In-Country Capacity project is funded by the Australian Government through the Department of Foreign Affairs and Trade (DFAT) and is being led by CSIRO (Oceans and Atmosphere) as a joint initiative on behalf of both CSIRO (Oceans and Atmosphere), SPREP (Climate Change Division CCD and the Pacific Met Desk Partnership) and the Australian Bureau of Meteorology. The project commenced in July 2016 and will finish in December 2017.
- 11. The project ensures that a regional focus is maintained for outreach of the latest climate science, including support for appropriate development of regional scale capacity and services, to underpin the expected more detailed approach of delivering products and services to national/sub-national sectoral and community-scale end-users through future support from donors such as the Green Climate Fund. The underlying assumption is that the realisation of sustainable and resilient, long-term outcomes and associated path to impact for Pacific stakeholders requires a targeted, coordinated and appropriately balanced provision of support and investment of resources at both regional and national scales.

Programme for Implementing the Global Framework for Climate Services (GFCS) at Regional and National Scales

12. The programme Implementing the GFCS at Regional and National Scales funded by the World Meteorological Organisation and Environment Canada to support activities that would enhance resilience in social, economic and environmental systems to climate variability and climate change through the development of effective and sustainable services.

¹ Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Niue, Nauru, Papua New Guinea, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu

- 13. The project supported various initiatives in the regional including the establishment of the Pacific Island Climate Outlook Forum (PICOF), the National Climate Outlook Forum (NCOF), development of drought policies for selected countries and as well as the Pacific Roadmap for Strengthened Climate Services (PRSCS)
- 14. The project will finish on March 2018

Pacific Islands Global Ocean Observing System (PI-GOOS)

15. PI-GOOS and the PI-GOOS Officer have been supported as part of SPREPs core work program and by US NOAA. PI-GOOS is working to build ocean observing capacity, coordinate regional activities, and develop programs for SPREP members. PI-GOOS supports and works with Members on deployment of Argo profiling floats and access to data they collect, and supports the Scientific Educational Resources and Experience Associated with the Deployment of Argo Floats project (SEREAD). This last year SEREAD has hosted teacher training workshops and assisted with curriculum development in Kiribati, Tonga and Tuvalu. The PI-GOOS Officer has been overseeing the execution of the NZ Pacific Partnership on Ocean Acidification project and is actively working with neighbouring GOOS Regional Alliances (US's PaclOOS and Australia's IMOS) to develop regional project.

Support to Kiribati and Tuvalu Upper Air Observation Network

- 16. The ongoing collection of reliable data is crucial to informing our understanding of the weather and climate.
- 17. The financial support is provided by the United Kingdom Met Office (UKMO) with technical support from the Meteorological Service of New Zealand (MetService). This programme has consistently supported the upper air programmes of Kiribati and Tuvalu.
- 18. Cooperation with national meteorological services plays an important role in ensuring that accurate data from remote locations such as the Pacific is made available to strengthen global model for weather and climate forecasting.
- 19. This is a 5 year programmes and will finish in 2019

Pipeline Projects

The Vanuatu Climate Information Services for Resilient Development project

- 20. The Vanuatu Climate Information Services for Resilient Development project (Van-CIS-RDP) was approved at the Green Climate Fund (GCF) Fifteenth Meeting of the Board in Apia, Samoa from 13-15 December, 2016. The Van-CIS-RDP will support the strengthening and application of Climate Information Services in five targeted development sectors: tourism; agriculture; infrastructure; water and fisheries. The project will build the technical capacity in Vanuatu to harness and manage climate data; develop and deliver practical CIS tools and resources; support enhanced coordination and dissemination of tailored information; enhance CIS information and technology infrastructure; and support the application of relevant CIS through real-time development processes, for more resilient outcomes.
- 21. The Van-CIS-RDP will begin with a 3 month inception and planning phase in the latter half of 2017 and is implemented by SPREP as a GCF Accredited Entity and jointly executed by SPREP and the Vanuatu Meteorology and Geoscience Division in partnership with CSIRO, BOM, and APCC.

CREWS and the Canada project – Supporting DRR and Establishment of Operational MHEWS in Small Island Developing States and Southeast Asia.

22. The Supporting DRR and Establishment of Operational MHEWS in Small Island Developing States and Southeast Asia project is implemented by WMO with funding support from CREWS. The goal of the project is to contribute to reduce human and economic losses associated with meteorological, hydrological and climate-related hazards in SIDS and SEA. In the context of the

design of this Programme, capacity development areas specific to SIDS have been identified and prioritized. These include (i) engagement of NMHSs on DRR governance issues, (ii) strategic planning in NMHSs, (iii) operational and technical capacities for impact-based forecasting; prediction capabilities for marine forecasting, flash flooding and storm surges, (iv) communication and feedback mechanisms, (v) research capacity, and(vi) sustainability of investments in DRR. This component of the project aims to support the implementation of this Programme. In this regard, the project will ensure alignment with identified key priorities, build on past achievements and provide the foundation for effective investments in DRR in SIDS. Emphasis will be placed on:

- a. Supporting engagement of NMHSs on governance issues;
- b. Strengthening capacities of NMHSs to support DRR and MHEWS with a particular focus on capacities for impact-based forecasting;
- c. Enhancing coordination and cooperation with global and regional specialized centres as well as South/South cooperation.
- 23. Implementation of these activities will take into consideration regional and national specificities, capabilities and relevant on-going national or regional programmes.

Intra-ACP Project on Climate Services

24. This project will be funded by the EU through the Intra-ACP Project of the ACP targeting the ACP regions. The project is currently being designed and will mainly focus on implementing the Global Framework for Climate Services. SPREP represents the Pacific region in the Intra-ACP Task Team that guide the design of the project. This project will likely commence in 2018.