

Second Meeting of the Pacific Meteorological Council (PMC-2)

1-5 July 2013
Nadi
Fiji Islands

Agenda Item 6.5.2 : WMO RA V Severe Weather Forecasting and Disaster risk reduction Demonstration Project (SWFDDP)

Purpose

1. This paper provides updated information on the status of the WMO Severe Weather Forecasting and Disaster risk reduction Demonstration Project (SWFDDP) in the South Pacific (RA V), as a contributing mechanism for the implementation of the Pacific Islands Meteorological Strategy 2012-2021.

Background

2. The SWFDDP began on 1 November 2009, with a one year pilot programme involving the Pacific Islands of Fiji, Samoa, Vanuatu and the Solomon Islands. On 1 November 2010 Tuvalu, Cook Islands, Kiribati, Niue and Tonga joined (for further details see Annexes 1 and 2 – final reports of the meetings of the Regional Sub-project Management Team (RSMT) meeting final report, April 2009; and November 2010; and respective Implementation Plans).

3. Since the project's inception, the website MetConnect Pacific was built as a tool for participants and a one-stop shop for all the Numerical Weather Prediction (NWP), including in the form of probability and risk guidance, and satellite-based products made available through the Project. The SWFDDP addresses strong winds and heavy rain (whether or not associated with tropical cyclones), and damaging waves. In-country training was conducted during 2009/10 and again during 2012 in each participating NMHS. Expansion to include spring tide and storm surge guidance will be considered in the next RSMT meeting (Nadi, Fiji, 26-29 August 2013), as well as the transition of the project to the "Continuous Development Phase", under regional responsibility and sustainability.

4. The SWFDDP follows a "Cascading" concept of the forecasting process whereby global-scale products (made available by advanced Global Data-Processing and Forecasting System (GDPFS) centres), are integrated and synthesized by RSMC Wellington with contribution by RSMC Nadi (for tropical cyclone forecasting) to provide daily guidance for forecasts of hazardous weather or weather-related phenomena to NMHSs in its geographical region, enabling those centres to issue effective warning services. The SWFDDP contributes to:

- Enhanced capability for NMHSs to forecast severe weather and issue warnings at national level, including improved accuracy and longer lead-times;
- Enhanced access to global and regional nowcasting data for very short-period forecasting;
- Established warning processes agreed with national disaster management and civil protection

- authorities, along with planned responses for protection of lives and property;
- Established forecast processes and Quality Management Systems (QMS), and strengthened forecast capabilities in support of other user sectors at the national level;
- Raised awareness of the value of NMHSs with national governments and their agencies, leading long-term to greater national support and investment, leading in turn to improved supply of observations and feedback into the GDPFS system;
- Reduced loss of life and damage to property with contributions to the Millennium Development Goals of eradicating extreme poverty and reducing child mortality.

The approach follows the Millennium Development Goal of a Global Partnership for Development and contributes directly to disaster risk reduction and climate change adaptation, as well as capacity development. It therefore is a contributing mechanism towards the expected outcomes 1 to 7 and 11 of the Pacific Islands Meteorological Strategy 2012-2021 (see Annex 3).

Recommendations

5. The Meeting is invited to:
 - note the information in this paper;
 - thank WMO and participating partners for supporting the enhancement of PMC member NMHSs in their capacity to forecast hazardous weather or weather-related phenomena, and delivery of warning services; and
 - urge PMC members to give full support to, and ensure ownership and sustainability of the SWFDDP in the South Pacific, including exploration of resource mobilization with external partners to support the SWFDDP routine operations.

Attachments

- Annex 1 – ‘Meeting of the RSMT for the SWFDDP for subproject RA V’ final meeting report, April 2009 at <http://www.wmo.int/pages/prog/www/CBS-Reports/documents/FinalReport.doc> and associated ‘Regional Subproject Implementation Plan’ at www.wmo.int/pages/prog/www/CBS-Reports/documents/ImpPlan_Final.pdf
- Annex 2 - ‘Meeting of the RSMT for the SWFDDP for the South Pacific Islands’ final meeting report, November 2010 at http://www.wmo.int/pages/prog/www/CBS-Reports/documents/Final_report_SWFDDP_Wellington_Nov2010.pdf and associated ‘Regional Subproject Implementation Plan’ at www.wmo.int/pages/prog/www/CBS-Reports/documents/ImpPlan_SWFDDP_Nov2010.pdf
- Annex 3 – ‘Pacific Islands Meteorological Strategy 2012 – 2021’, <http://www.sprep.org/publications/pacific-islands-meteorological-strategy-2012-2021>