

Solomon Islands climate services and early warning system



Client:	United Nations Development Programme & Solomon Islands Meteorological Service
Location:	Solomon Islands
Duration:	2014 – 2016
Services:	Climate services, Climate early warning system, meteorological and climate instrumentation & telemetry, training and capacity development, community engagement & stakeholder consultation

The Solomon Islands National Adaptation Programme of Action (NAPA) has determined, through a broad national consultative process, that agriculture, human settlements, water and sanitation and human health are priority vulnerable sectors requiring urgent support to enhance resilience against the predicted impacts of climate change.

The resulting project, *Enhancing resilience of communities in Solomon Islands to the adverse effects of climate change in agriculture and food security (SWoCK)*, led by the Ministry of Environment, Climate Change, Disaster Management and Meteorology aims to strengthen the ability of communities in Solomon Islands to make informed decisions and manage likely climate change driven pressures on food production and management systems.

NIWA is providing technical support to Solomon Island Meteorological Service (SIMS) within the SWoCK project to upgrade the climate and weather observations network with the installation of 4 automatic weather stations and 12 automatic rain gauges. In addition the project is supporting the installation of two remote automatic weather stations, on Mono and Tikopia Islands respectively, to support early warning systems involving both SIMS and the National Disaster Management Office.

The climate early warning system (CLEWS) being installed by NIWA has four main components – (i) weather and climate observations, (ii) data telemetry to convey the data from the weather stations to the database, (iii) the database management system, and (iv) the services and products application layer.

The data from the automatic weather stations and rain gauges are being integrated in near real-time to the Solomon Islands Meteorological Service data management systems for weather hazard assessment and forecasting, and to support the development and implementation of timely climate services, particularly focussed on food security, community livelihoods and resilience.

NIWA also helped facilitate stakeholder workshops held to develop institutional collaboration between the Solomon Islands Meteorological Service and the Ministry of Agriculture and Livestock. These workshops were aimed at defining, developing, and producing meteorological information targeted to support the Ministry of Agriculture's development of climate-aware agricultural planning and production.