

**AUSAID PROJECT  
PACIFIC ISLANDS – CLIMATE PREDICTION PROJECT  
(PI-CPP)**

**“Climate Data Security”  
Mission to Cook Islands  
4<sup>th</sup> to 21<sup>st</sup> June 2008**

**NAME OF OFFICER:** Kevin Smith, National Climate Centre

**MISSION**

To travel to the Cook Islands Meteorological Service (CIMS) to undertake a series of activities associated with Climate Data Rescue, Records Management and Data Management. AusAID through the Pacific Island - Climate Prediction Project (PI-CPP) had agreed to fund visits to four Pacific Region countries (Cook Islands, Niue, Tonga & Tuvalu) to undertake the work listed below. These visits are an extension of the previous Pacific Island - Climate Data Rescue (PI-CDR) and Pacific Island - Building Robust Infrastructure (PI-BRI) projects.

As part of this program, the steps involved are to:

- Conduct an audit of the data holdings of the CIMS held as paper records.
- Produce an inventory of climate data records (which exist mostly in paper-based forms);
- Where necessary, take immediate action to secure data in imminent danger of deterioration or loss;
- Provide training to CIMS staff in effective records management (thereby contributing to Australia’s capacity-building activities in the Pacific region).
- Install on CIMS computers a self-contained Climate Database Management System (ClimSoft), approved by WMO as a system suitable for generic use in developing countries;
- Ingest existing and current CIMS meteorological surface data prepared for ClimSoft system.
- Instruct officers of the CIMS in the operation and use of the ClimSoft system, and provide hands-on assistance to their staff as they practice the required skills;

**REPORT ON THE MISSION**

After a cancelled flight and a resultant overnight stay in Auckland due to a missed connection, I arrived in Rarotonga on the afternoon of Wednesday 4 June. On Thursday 5 June I met briefly with the Director of the Cook Islands Meteorological Service, Mr Arona Ngari. I discussed the project and my expected visit outcomes. I was then introduced to the Senior Climate Officer, Mr Ngatokorua Rauraa. We held further discussions and was then shown around the office and introduced to staff on duty.

There is no specific area for storage of the hard copy records. The paper record holdings were scattered around the office, stored in both metal and timber cupboards. They were loosely stacked, some in date and site order but many were not. Ideally some reorganising is required to store the archived data in one area. The office has only recently been air conditioned and there were some signs of deterioration of the records.

The earliest daily records dated back no further than 1979. These paper records were sorted where necessary, bundled and tied using the acid free cotton tape and placed into National Archives of Australia quality boxes. These were purchased specifically for this project and sent prior to my arrival. The boxes were labelled after packing using a numbering system consistent (but independent from) other projects of this nature for Pacific Islands countries. The box identification number was entered on an electronic inventory along with a description of the contents of the box.

It is further noted that there is a need to provide some larger archive boxes to accommodate the larger meteorological records (420x320mm) that had been folded in half for storage.

The archiving and the completion of the electronic inventory were accomplished by the following Friday 13<sup>th</sup>, taking a lot longer than expected.

Climsoft training and implementation was started on the Monday 15<sup>th</sup>. Due to restrictive staff numbers, only the senior climate officer was available for training. Unfortunately, Climsoft V1 had not previously been used to store electronic records. Electronic data records were stored in spreadsheets. Though the spreadsheets were well designed, it was considered too large a job and outside the scope of this visit, and the project, to attempt to import this data into Climsoft V2. Data entry has begun from some existing electronic sources and new key entry from hand written meteorological logs. Follow-up emails are required to encourage the use of the database.

Much discussion and demonstration was conducted on different methods of data manipulation using the Climsoft Application and the Access database itself.

## **SUMMARY ASSESSMENT/VALUE OF MISSION**

The main aim was to build a capacity for CIMS staff to engage in effective Records and Data Management of both hard copy forms, and electronic ingestion into a Climate database. This visit has successfully accomplished this objective. However, follow up will be required to encourage the use of the Climsoft database as the preferred choice for the storage of electronic records; given the large number of specifically developed spreadsheets in use for this purpose. Also, given the lack of appropriately qualified staff and the turnover of staff in the Pacific Island countries, and the advancement in technology and software updates, further training and refresher workshops may be required. It should also be noted of the continuing strong relationship with other projects including SCOPIC (Seasonal Climate Outlook for Pacific Island Countries) and also with PI-GCOS projects.

## **RECOMENDATIONS**

1. Ongoing support and encouragement by telephone and email offered to the extent that it is within the limitation of our resources;
2. Development of a project proposal to import current spreadsheet data into Climsoft;
3. Development of more personalised forms in the Climsoft application specifically for the CIMS;
4. Provide the CIMS with a minimal shipment (25pack) of archive boxes size10, to accommodate meteorological records of size up to 420 x 320mm.; and
5. Regular training and/or workshops to sure up current skills and for the introduction of new technology, software updates, and any changes in methodologies.