

**AUSAID PROJECT  
ENHANCED APPLICATIONS OF CLIMATE PREDICTIONS IN  
PACIFIC ISLAND COUNTRIES  
(PI-CPP)**

***Report on the Stakeholders Workshop on Application of Climate  
Predictions in the Solomon Islands***

CEMA Conference Room, Honiara  
9<sup>th</sup> to 11<sup>th</sup> February 2005

**Introduction**

The project is now moving into its second and most important phase, which involves the roll-out of the revised (near-final) Seasonal Forecast System (called SCOPIC) to the local NMSs, training of local NMS personnel in statistics and forecast production and distribution, and the conducting of stakeholder workshops. In addition, the visiting party investigated possible pilot project, for the application of climate forecast information in climate sensitive industries, most notably fisheries, agriculture and water.

The second of a series of workshops under the second phase was held in the Solomon Islands. The project team spent two days (7<sup>th</sup> to 8<sup>th</sup> February) training the Solomon Islands Meteorological Service (SIMS) personnel on advance statistics and SCOPIC. They also assisted the SIMS personnel with the preparation of their presentations and other relevant materials for the following 3-day workshop. About six met staff underwent training.

The stakeholders' workshop started with a formal opening, with an address delivered by Ms Stacey Greene, Australian High Commission and the opening address by Permanent Secretary of the Ministry of Infrastructure and Development, Mr Fred Ganate. The Director of the SIMS, Mr Chanel Iroi chaired the session. Ms Eleanor Pitakaji, Program Officer – Training, from the AusAID office was also present at the opening. There were twenty-eight participants, including six from the met service, and representatives from the following sectors: Tuna company (SOLTAI), Broadcasting Corporation, Disaster Management Office, Red Cross, World Vision and several government departments (education, Human Resource Development, agriculture, livestock, marine, Infrastructure and Development, health; water supply and sanitation and Planning Division).

The objectives of the workshop were as follows.

- To demonstrate available information and stress the limitations of the forecasts, the nature of probability-based predictions;
- To demonstrate to decision-makers in climate sensitive activities the availability of, and effective and prudent use of probabilistic climate predictions as an input to decision-making;
- To train decision-makers in climate sensitive activities on the usage of probabilistic climate predictions in decision making to minimize risks in their respective sectors;
- To establish effective communication delivery channels from the PIC National Meteorological Service to its clients;
- To ascertain specific information needs, provide a forum for identifying

desirable software modifications

- To train the media contacts in order to ensure most effective and accurate dissemination of the climate information, including predictions to the general public; and
- To identify and/or commence one or more pilot projects in some of the PIC.

The workshop was structured into six sessions: Formal Opening; The Climate System, its behaviour and consequences; Seasonal Climate Forecasting; Managing Climate Risks (case studies); The Forecasting and Decision-Making exercise and Climate Outlook Forum.

The Project Team (PT) was represented by Ms Janita Pahalad (Project Team Leader), Dr David Jones (National Climate Centre), Dr Anthony Falkland (Australian Marine Science and Technology Ltd) and Dr Yahya Abawi (Queensland Department of Primary Industries).

### **Outcomes**

An evaluation of both the training of the met officers and the workshop was carried out (see attached summary report). The overall rating for the workshop ranged from *very good* to *excellent*. It was once again noted that this workshop was the first of its kind in Vanuatu which focussed on climate information.

Some of the key points highlighted during the discussion sessions were:

- There was a request for users to be able to access climate information directly from other sources and to be trained in the interpretation of the information. It was highlighted that it was SIMS responsibility to access/produce those information and disseminate them to the users in a simple language or format.
- Telecommunication service is not reliable and very expensive in the Solomon Islands therefore it imposes difficulties in sending information on a regular basis. Even Government mails are not delivered if postal bills are not paid. A communication service called PFNET is being installed in some villages which uses VHF radio frequency. PFNET has email facilities but does not allow Internet access.
- To date the agricultural department has relied on local farmers' experience when planning for planting season, but now with the new climate information they envisage improving their services for the farmers.
- The Solomon Islands Government does not place priority to climate activities and has allocated only \$5,000 to the climate section. The government gives more priority to national development and tends to overlook some of the important institutions such as SIMS. Awareness of the importance of the met service rises during tropical cyclones. Abawi mentioned the example of the drought caused by the 1991-1994 El Niño in eastern Australia which raised awareness among the people and the politicians. Following this event, lot more funds were allocated to research ENSO impacts.
- There was a suggestion that the government departments/agencies should support SIMS. The benefits gained from this new information service may encourage the government to provide more funding for SIMS.
- Local/traditional knowledge can be used to an advantage.
- Before the ethnic tension in 2000, SIMS used to produce monthly climate bulletins for the users. They are now trying to establish this capability again.

- Urban drainage system in Honiara does not have the capacity to cope with heavy rainfall. The water authority need appropriate data to be able to address this situation. Water Resources Division collects water data but only in areas of interest as dictated by the government (mostly for hydropower planning and water supply). Some of this data maybe useful for engineering purposes for Honiara, but due to a difference in the software used, it causes difficulties in transporting the data from the SIMS database. Abawi mentioned that there are other techniques for addressing this issue and there is a need for sufficient data, but this issue is however beyond the scope of the current project.
- NDMO is trying to coordinate all disaster related activities. SIMS is a member of NDMO.
- It was noted that 80 % of the population lives in rural areas, where due to lack of climate observing stations, no climate forecasts can be made available.
- There is a need for other climate-related information such as sea surface temperatures.

### **Discussion**

During the workshop Abawi highlighted that the link between climate and agriculture is one of the objectives of this project along with training of SIMS staff in use of SCOPIC and awareness-raising for the users. One of the real issues is how to encourage partnership between SIMS and the users of the data. In relation to flowering of plants in different conditions, he mentioned that there is a lot of very important local knowledge that can be documented to improve scientific knowledge of climate impacts on agriculture.

Lloyd Tahani (SIMS) requested for details on main contact in each sector. He mentioned the past experience shows that information often went to the head of each relevant agency and was not passed on to the relevant persons. There is therefore a need to send the information to the “right” people.

The government has established a policy for SIMS to introduce some small fees for its services. Data would continue to be provided free of charge to the educational institutions and the government agencies but some fees would be charged to private organisations. Iroi mentioned that WMO resolution 40 does not permit charging of fees except in some cases. Data should be freely available to other countries. Tahani mentioned that fees would cover charges like photocopy services. ATL explained that WMO resolution 40 states that fees can be charged for services but not for the data itself (which has already been funded by government and ultimately by the taxpayers). Tahani added that SIMS would not be charging for forecasts.

SIMS is having problems getting its Internet connection approved. They still have the Website in place but need to enable users to access it. ATL mentioned that, in the interim, the forecast information from SIMS (using SCOPIC) could be sent to her to be placed on the PI-CPP Website.

RANET presentation generated lot of interest among the participants especially from the NDMO. They requested Iroi to brief the National Disaster Council about the RANET during their next meeting. Though RANET is not currently available and Solomon Islands is not part of the Pacific RANET project, there is definitely lot interest (and need) there to have such a service in place.

There was a major concern about the low level of priority by the Solomon Islands Government for SIMS. It was noted that there should be some form of pressure from the committee to the government. SIMS plays a very important role for the country and there would be some serious consequences if SIMS fails to provide correct information. One of the participants suggested a formation of a “pressure group” which should include fisheries, agriculture and other sectors. He also suggested there should be a national stakeholder workshop/meeting so as to enhance communication and linkages between the sectors. He emphasised that there is an ongoing need for such meetings.

NDMO has started working with the government officials especially with the provincial secretaries. They (the provincial secretaries) have undergone some disaster-related training including meteorology and geology. At provincial level, disaster coordinators have had some training. There is lot of support from other NGOC such as Red Cross, and World Vision. NDMO is currently in the process of coordinating all disaster-related training to avoid duplication, as there are limited resources. NDMO requested SIMS to work closely with the National Disaster Council (which includes most of the permanent secretaries including senior officers from Finance and Foreign Affairs) who has large influence on the government. It was noted that the former Director of SIMS was coopted onto the Council. The NDMO is now stressing preparedness and that is why these SCFs are very important and useful. There was a suggestion that the National Disaster Council could take the lead in ensuring that workshops are held for users, but a concern was raised in this regards that many of the members (permanent secretaries) of the National Disaster Council are political appointees of the current government.

It was noted that this is the first meeting of its kind between SIMS and users and it should continue in the future.

It was further noted that if the government knows the value of the data, they will be prepared to increase funding. If the costs /benefits can put it in economic terms and savings can be identified, then politicians are more likely to respond.

There was a suggestion that to ensure that SCOPIC is performing effectively, some of the participants should evaluate the software. ATL said that there will be a meeting of NMS Directors in a year or so and that, prior to the meeting, they will need to get user feedback. In the meantime, there is a need for users to provide feedback via SIMS to the Bureau. Also, when SCOPIC is updated, SIMS will be provided with the latest version.

It was noted that it is the first time that Solomon Islands has software which is useful for water, energy and other sectors. ATL suggested that in order to get started SIMS could issue a summary through the newspaper each month. Iroi agreed this could be done and added that the information can be disseminated directly to provincial offices.

Once again, lot of interesting decisions were made in response to the forecasts during the Forecasting and Decision-Making exercise. The project team noted that the level of the participants’ responses were higher than the previous workshop in Vanuatu. They required less assistance from the project team to get them started.

## **Recommendations Made**

- SIMS to hold workshops for all provinces especially during the onset of El Niño events.
- There is a need for close collaboration between the users and the SIMS such as national stakeholder workshop/meeting in order to enhance communication and linkages between the sectors.
- SIMS and the agricultural department to undertake collaborative studies on climate impacts on crops eg vanilla.
- SIMS to simplify climate information to a level that will be understood by the general public.
- SIMS to spend some time with the local media explaining the weather/climate terminology.
- SIMS to revive the observing stations in Taro Island so that forecast for Choisel can be issued.
- NDMO and SIMS to prepare a checklist explaining droughts and wet conditions in relation to ENSO that will assist the general public in advising themselves.
- SIMS and NDMO to draw up a checklist for droughts and extreme wet conditions that will assist them in advising people on what climatic conditions to expect.
- SIMS should organise more meetings for government officials so that they would better understanding about the value of the information.
- SIMS to get their Internet connection established as soon as possible as there is a need for the users to access the climate outlooks.
- Project manager should present certificate of attendance to all participations.
- The interest generated during the workshop on climate information should be encouraged by further workshops and awareness programmes by SIMS.
- All local presentations should be made available to all participants.
- More time should be allocated to group exercise.
- There should be follow-up workshops.

## **Additional Comments**

During the closure Iroi thanked the ATL, the training team and AusAID on behalf of SIMS for the training workshop. He mentioned it has been a very exciting few days. He thanked all those from other agencies and the provinces. He reminded all that this was a starting point and that he hopes to proceed from here. The project team thanked everyone for their attendance and contributions. Eleanor Pitakaji was present at the recommendation session.

Jonathan Taisa (Western province) gave a big thank you to the team for their presentations and contributions, on behalf of those from the provinces. He said that the workshop was very important for the country.

Once again, Falkland took the opportunity to talk to the participants from the local water authority in regards to the pilot project. He managed to acquire some digitised data and make contact with the relevant people.

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**EVALUATION REPORT**

*Stakeholders Workshop on Application of Climate Predictions (Solomon Islands)*

Introduction

An evaluation was done for the 3-day workshop held at the CEMA Conference Room, Honiara from 9<sup>th</sup> to 11<sup>th</sup> February 2005. The main purpose was to ensure that the objectives of the workshop were met and to measure the success of the project.

Evaluation Form

The form consisted of eight sections with rating ranging from strongly agree (5) to strongly disagree (1). The five workshop sessions and training handout were evaluated with an overall assessment.

The workshop sessions were:

- Climate System, its Behaviour and Consequence;
- Seasonal Climate Forecasting;
- Managing Climate Risks;
- The Forecasting and Decision Making Exercise; and
- Climate Outlook Forum.

The participants were asked to rate the above sessions by its contents (its usefulness and relevance), time allocation, the structure of the presentations, and its effectiveness. The contents and the amount of materials provided in the handouts were rated.

Participants also had a chance to comment on each presenter: how well the presenter do and how could he/she improve.

Finally, there was a section on overall assessment: most valuable aspect; least valuable aspect, venue, entire workshop and any additional comments.

Results

Twenty-eight people registered on the first day of the workshop but the number dropped slightly from the next day. The following results are summarised from 23 forms.

The average rating for each workshop session ranged from 4.3 to 4.5 (out of 5). The lowest rating was given to “*the time allocation*” for every session (as low as 3.5). The highest average rating of 4.9 was given to “*I would recommend others to attend sessions like CFO (climate outlook forum) if it is held on regular basis*”. Training handouts also scored an average of 4.5. The participants rated the three presenters from *fair* to *excellent*.

Though COF scored the highest rating, most participants found the *Forecasting and Decision Making Exercise* as the most valuable aspect of the workshop. There was no session that was rated as least valuable but there were few general comments: 4 participants found presentations too scientific.

The overall rating:

Venue: Excellent (1); very good (5); good (7); fair (6) and poor (1).  
Workshop: Excellent (8); very good (7), good (4) and fair (1).

### Some notable comments/recommendations made by the participants:

- Next workshop emphasis gender balance.
- Follow-up workshops.
- Use more local case studies.
- Looking forward to continue the partnership with SIMS and to access the SCOPIC data information for our organisation
- A very good workshop which gave me more valuable information concerning weather/climate forecasts for planning and preparedness for times of disasters.
- Tea breaks to be shorten by 10 minutes to give more time to SIMS for their presentations.
- It has opened up my eyes and understanding of the importance of weather and weather forecasting for lot of uses. There is a need for more collaboration with the local NMS and stakeholders.
- All workshop materials must be made available to all participants esp. the presentations given by the SIMS. Otherwise the workshop is very good and needs to put into practical.
- This is an eye opener workshop. Given the opportunity for stakeholders to realise the potential of utilising climate prediction and the need of applying the information in decision making planning.
- There is lot of challenges ahead and we must work together to make things happen.
- A very good project that needs to succeed that can have an impact on the country's economy.
- The interest should be encouraged by further workshops and awareness in the schools.
- Janita needs to be highly commended for her organisational skills and excellent presentations.

### Further comments

The team noted that though there was some variation in qualification/skills among the participants, they had better understanding of application of climate information in decision making in their respective sector. This was noted during the FDM sessions where they required lesser assistance than the participants at the Vanuatu workshop. Like the previous workshop, project team engaged the met staff in doing several presentations to build their capacity to rely this information to the others.

All presenters had a chance to read the evaluation forms. Once again, they noted the comments/criticism (if any). The presentations (including format and contents) and their form of delivery are continually revised. Though there are a set of generic training materials, the presentations are modified (if need be) for each Pacific Island Country.

The presentations given by the SIMS were not made available to the Project Team till the first day of the workshop therefore copies were not made in advance. However, copies were printed and given to those participants who requested for them before the end of the workshop.

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**AGENDA**

**Wednesday**

Formal Opening: Chaired by the Director of Solomon Islands Meteorological Service, Mr Chanel Iroi

- 8.30            Opening Ceremony  
                  Welcome and Introduction of VIPs: Chanel Iroi  
                  Prayer: Lloyd Tahani SIMS
- 8.40            Address by Ms Stacey Greene, Australian High Commission
- 8.50            Opening address by Mr Fred Ganate, Permanent Secretary of the Ministry of Infrastructure and Development
- 9.00            Introduction to PI-CPP project and the Workshop: Janita Pahalad
- 9.15            Brief self introduction of the participants
- 9.30            *MORNING TEA*

Session Two: The Climate System, its behaviour and consequences

- 10.00           Background on the climate system including key process (small scale/large scale variability): David Jones
- 10.45           Local climatology (eg seasonal variation, ENSO teleconnections including some of the past events and tropical cyclones): Lloyd Tahani SIMS

Session Three: Seasonal Climate Forecasting

- 11.15           Seasonal climate forecasts: what makes it possible, processes, what do they tell us and their limitations: David Jones
- 11.45           Seasonal Climate Outlook for the Pacific Island Countries (SCOPIC): What user products are available?: Yahya Abawi, QDPI and Douglas SIMS
- 12:30           *LUNCH*

Session Four: Managing Climate Risks (case studies)

- 13.30           Solomon Island's case study: Chen Cheng-Chang
- 14.00           Agricultural: Yahya Abawi
- 14.45           *AFTERNOON TEA*
- 15.15           Water management: Tony Falkland
- 16.00           *END OF DAY*

## **Thursday**

### Session Five: THE FORECASTING AND DECISION-MAKING EXERCISE

- 8:30 Regional and Local Seasonal Forecast Products: what's available regionally and locally; dynamic models: David Jones
- 8.50 Briefing on F&D-M Exercise  
Presentation of 1<sup>st</sup> 3-month rainfall outlook and ENSO outlook  
Group session  
Presentation "what actually happened"  
Brief report from each group
- 10.30 *MORNING TEA*
- 11.00 Presentation of 2<sup>nd</sup> 3-month rainfall outlook and ENSO outlook  
Group session  
Presentation "what actually happened"  
Brief report from each group
- 12.30 *LUNCH*
- 13.30 Presentation of 3<sup>rd</sup> 3-month rainfall outlook and ENSO outlook  
Group session  
Presentation "what actually happened"  
Brief report from each group
- 15.00 *AFTERNOON TEA*
- 15.30 Lessons Learned from the F&D-M Exercise
- 16.30 *END OF DAY 2*

## **Friday**

- 8.30 Presentation on RANET: Janita Pahalad

### Session Six:

- 9.00 CLIMATE OUTLOOK FORUM  
Presentation of the following 3-month rainfall outlook: SIMS  
Round-table discussion
- 10.00 *MORNING TEA*
- 10.30 Recommendations and the next steps (Wrap-up): how to establish an effective communication channel/ service delivery channels; software modification specification.
- 12.00 *WRAP UP (followed by lunch)*

THE STAKEHOLDERS WORKSHOP ON APPLICATION OF CLIMATE  
PREDICTIONS HONIARA, SOLOMON ISLANDS

9<sup>th</sup> to 11<sup>th</sup> FEBRUARY 2005

PARTICIPANTS LIST

<b>Name</b>	<b>Addresses</b>
1. Mr. Timothy Sosimo 2. Ms. Mely Ordinario	SOLTAI Fishing and Processing Ltd, Solomon Islands, Noro, Western Province
3. Mr. Patrick Daudau	Curriculum Development Centre, Ministry of Education and Human Resource Development (MEHRD), Honiara
4. Mr. Bartholomew Basia	Solomon Islands Broadcasting Corporation (SIBC), Honiara
5. Mr. Chen. Cheng-Chang	Technical Mission of Taiwan – KGVI Farm, Honiara.
6. Mr. Ray Anderson	Solomon Islands Waters Authority (SIWA), Honiara
7. Mr. Boby Ridol	Search and Rescue Unit, Marine Division, Ministry of Infrastructure Development, Honiara
8. Mr. Fred Talo	National Disaster Management Office, Honiara
9. Mr. Michael Ho'ota	Ministry of Agriculture and Livestock, Honiara
10. Mr. Luke Honiola 11. Mr. Albino Bobogare	Vector Borne Disease Control Program, SIMTRI, Honiara
12. Mr. Isaac Lekelalu	Water Resources Division, Department of Mines & Energy, Ministry of Natural Resources, Honiara
13. Mr. Rex Tara	Red Cross, Honiara
14. Mr. John Mark Lokumana	Planning Division, Isabel Provincial Government, ISABEL PROVINCE.
15. Mr. Andrew Nanauoha	Disaster Coordinator, Makira Ulawa Provincial Assembly, Kirakira, Makira Province.
16. Mr. Willy Tuita	Agriculture Division, Ministry of Agriculture and Livestock. Auki, Malaita Province.
17. Mr. George West	Planning Division, Temotu Provincial Government, Lata, Temotu Province.
18. Mr. Jonathan Taisa	Disaster Coordinator, Western Province Disaster Council.
19. Mr Benjamin Billy	Rural Water Supply and Sanitation, Environmental Health Division, Ministry Health & Medical Services, Honiara.
20. Mr. Chanel Iroi	Director, Meteorological Service, Honiara
21. Mr. Freddy Ferah	Chief Forecaster, Meteorological Service, Honiara
22. Mr. Festus Ahikau	Chief Meteorological Officer - Climatology, Meteorological Service, Honiara.
23. Mr. Douglas Yee	Principal Climate Officer, Meteorological Service, Honiara.
24. Mr. Lloyd Tahani	Principal Meteorological Officer – Climatology, Honiara.
25. Mr Noel Sainao	Principal Training Officer, Meteorological Officer, Honiara.
26. Mr Shadrack Tobani	Vector Borne Disease Control Program, SIMTRI, Ministry Health & Medical Services, Honiara
27 Mr Lawrence Nodua	World Vision, Honiara
28 Mr Kenneth Bulehite	International Waters Program (Coastal Fisheries), Ministry of Natural Resources, Honiara