



SOLOMON ISLANDS GOVERNMENT

Ministry of Environment, Conservation and Meteorology

Media Release

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Climate forecasting helps to predict malaria outbreaks

The Solomon Islands Meteorological Service held a one day workshop today with a number of stakeholders to communicate findings from the Pacific Islands Climate Prediction Project which show that new climate forecasting software can help predict outbreaks of malaria.

Funded by AusAID and implemented by the Australian Bureau of Meteorology and a team at the University of Southern Queensland, the project has been building the capacity of the meteorological services of nine Pacific island countries in climate forecasting by introducing country specific climate prediction software.

Dr Yahya Abawi, the Project Manager visiting from Australia for the workshop, said that the software allows meteorological staff to analyze the relationship between key climate drivers and climate related events and to forecast climate variability based on this.

The second phase of the project has been to study the impact of climate on various sectors such as agriculture, water and renewable energy. The pilot project in the Solomon Islands has been focusing on the link between climate forecasting and malaria.

Dr Abawi said connecting all the data is like putting together a jigsaw puzzle which has the potential to help combat a serious disease.

“The main aim of this project was to discover whether malaria instances in the Solomon Islands are related to climate variability and to determine if such a relationship can be used as an early warning system for predicting seasons with a high risk of malaria,” Dr Abawi said.

“Government authorities will be able to use this information to take proactive measures in terms of control rather than waiting until the epidemic develops before addressing the situation.”

Through analyzing data from the Ministry of Health which detailed the confirmed cases of malaria, with data produced through the new climate prediction software concerning rainfall and temperature, the team was able to determine that higher rainfall and warmer weather leads to increased instances of malaria.

“You need a rainy season for the spike in cases but we found that too much rain has the opposite effect and reduces the instance of malaria,” Dr Abawi said.

“In Honiara the topography is very mountainous with steep ridges and when it rains heavily the mosquito breeding grounds are flushed out.”

This means that while malaria is more prevalent during the wet season, the results show that when an El Nino season occurs and there is less rainfall there is also a heightened rate of malaria.

The ability to predict an El Nino season using the new software means that the country can prepare for a higher than average number of malaria cases during that wet season.

Ms. Jennifer Mitini, Director Supervising of National Health Training and Research attended the workshop today with other colleagues and said she is looking forward to working with the Meteorological Services to implement the findings of the pilot project.

“This research has answered one of the burning questions we have really tried to answer in the past but we didn’t get results as comprehensive as this,” she said.

“This has given us different tests that really show us that almost 50% of malaria instances are related to climatic events.

“The most important next step is for us to start working with the Meteorological Services to use the information they collect to help guide us in our control actions, planning and management of malaria cases”.

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Media contact:
David Hirasia
Acting Director
Solomon Islands Meteorological Service.
Ph: 20332