

The Cook Islands planning to get more cyclone savvy



Photo: Cook Islands News

Coastal infrastructure in Rarotonga, such as the iconic bar Trader Jacks, is at the frontline of storm surge and destructive waves during cyclones.

AUSTRALIAN GOVERNMENT-FUNDED research is helping the Cook Islands understand how to adapt its infrastructure and plan for more intense cyclones and extreme weather.

During the last 15 years, the Cook Islands has experienced more intense storms where flooding and wave surge have severely damaged coastal infrastructure.

Most notable was an unprecedented five cyclones within as many weeks in February and March 2005. Three of the five reached Category Five status (wind speeds in excess of 200 km/h) and caused NZ\$20 million damage across the nation's southern group of islands.

Matt Blacka, a coastal engineer for the Water Research Laboratory in Sydney, is leading research in the Cook Islands to calculate the impact that more extreme storm events will have on the capital town of Avarua.

He says that implementing large-scale protection measures has challenges.

'Practical strategies, such as understanding the hazards and improving the planning and design of future development, accommodate the risks from extreme events', he says.

'Our research work will provide hazard mapping for most of the north coast of Avarua, identifying areas of [vulnerable] land.'

Measuring the risk to infrastructure

Avarua lies on the north coast of the main island of Rarotonga and is the centre for tourism, government and trade.

Over 110 000 tourists pass through its international airport each year and



Photo: Econnect Communication

Managing risk

Matt Blacka, coastal engineer for the Water Research Laboratory, says the new flood hazard maps will allow government agencies to better manage the associated risks of major cyclones.



Photo: Econnect Communication

Reviewing building codes

Timoti Tangiruaine, urban and rural planner for the Ministry of Infrastructure and Planning, says that the new maps will help with reviewing building codes.



More information

The Australian Government funded research into climate change and institutional adaptation in the Cook Islands as part of Australia's

(PASAP).

For further information on the Cook Islands institutional strengthening or other PASAP projects, go to www.tiny.cc/t5axxw or contact InternationalAdaptation@climatechange.gov.au