

NIWA International

Overseas, NIWA provides research and consulting services of a similar nature to those it provides in New Zealand. These range from fisheries strategies for Iran and Chile to assistance with climate, water resources and quality, and natural hazard issues and capacity building in the Asia-Pacific region. We also have subsidiaries in Australia and the US to facilitate our work there.

Reducing cyclone damage to the Tokelau atolls

Tropical cyclone Percy, a category 3 to 4 cyclone, caused widespread damage to the atolls of Tokelau on 25 February 2005. Particularly hard hit were Fakaofu and Nukunonu, with storm surge and large waves causing significant flooding on both atolls.

In the aftermath of Percy, the UN Development Programme in Samoa commissioned NIWA to provide technical support to the Government and people of Tokelau to help reduce both the impacts of future cyclone-related inundation and also adapt to longer-term issues, such as climate change.

In collaboration with each community, we developed a variety of short- to long-term risk reduction activities incorporating a wide range of social and environmental objectives. We also looked at incorporating risk reduction considerations within the decision-making processes at all levels – individual, community, and national. Adopting a proactive and strategic approach results in more resilient communities and is a far more cost-effective strategy than managing disasters such as cyclones after they occur.



The extent of the inundation on Nukunonu atoll during Cyclone Percy.



Hydroelectric project a key for Laos

The almost US\$2 billion hydroelectric power project on the Nam Theun River, a tributary of the Mekong, is a key project for the economic and social development of Laos. The scheme involves diverting the flow of the Nam Theun River from the Nakai Plateau down to the Xe Bang Fai River.

NIWA Australia is supervising the collection of data – extensive rainfall and stream flow measurements – required to optimise the generation capacity of the scheme. Our role is to ensure the high quality of the measurements and to analyse the data on an annual basis. We are also assisting with instrumentation and telemetry of remote stations.

NIWA Australia consultant Lyod Smith and a Lao technician measuring discharge on the Nam Theun River.