



# Snapshot

## Climate Resilient Tonga professional development program

### Summary

Tonga is extremely vulnerable to the adverse effects of climate change and disasters because of its geographical, geological and socio-economic features. Its Government commissioned the delivery of training on climate change adaptation and disaster risk reduction for Tongan Government staff. The practical training, accredited by TAFE NSW (Technical and Further Education New South Wales, a leading provider of vocational education and training), was delivered in Tonga by an Australian team consisting of experts from the private, government and university sectors. The program covered international institutions, climate projections for the South Pacific, frameworks for climate change adaptation and resilience, communications and community engagement strategies, approaches to national environmental accounting, emergency management and disaster preparedness.

### Background

Tonga has experienced changes in weather patterns, particularly an increasing trend in the occurrences of tropical cyclones, since the early 1980s. Now changing rainfall patterns and other climatic factors, for example rising temperatures and sea-levels, are being experienced all over Tonga, with the potential to increase Tonga's exposure to climatic conditions, as well as its existing exposure to geological hazards. Addressing this increased risk is challenged by uncertainty in climate projections and a lack of data.

As a small island developing state without the economic resources of larger countries, Tonga is vulnerable to climate change impacts and relies on foreign aid donors to build its response capacity. In 2015 the Tongan Government obtained a grant from the Asian Development Bank with the objective of increasing resilience in economic, social, and natural ecosystems to climate variability, change and disaster risk in Tonga. Allowance was made for technical training of government staff on climate change adaptation and disaster risk reduction.

### Keywords

Disaster risk reduction, climate change adaptation, accredited training, small island developing state, capacity building

## Delivering the professional development program

The Government awarded the contract to Sustainably Pty Ltd, an Australian company specialising in professional development in climate change adaptation, to deliver accredited training of government staff addressing:

- international sustainability issues and institutions
- climate science and current projections for the South Pacific
- approaches to developing national environmental accounts for Tonga
- current frameworks for climate change adaptation and resilience in policy and practice
- approaches to performance monitoring and evaluation of environmental programs
- communication of adaptation action and community engagement strategies
- emergency risk management and disaster preparedness.

A training needs assessment informed the design of the program and staff from across the Tongan Government were recruited from frontline agencies, such as the police, and central budget agencies. The program content was delivered in two two-week face-to-face intensives in Nuku'Alofa, Tonga, by five Australian expert trainers (see Figure 1). The meetings were facilitated by a training manager experienced in climate change adaptation education and an in-country coordinator fluent in Tongan languages and culture.



*Figure 1: Workshop participants in Nuku'Alofa, Tonga.*  
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The program focused on practical skills and applying contemporary best-practice techniques in adult education, including inquiry based, experiential, peer-directed and self-directed learning. A community of practice was further facilitated through action learning, where participants nominated and then carried out group projects contributing to their work, supported by online mentoring from the facilitators and experts – effectively using the Government as a 'living lab'. Two of the four work projects conducted during this program related to assessment of carbon footprints and two related to building national resilience to climate change.

Much of the effectiveness of the program resulted from a 'brokering' delivery model, which brought together the specialist knowledge of team members contracted from CSIRO, the Institute for Sustainable Futures and from various private sector providers. TAFE NSW accreditation of the program was supported by assessment tasks directly related to the participants' workplace.

The evaluation of the pilot program found that the project achieved the specified objectives and deliverables, in particular by allowing participants to gain an Australian qualification. It considered the participants' feedback and evaluated learning by assessing their competence and increased confidence in their knowledge and skills. Participants reported a substantial increase in their knowledge of climate change adaptation and disaster risk reduction and a substantial rise in their confidence in their skills in climate change adaptation and disaster risk reduction. Impact was demonstrated through the participants' willingness to apply their skills in their workplace through the action learning projects, and by their subsequent establishment of a voluntary 'community of practice', through which they intend to continue fostering organisational capacity.

Some of the challenges included securing time commitment by participants and a work release by their employers, as well as the logistics and resourcing commitments by the training provider.

## Lessons learned

The Climate Resilient Tonga professional development program (see Figure 2) has contributed to the enabling environment for climate change adaptation and disaster risk reduction at national and local levels. Training evaluation demonstrated that capacity within the Australian vocational education sector can address a capability gap within the Tongan Government by building the professional competence of participating staff to adapt to climate change and reduce disaster risk. Tongan learners were receptive to experiential and action-based learning approaches, and these achieved transformative outcomes (including changes in personal attitudes, behaviours and values) that underpin the formation and ongoing employment of skills in climate change adaptation and disaster risk reduction.

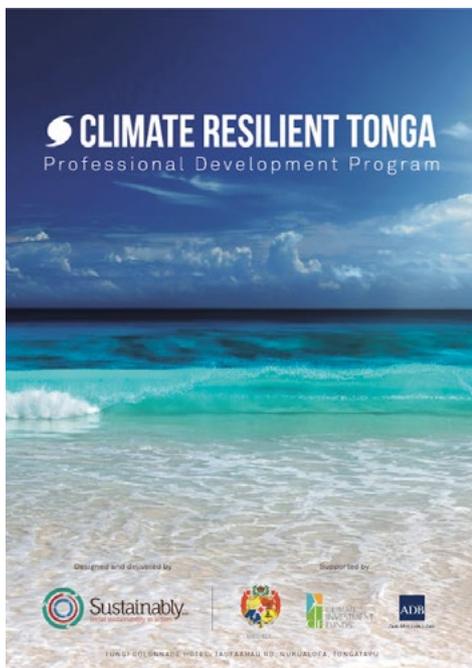


Figure 2: Climate Resilient Tonga professional development program. © Fabian Sack.

## Conclusion

An education for sustainability philosophy applied through a vocational qualification under the Australian Qualifications Framework proved to be a useful tool, and contributed to the capacity of a developing Pacific small island state to adapt to climate change and manage disaster risk. The program demonstrates that well-structured, formal vocational education can consolidate the existing skills of climate change adaptation practitioners and can contribute to supporting the resilience of governments around the Pacific to the impact of a changing climate.

## References

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## Further information

Press release by the Tongan Ministry of Information and Communications. Accessed on 20 June 2018. [Available online at: <http://mic.gov.to/news-today/press-releases/6815-short-term-training-to-enhance-participants-knowledge-on-climate-resilience>].

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**CLIMATE RESILIENT TONGA**  
Professional Development Program



**Australian Government**  
Department of the Environment and Energy