

## Consultancy to conduct coastal feasibility studies, coastal design and costing for six communities in Western Tongatapu (Hihifo)

Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start/end)	Name of partners if any
Sustainable Seas Ltd	Tonga	US\$49,500	US\$49,500 (100%)	2	Pacific Adaptation to Climate Change (PACC)	AusAid	November 2013 - Janu- ary 2014	Jan Speak

## **Detailed description of project**

Communities (Fo'ui, Ha'avakatolo, Kolovai, Ahau, Kanokupolu and Ha'atafu) that are situated on the eastern coastline of the Western Site, Tongatapu. There are uncertainties and several misconceptions in reports and stories regarding the origin of the earlier flooding and in the formation of the flooded area. The eastern coastline of the Western Site of the demonstration communities are highly susceptible to the impacts of climate change and disaster risks (sea level rise, storm surge & coastal erosion) principally because of their low topographic elevation, that is, below 2m above the mean sea level.

The Ministry of Lands, Environment, Climate Change and Natural Resources has successfully completed the preparation of its National Communication Report, 2005 and also the Tonga's Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management, 2010. Priority adaptation needs for Tonga were highlighted in these reports. Recommendations for immediate and concrete adaptation actions to be implemented on these vulnerable communities were also reflected in these reports.

The Government of Australia under its AusAID International Climate Change Adaptation Program has granted funds to increase support to the implementation of the Pacific Adaptation to Climate Change in Tonga to fast tract on-ground implementation of adaptation activities in water resources management and coastal management.

## Type of services provided

Jonathan McCue was engaged by PACC Tonga to produce two major outputs, namely a "Coastal feasibility Studies Report for Hihifo District" (involving coastal geomorphology mapping; beach profiling; sediment sample analysis; determination of wave parameters and littoral current regimes; marine/land flora and faunal assemblages and coastal aquifer assessments) and a Coastal Design and Costing Report for Hihifo District (involving the design of the most appropriate coastal structures/techniques for these vulnerable communities, and coastal structure costings).

The consultancy involved designing and implementing a series of 6 community meetings (one for each village). This involved using "Community Based Vulnerability Analysis" techniques to capture social and gender related issues of important to help with the design of the most appropriate and implementable coastal action plan for all Hihifo villages.