

IPSI Case Study Summary Sheet

Basic Information

Title of case study			
Enhancing knowledge of socio-ecological production landscapes and seascapes in Vava'u, Kingdom of Tonga			
Submitting IPSI member organization(s)			
Secretariat of the Pacific Regional Environment Programme (SPREP)			
Other contributing organization(s) <i>(IPSI members and/or non-members)</i>			
International Union for Conservation of Nature (IUCN)			
Author(s) and affiliation(s)			
Stuart Chape, Secretariat of the Pacific Regional Environment Programme (SPREP); James Atherton, Environment Consultant, Apia, Samoa; Jacob Salcone, International Union for Conservation of Nature, Suva, Fiji; Amanda Wheatley, Secretariat of the Pacific Regional Environment Programme (SPREP)			
Format of case study <i>(manuscript or audiovisual)</i>	Manuscript	Language	English
Keywords <i>(3-5 key concepts included in the case study)</i>			
Vava'u, Tonga, biodiversity, socio-economic assessments, BIORAP			
Date of submission <i>(or update, if this is an update of an existing case study)</i>	22 December 2015		
Web link <i>(of the case study or lead organization if available for more information)</i>	http://www.sprep.org/publications/rapid-biodiversity-assessment-biorap-of-the-vavau-archipelago-kingdom-of-tonga		

Geographical Information

Country <i>(where site(s) or activities described in the case study are located – can be multiple, or even “global”)</i>									
Kingdom of Tonga									
Location(s) <i>(within the country or countries – leave blank if specific location(s) cannot be identified)</i>									
Vava'u Archipelago									
Longitude/latitude or Google Maps link <i>(if location is identified)</i>									
https://www.google.com/maps/@-18.5999989,-174.0175096,11z									
Ecosystem(s)									
Forest	x	Grassland		Agricultural		In-land water		Coastal	x
Dryland		Mountain		Urban/peri-urban		Other <i>(Please specify)</i>			
Socioeconomic and environmental characteristics of the area									
Surrounded by deep oceanic waters, Vava'u has a wide range of marine habitats and species, most notably its coral reefs and migrating humpback whales which are attracted by the sheltered deep lagoons. About 15,000 people live in Vava'u. 2009 Household Income and Expenditure Survey estimated 3,447 households in Vava'u.									
Description of human-nature interactions in the area									
The Vava'u Archipelago is a prime example of SEPLS where communities live closely connected to the natural environment. Dependence on the goods and services provided by marine, coastal, and terrestrial ecosystems remains high. Freshwater, timber, fish and agriculture are important for subsistence purposes and a major component of national economies, especially tuna fishing, cash crops, and commercial logging.									

Contents

Status (<i>"ongoing" or "completed"</i>)	Completed	Period (<i>MM/YY to MM/YY</i>)	02/14 to 07/14
Rationale (<i>why activities or policies described, or information shared in the case study are needed</i>)			
This paper focuses on the project work undertaken in Vava'u to establish the ecological and socio-economic knowledge base essential for determining the best options for long term conservation, management and development of this important area.			
Objectives (<i>goals of activities or policies described, or of producing the case study</i>)			
To provide a basis for medium to long term decision making by the people of Vava'u and the Government of Tonga to improve the environmental management of land and seascapes for the benefit of local and national economies and for biodiversity. It is intended that the approach will be replicated in other Pacific island countries.			
Activities and/or practices employed			
1) The Biological Rapid Assessment Programme (BioRAP) involved assessments of land and sea birds, bats, plants, reptiles, land snails and insects while the marine survey included assessments of coral reef fish and commercial fish, corals and other marine invertebrates, sea turtles and cetaceans. 2) The socio-economic assessment analyzed household activities, subsistence and monetary, and quantified the magnitude of key ecosystem services in the Vava'u group.			
Results			
The surveys have greatly enhanced the knowledge base for sustainably managing the land and seascape of the Vava'u archipelago, confirming the value and linkages between natural ecosystems and the livelihoods and economic development of local people and the country as a whole.			
Lessons learned (<i>factors in success or failure, challenges and opportunities</i>)			
Both the biological and economic surveys have provided invaluable information that has substantially increased the level of environmental and socio-economic knowledge of the Vava'u archipelago, which can be applied to improve policy decisions and management interventions of this important land and seascape where the livelihoods of the local people are dependent on ecosystem services.			
Key messages			
A set of convergent recommendations emerged from these complementary assessments that can be applied not only to Vava'u, but also similar tropical island land and seascapes: • Develop socio-economic and ecological information gathering methods together, to meet joint objectives • Conserve sites of significant conservation value • Recognize community dependence upon natural areas for horticulture and animal husbandry and value of agroecosystems • Improve conservation of threatened species • Improve management and use of marine resources, including by implementing marine spatial planning processes • Manage threats to key sites from invasive species • Raise public awareness on conservation and linked economic values of the Vava'u Archipelago • Raise awareness on and enforce existing environmental laws • Improve knowledge of the ecology and biodiversity of the Vava'u Islands • Ensure ecotourism, including whale watching, is managed sustainably • Reduce runoff, pollution and sedimentation • Establish environmental quality monitoring systems			
Relationship to other IPSI activities (<i>if the case study is related to any other IPSI collaborative activities, case studies, etc.</i>)			
This case study originally appeared in the Satoyama Initiative Thematic Review v. 1.			
Funding (<i>any relevant information about funding of activities or projects described in the case study</i>)			
The BioRAP was coordinated by SPREP, the Vava'u Environmental Protection Association (VEPA), the Waitt Foundation (which provided a ship for the marine survey work) and the then Tongan Ministry of Lands, Environment, Climate Change and Natural Resources (MLECCNR). Staff from the Ministry of Agriculture, Food, Forestry and Fisheries (MAFFF) also participated in the survey. Specialist support was provided by scientists from BirdLife International, the New Zealand Department of Conservation, and the United States Geological Survey. The socio-economic assessment was commissioned by SPREP and funded by the Australian International Climate Change Initiative component implemented by SPREP. The implementation of the survey falls under the umbrella of the MACBIO project, a five-year regional project funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety to support and strengthen conservation and management of marine and coastal biodiversity through economics, marine spatial planning, and protected area policy. The Vava'u Environmental Protection Association (VEPA) was a key partner in the assessment.			

Contributions to Global Agendas

CBD Aichi Biodiversity Targets (<https://www.cbd.int/sp/targets/>)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the “direct” or “indirect” contributions to the CBD’s Aichi Biodiversity Targets respectively to which the work described in this case study contributes to.

Strategic Goal A				Strategic Goal B					
■	■		■		■	■		■	■
Strategic Goal C			Strategic Goal D			Strategic Goal E			
●	●		■					●	

UN Sustainable Development Goals (SDGs) (<https://sustainabledevelopment.un.org/sdgs>)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the “direct” or “indirect” contributions to the SDGs respectively to which the work described in this case study contributes to.

	■						■	
		■		■	■			