Ocean Accounts Samoa
A Study on Sustainable Tourism, the Environment and the Ocean

Samoa is a Small Island Developing State in the middle of the Pacific Ocean. Its land area is 2,820 km², and it has an exclusive economic zone of 98,500 km², the smallest in the Pacific.

Why ocean accounts?
Ocean accounts help policy makers to make better decisions about how to manage marine ecosystems and resources. The tourism industry is of strategic importance to Samoa and the ocean is vital to the success of the tourism industry in Samoa.

The importance of considering the environment when planning sustainable development of the tourism industry is paramount. To this end, assessing the impact of tourism on water and energy usage, waste generation, and land and marine space and ecosystems use is vital.

Activities and analysis
The study was led by the Ministry of Natural Resources and Environment, with the Samoa Tourism Authority and Samoa Bureau of Statistics.

Satellite accounts were developed and then used to analyse the impact on and use of resources by the tourism industry.

The first experimental tourism accounts were built, and the tourism product ratio (the proportion of an industry's output that is consumed by tourists) and the tourism industry ratio (the ratio of tourism sales to total industry sales) were calculated.

These ratios link the water and energy accounts to water and energy accounts, so that estimates of tourism usage of water and energy could be produced.

The total value of water used in 2017 was combined with the tourism industry ratio to estimate the tourism industry usage of water resources.

Similarly, the electricity sub accounts for 2018 were used to estimate the 2018 electrical sales attributable to the tourism industry.

Research focus
The objective of this pilot was to develop tourism satellite accounts as a step towards assessing the full economic impact of tourism.

The pilot looked at the linkages between the tourism satellite accounts and National Accounts, and the linkages to Water and Energy Accounts.

This information helps policy makers and planners to consider the broader impacts and trade-offs of different policies thus, facilitating the sustainable planning and development of the tourism industry.

An extension to the initial pilot focuses on land-based pollution and the link between waste generated by tourism and the impact on the ocean.
Major findings and results

The majority of accommodation, food and beverage and air transport services in Samoa are focused on tourism. However, the percentage of water used by the tourism sector was 11.5% in 2017 and the electricity sales to the tourism industry were 10.1% in 2018.

Summary of findings

- Tourism accounts for the majority of accommodation, food and beverage, and air transport services in Samoa.
- However, only 10% of the total electricity sales are attributed to the tourism industry; and
- Only 11% of the total water usage is attributed to the tourism industry.

Challenges and considerations

There were major data gaps, especially in relation to waste accounts and energy accounts.

Data sharing among institutions was limited, which increased the difficulty in data access and availability; and recoding of administrative data was required.

The limited duration of the pilot prevented the ability to develop full tourism satellite accounts and establish linkages with other accounts.

Extension to initial pilot

Following the initial Samoa Ocean Accounts Pilot study, an extension was conducted to further improve the applications of ocean accounts for national ocean policy and governance. The extension focused on land-based pollution: starting with solid waste and its impact on the ocean.

Draft Waste Accounts for Samoa were built and then used to measure the total waste generated in Samoa. This included an estimate of waste generated by tourism and non-tourism sectors, import and export of waste by product and estimates of the amount and location of waste that ends up in the ocean.

Next steps

With further research, the pilot tourism satellite accounts could be further developed into complete tourism accounts. On a larger scale, complete ocean accounts could be developed by building on the experience of the pilot and the extension.

Further Reading and Contact Details

For more information, please contact ESCAP Statistics Division - telephone number+66 2288 1234, or visit our resource platform on Environment Statistics via the QR code link.