

Whale Watching Tourism in the Kingdom of Tonga

Preliminary Report for the Pacific Islands Forum
October 2007



A report for the International Fund for Animal Welfare
and Opérations Cétacés



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Introduction:

Humpback whales, *Megaptera novaeangliae*, have long visited the islands in the Kingdom of Tonga on their seasonal cycle of migration to and from their feeding grounds in Antarctica. The Kingdom is an important breeding ground for these whales, despite many years of hunting of whales. Hunting was banned by royal decree in 1978 and protection of all marine mammals is embodied in the Tongan Fisheries Conservation and Management Act 1993. Since the early 1990s, tourism operators have been taking people to see these whales close up in their natural environment, particularly in the protected waters of the northern Vava'u Island group.

The International Fund for Animal Welfare (IFAW) and Opération Cétacés¹ have commissioned this report to estimate the socioeconomic value of whale watching in the Kingdom of Tonga as at 2006. Importantly, given Tonga's position as one of the leading whale watching destinations in the region, it is hoped that this work can assist other emerging whale watch regions to learn valuable lessons from the Tongan experience.

The following is a preliminary report summarising the key findings from the research for release at the Pacific Islands Forum, October 2007. The full report is due to be finalised following discussion with the Government of Tonga and Tongan whale watching operators. It will include the comprehensive analysis behind the following findings.

Research methods

The research for this report was undertaken as a combination of desktop study and a period of in-country research. The desktop study included direct contact with key stakeholders, literature reviews, and discussions with Tongan whale watch operators. The in-country research took place in March 2007 with time spent in both Nuku'alofa and Vava'u. The regions of Ha'apai and 'Eua were not visited due to time constraints. Interviews were held with four government ministries, seven operators and two local organisations. Other discussions were held with local stakeholders including guesthouse owners, hoteliers, restaurateurs, local handicraft makers, cafes, internet cafes and taxi operators for a broader impression of the socioeconomic impact of the industry. In total, formal interviews and informal discussions were held with approximately 24 stakeholders.

Summary of Key Findings:

Whale watching in Tonga continues to contribute strongly to the country's economy, with whales clearly an iconic species for the nation's tourism industry. In 2006, there were more than 9,800 whale watch participants in Tonga, representing annual average growth of 20% since 1998. These whale watchers generated a total estimated expenditure of Tongan Pa'anga (TOP) 3.82 million (USD 1.89 million)².

Key findings are presented below:

Growth in the number of whale watchers in Tonga

- Using data gathered from interviews with operators, along with the data provided by the Tongan Visitors Bureau, there were an estimated 9,804 participants on whale watch tours in the 2006 season

¹ IFAW, see: <http://www.ifaw.org>. Opération Cétacés, see: <http://operationcetaces.lagoon.nc>

² Exchange rates are as of April 2007, where TOP 1 = USD 0.495; USD 1 = TOP 2.02, according to the National Reserve Bank of Tonga.

across the country (see Table 1), 92% of which were undertaken in the main whale watching region of Vava'u.

- This number of whale watch tourists equates to an annual average growth rate of 20% since 1998. This compares strongly against the annual average growth of visitor arrivals to Tonga (by air) of 4.05% between 2000 and 2005.
- It is important to note that repeat whale watchers undertaking multiple trips during their stay in Tonga are the drivers of this growth. Our findings indicated that approximately 3,200 individuals visited Tonga in 2006 to whale watch. On average, whale watchers undertake three trips during their stay.
- It is assumed that this rate of growth is approaching a plateau at around 3,200 visiting whale watch tourists annually. Growth is now being generated from repeat whale watch episodes, with tourism expenditure growth driven by increasing prices of whale watching participation.

Table 1. Growth in the number of commercial whale watching trips undertaken in Tonga

Year:	Whale Watch Operators:	Whale Watchers:	Average Annual Growth Rate ³ (%)
1994	2 ⁴	200	
1998	5	2,334 ⁵	103
2006	14	9,804	20

Growth in the revenue generated by whale watching in Tonga

- Direct expenditure⁶ on whale watching tours in Tonga is based on ticket sales. In 2006, an average whale watching ticket price in Tonga was TOP 150 (USD 74). The total direct tourism expenditure is estimated as TOP 1,515,069; USD 749,959 (see Table 2).

Table 2. Growth in whale watching expenditure and revenue in Tonga

Year:	Direct Expenditure:		Government Revenue:		Indirect Expenditure:		Total Expenditure:	
	TOP	USD	TOP	USD	TOP	USD	TOP	USD
1994		10,000		NA		NA		35,000
1998		55,000		NA		NA		422,000
2006	1,515,069	749,959	25,606	12,675	2,283,673	1,130,418	3,824,348	1,893,052

³ The average annual growth rate (AAGR) is calculated as the average of a series of growth rates that allows the data to grow steadily from the first survey period (1998) and achieve the result specified in the next survey period (2006) (the 'interpolated' period). This interpolation is based on the assumption that growth in whale watcher numbers is constant over all years between 1998 and 2006.

⁴ Reported by IFAW, and supported by whale watch operator interviews.

⁵ 1994 & 1998 figures are taken from: Hoyt, E. (2001), *Whale Watching 2001: Worldwide tourism numbers, expenditures and expanding socioeconomic benefits*, a report for IFAW – Hoyt uses figures taken from: Orams, M. (1999), *The Economic Benefits of Whale Watching in Vava'u, The Kingdom of Tonga*, Centre for Tourism Research, Massey University at Albany, New Zealand.

⁶ Expenditure in this context refers to tourism expenditure, which can also be considered as tourism operator revenues or sales. Hence the terms are used interchangeably here.

- An important part of the benefit of whale watching to the Tongan economy is the additional expenditure by tourists induced as a result of their participation in the whale watch activity. This includes, for example, accommodation, restaurants, markets, handicrafts, taxis and domestic airlines. A proportion of domestic airline ticket price is allocated only to those tourists who undertook whale watching in Vava’u and Ha’apai. International travel costs are not included. In 2006, indirect expenditure is estimated at TOP 2,283,673 (USD 1,130,418).

Table 3. Whale watching indirect expenditure in Tonga

	TOP	USD
Indirect Expenditure (excl. travel):	1,892,172	936,625
Travel Expenditure:	391,501	193,793
Total Indirect Expenditure:	2,283,673	1,130,418

- An additional area of indirect benefit to the country is the government revenue derived through taxation and administration of the industry. For the purposes of this report, we have not calculated consumption tax or fuel excise due to the variability of taxation levels on whale watch businesses according to their size, annual revenues, fuel consumption etc as well as the inaccessibility of such data. A conservative calculation of government revenue is possible through departure taxes and annual whale watch license fees. From this basis, the Tongan government earned an additional estimated TOP 25,606 (USD 12,675) in revenue due to whale watching, without taking into account income, consumption or fuel taxes.

The role of whale watching in attracting tourists to Vava’u

- Our research indicates that of majority of holiday-maker tourists visit the Vava’u island group during the whale watching season, and of these, approximately 70-80% undertake a whale watch trip during their stay. This figure therefore indicates that whales are a *key attraction* to holiday-maker tourists in Vava’u.

Employment in the whale watching industry and associated tourism sector

- The numbers of employees *directly* engaged by the whale watch industry across the country remains low at approximately 44 people – 32% foreigners and 68% Tongans – across 14 whale watch businesses in the regions of Tongatapu, ‘Eua, Ha’apai and Vava’u.
- The broader tourism industry in Tonga employs up to 11% of the country’s labour force (approximately 4,000 employees), of which many service the 3,200 whale watch tourists. Whale watching does, therefore, play a role in supporting a significant number of jobs within the Tongan economy.

Future development of the industry

- Results show that the industry may be facing some capacity constraints in the Vava’u island group that are restricting continued strong growth. These include limited number of whale viewing opportunities, seasonal limitations of hotel beds, access constraints (limited numbers of flights) and whale watch vessel capacity.
- Despite these constraints, operators report high demand for whale watch tours, with many companies being booked out well in advance of the whale watch season. In response to this high demand, the

Tongan Whale Watch Operators Association reports many operators are increasing their ticket price for the 2007 season by 50%, from TOP 150 to TOP 225. This will increase direct expenditure in the 2007 season to approximately TOP 2 million or just below USD 1 million based on 2006 figures - an increase of approximately 30% compared with 2006.

- With debate still occurring regarding the potential impact of whale watching on marine mammals, the continued development of the industry needs to be managed sustainably and responsibly to ensure the interests of both the industry and whale populations are protected.

Conclusions

- The whale watching industry continues to make an important and growing contribution to the economy of the Kingdom of Tonga.
- The industry, based around humpback whale watching, was worth close to TOP 4 million (or almost USD 2 million) to the Tongan economy in 2006.
- The contribution to the economy is likely to increase as both the numbers of in-bound tourists and the ticket price charged for whale watching trips continue to rise.
- Whale watching is a *key attraction* to holiday-maker tourists in Vava'u and, as such, makes a significant contribution to supporting the local tourism industry.

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