

Tonga

Employment

According to the Statistics Department (1999a), there are three categories of economic activity: (i) paid employment (full or part-time job), (ii) farming/fishing/handicrafts, and (iii) on leave. Taking the first two categories (only 77 were on leave, sectors unspecified), the following table summarizes the situation:

Table A2.54: Employment in Tonga, 1996

Category	Total in Tongan Economy	Total in Fisheries Sector	Men in Fisheries Sector	Women in Fisheries Sector
Paid Employment	13,318	1,067	1,039	28
Farming/Fishing/Handicrafts	16,011	940	907	33
Total	29,329	2,007	1,946	61

Source: Statistics Department (1999a).

The 940 people in the “farming/fishing/handicrafts” category represent a continuum between subsistence and commercial activity. Statistics Department (1999a) segregates this category into three components: (i) “Own consumption” [254 people], (ii) “Occasionally sell” [448], and (iii) “Regularly sell” [238 people]. If this last component is taken to be non subsistence, then it could be stated that fisheries employment in Tonga in 1996 consisted of 702 people in the subsistence sector, and 1,305 in the non subsistence sector.

The above information was from the most recent national census of Tonga (1996). The methodology is documented in the Statistics Department (1999a).

During a visit to Tonga to collect information for the present study (May 2001), some additional observations on fisheries employment were made. Using information from the fish exporters association, it was estimated that the export-oriented fisheries employ about 215 people.

Volumes and Values of Fish Harvests

The Ministry of Fisheries has no estimate of total coastal/in-shore production, only the volumes and values of the throughput of certain fish markets. Available documents giving information on fishery production and value include:

- Dalzell et al. (1996) states in the early 1990s that subsistence production was 933 mt, worth US\$1,901,208, and that the coastal commercial production was 1,429 mt, worth US\$2,806,641.
- Ryan and Stepanoff (2000) indicate that the population of Tonga has increased about 4% since the period of the Dalzell et al. (1996) estimate above.
- The Statistics Department, using household income and expenditures surveys, has determined that the value added for local market fisheries is T\$9,090,000 and for non market fisheries is T\$5,108,000. Using the value-added ratio of 0.8 and fish values in Vaikona et al. (1997), this equates to:

Non market fisheries	–	2,863 mt, worth T\$6,385,000
Local market fisheries	–	3,561 mt, worth T\$11,362,500
- The Foreign Trade Report indicates that T\$4,116,328 worth of fishery products was exported in 1999.
- The Tonga Fish Exporters Association indicates that about T\$9,000,000 (1,224 mt at T\$7.35 per kg [FOB]) of fresh chilled fish was exported by their members alone in 2000. For the purpose of this calculation, half of this is assigned to coastal fisheries (bottomfish) and half to offshore fisheries (tuna).
- Ministry of Fisheries (2001) details volumes and values of fisheries exports, including:

Aquarium fish and related products	–	T\$1,520,230
Seaweed	–	T\$108,500
- Ministry of Fisheries (1999) indicates that the locally-based offshore fleet produces 700 mt to 900 mt of fish annually.
- Gillett et al. (2001) give the following foreign catches in the Tonga zone in 1999:

Table A2.55: Estimated Offshore Foreign-based Catches in the Tonga EEZ, 1999

Fishing Nation	mt
United States of America	29
Fiji Islands	14
Taipei, China	2
Total	45

EEZ = exclusive economic zone; mt = metric ton.
 Source: Gillett et al. (2001).

Much of the above information is conflicting. Using knowledge of Tonga fisheries, a crude estimate of annual production and values for recent years is given in Table A2.56:

Table A2.56: Estimated Annual Fisheries Production of Tonga, late 1990s

Fishing Sector	Volume (mt)	Value (T\$)
Coastal Subsistence	2,863	6,385,000
Coastal Commercial ^a	4,173	17,362,500
Offshore Locally-based	800	5,880,000
Offshore Foreign-based	45	166,000
Total	7,881	29,793,500

mt = metric ton; T\$ = pa'anga.

^a Includes aquarium fish and related products (value but not volume) and seaweed.

Fishery Exports and Imports

The various estimates of fishery exports and imports are:

Table A2.57: Estimates of Fisheries Exports and Imports of Tonga, Various Sources

Source	Export (mt)	Export (value)	Import (mt)	Import (value)
FAO 1997	209	US\$1,225,000	8	US\$29,000
Reserve Bank 1997		T\$3,100,000		
Reserve Bank 1998		T\$2,400,000		
Reserve Bank 1999		T\$5,900,000		
Ministry of Fisheries 1997		T\$2,402,927		
Ministry of Fisheries 1998		T\$2,080,852		
Ministry of Fisheries 1999		T\$3,004,839		
Ministry of Fisheries 2000		T\$10,346,037		
Tonga Fish Exporters Association ^a 2000		T\$9,000,000		
Foreign Trade Report, 1999	715	T\$4,116,328	712	T\$1,356,980
FAO (2000b) average of triennium ending 1997	300		500	

FAO = Food and Agriculture Organization of the United Nations.

mt = metric ton; T\$ = pa'anga; US\$ = United States dollar.

^a Covers only the finfish exports of the seven companies belonging to the association.

The Reserve Bank and Foreign Trade Report statistics are from declared values on export documentation, where there are incentives on the part of exporters to under-report the figures. The Ministry of Fisheries data is from the permits for export of products, and these are not usually inspected by Ministry officials. The members of the exporters association are under pressure to show the importance of fish exports to the Tonga economy, as the current tax exempt status of fuel may be under jeopardy.

Statistics Department (1999) gives the total exports of the country as T\$17,312,142 in 1999. Hence, the official fishery exports that year, which amounts to T\$4,116,328, represent approximately 23.8% of all exports.

Access Fees

It is estimated that Tonga received US\$152,041 in access fees during 1999.

Levels of Marine Resource Consumption

The 1998 FAO/Australian Agency for International Development (AusAID) Fisheries Sector Review (Gillett et al. 1998) stated that:

“It is difficult to make an accurate assessment of the present level of fish intake in Tonga. Although there was a national nutrition survey in 1986, there have been no national food consumption surveys from which average fish consumption could be derived. The figures published for per capita consumption of fish range from a low of 14.0 kg/year to a high of 102.0 kg/year (implying a production of 10,000 mt). Assuming that all the production from inshore fisheries is eaten domestically, and that the best estimate of this in 1995 was 2,362 mt, then this would provide a supply of 24.2 kg/year for the 1996 population of 97,500. Integrating the 575 mt of imported canned fish gives an overall availability of 30.0 kg/year.”

Preston (2000), using 1995 FAO production import, and export statistics, indicates an “apparent per capita supply of fish” of 25.2 kg per year.

Exchange Rates

Tongan dollar or pa’anga (T\$) to the US dollar (US\$) as per ADB average-of-period rate:

- 1995 – 1.2709
- 1996 – 1.2323
- 1997 – 1.2635
- 1998 – 1.4921
- 1999 – 1.5994
- 2000 – 1.7585

