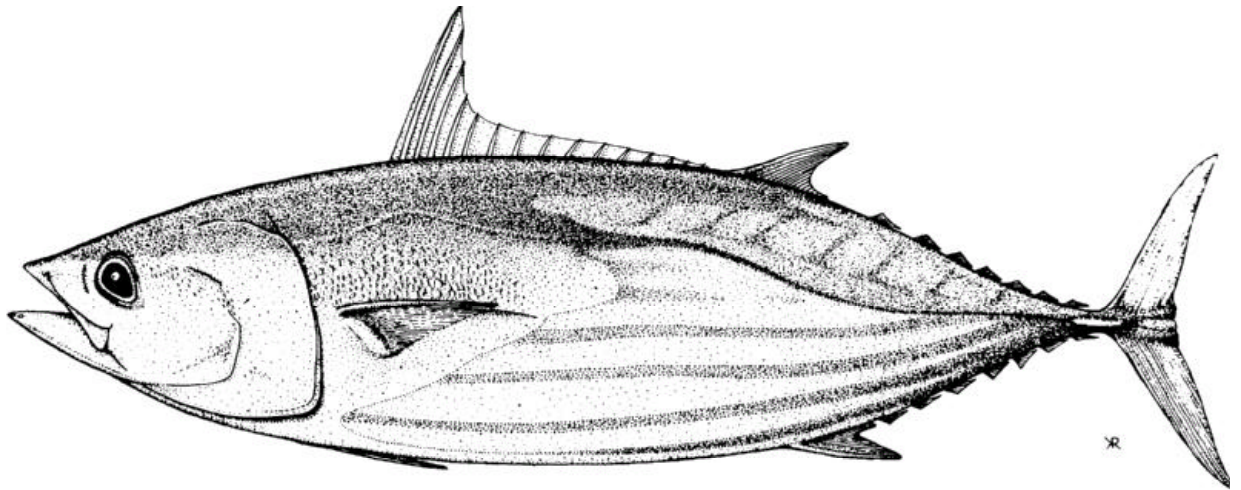


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Samoa National Tuna Fishery Report



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1. Introduction

Fisheries play an extremely important role within Samoa and a wide variety of subsistence and commercial fishing is practised. The offshore commercial fisheries, in particular the tuna longline fishery, have become increasingly important. The tuna longline fishery is now the major export earner in the country since its early beginning in 1996. Export volume and value have increased from 2092 tonnes and SAT\$14 million in 1996 to 6200 tonnes and SAT\$46 million in 2002 respectively.

The Exclusive Economic Zone of Samoa is the smallest in the Pacific and covers an area of only 120,000 sq. km. The current number of fishing vessels, 160 all sizes included, fishing within the limited sea area is of great concern to the local authority. Although there is already a Fishery Management Plan in place for the longline fleet, there seems to be a continuous push by the industry to increase the current fishing effort. The good catches, positive market behaviour as well as the readily available financial facilities are incentives that encourage the desire to increase fishing effort within the zone. However, the available onshore infrastructure is insufficient to cater for the needs of the current fleet rendering onshore activities very dangerous. There is also a pressing need to address the issue of quality control at all levels of the industry. Previous rejects from the markets are negative signs and the local authority and the industry have made valiant efforts to remedy this situation.

The catch data are collected through port sampling and log books. It is a condition of the fishing license that the fishing log is submitted to the Fisheries Division five days after the completion of each fishing trip.

The Fisheries Division has already embarked on establishing a national seafood standards program to monitor closely quality of fish and fish products that are destined for export. This program has already made progress into setting up a National Seafood Council, Industry Agreed Standards for fish and fish products, the licensing of fish processing establishments as well as national legislation and regulations to ensure full compliance by the industry.

2. Total catch for all species

The estimated tuna catches and species composition are shown in the Table 1 below. The total estimates for 1996 -2001 are based on exports and catch composition was determined from port sampling data. The total catch and species composition of the catch for 2001 were based on information from the Fisheries Division data base.

Table 1. Estimated tuna longline catch (mt) from 1996-2001

Year	Vessels Active	Longline Catch Exported	Longline Catch Not Exported	Longline Catch Rejected from Exporters	Total Tuna Longline Catch
1996	90	2092	272	105	2369
1997	170	4872	633	215	5720
1998	200	5072	609	304	5985
1999	175	4407	529	176	5112
2000	155	4505	541	225	5271
2001	149	5150	618	412	6180

3. Tuna Longline Fleet Structure and Fishing Effort

Table 2. Fleet 1996–2001

Year	Vessels Active
1996	90
1997	170
1998	200
1999	175
2000	154
2001	149

Table 3. Tuna longline fleet structure and fishing effort for 2001.

Vessel Category	No. of Boats	Av. Trips	AV set/trip	Av.hooks/set	Est catch
Class A	116	64	1.65	305	2376611
Class B	14	65	1.93	375	428098
Class C	8	38	4	1100	992195
Class D	11	30	6	1450	2383096

Class A : less than 10 meters

Class B : 10 to 12.5 meters

Class C : 12.5 to 15 meters

Class D : greater than 15 meters

4. Tuna Longline Species Composition for the Year 2001

Table 4. Tuna Longline Species Composition for the Year 2001

Species	Catch(kg) Class A	Catch(kg) Class B	Catch(kg) Class C	Catch(kg) Class D	Total	%
Albacore	1338031(56)	233741(55)	754068(76)	1882645(79)		
Yellowfin	152103(6)	25258(6)	56555(6)	119155(9)		
Big eye	64168(3)	12415(3)	22820(2)	69109(3)		
By-Catch	774775(33)	156683(37)	158751(16)	3121,85(13)		

Table 5. Total Fishing Catch and Effort For 2001

Fleet	149
Hooks	8610380
Catch	6180000
CPUE	72 kg/100 hooks

Table 6. CPUEs for individual vessel class

Vessel Class	CPUE
Class A	63.6 kg/100 hooks
Class B	65kg/100 hooks
Class C	73.8kg/100 hooks
Class D	83.kg/100 hooks

Note: catch and effort results for 2001 based upon export data provided by the two canneries and air freight companies, log sheets data from fishing vessels in Class D and C, port sampling data, visual census surveys, and information provided by boat owners and exporters.

5. Market Destination of Catches/Disposal of Catch/ Value of Exports

Sources of information for tuna exports consisted of a compilation of data collected from the two canneries in Pago Pago, American Samoa, the two major airlines exporting fresh chilled longline catches, Air New Zealand and Polynesian Airline.

Table 5. Tuna exports from Samoa 1996-2001

Estimated value of tuna longline exports from 1996-2001 Samoan tala (SAT)

Longline exports (tonnes)	1996	1997	1998	1999	2000	2001
VSC Sampac cannery	1150	2800	3400	2270	2926	3295
Star Kist cannery	370	1500	1100	1100	398	753
Air freight	572	572	572	1037	1181	1102
Total tonnes	2092	4872	5072	4407	4505	5150
Foreign revenue from exports (SAT)	13,844,400	27,476,400	29,581,400	27,531,400	38,971,000	45,788,000

Note: Calculations for foreign revenue earnings based on the above

Value of the longline catch was based on the average price of frozen tuna at the two canneries in American Samoa of SAT 4900 per tonne from 1996 to 1997, SAT 5150 in 1998, SAT 5400 in 1999, 6700 in 2000 and 7500 in 2001. The average price in 1998 and 1999 for frozen albacore at the canneries was calculated according to the drop in price to USD 1400 per tonne in the latter part of 1998 and the first 3 months of 1999. Interviews with the exporters indicated that the average price for fresh chilled tuna and other species exported via air cargo was SAT 11.20 from 1996-1998, SAT 9.00 in 1999 and SAT 14.00 in 2000 - 2001.

6. Onshore Developments

Currently, four fish processing companies export the tuna longline catch either frozen to the two canneries in American Samoa or fresh chilled to Hawaii or the mainland of the United States. The fish export companies are equipped with blast freezers, cold stores and ice making machines. As the rejection of tuna from the canneries has been a major concern, the need to increase the ice production capacity to ensure the catches are chilled properly is a priority for the industry.

Table 6. Ice production capacity from 1996-2000

Ice production (kg per 24 hours)	1996	1997	1998	1999	2000
Total ice production	6000	16000	26000	34000	42000

It is estimated that the present ice production capacity still is not sufficient to supply the entire fishing fleet with ice to chill the catches. The Fisheries Division has recently secured funds to purchase two 3 ton ice making machines that will be based in Savaii. Two fish exporting companies based in Apia will increase the ice production capacity by 16 tons per 24 hours before the end of the year.

Due to the success of the tuna longline fishery over the last five years the commercial fishing fleet has expanded from 25 active alias (catamarans) in 1994 to over 100 vessels in 2001. An estimated 70% of the entire fishing fleet is based in the Apia area. The increased number of fishing vessels has resulted in the fishermen's wharf adjacent to the Fisheries Division being congested. Congestion at the port facility has reached the point where the safety of the fishing fleet will be endangered if Samoa experiences a tropical storm similar to those in 1990 or 1991. Also, serious injuries to the crew of the fishing vessels are likely to occur when loading and unloading in such crowded conditions.

Some fishermen are forced to moor their vessels along the sea wall in front of the bus terminal and the small cove near the commercial wharf in Matautu. The Samoa Port Authority has warned that in the near future it will prohibit boat owners from mooring their fishing vessels at the commercial wharf or in the cove in Matautu.

A survey of the proposed site for the marina at the Mulinu'u Point was conducted to determine the boundaries of the site. An infrastructure plan which included 4 floating mooring pontoons, a breakwater, boat lift, cold store rooms, fuel depot, and a boat repair yard was designed by the engineering company. The estimated cost for the construction of the marina was USD\$12 million.

7. Future Developments

a. The current FMP for the longline fishery is due for review in March 2001. The current Management Plan allows for the licensing of the local fishing vessels in the following categories:

Class A: Alia fishing boats(unlimited number)

Class B: 9 - 12 meters (25 licenses)

Class C: 12 -14 meters (15 licenses)

Class D: 15 meters and over (15 licenses)

This FMP is under extreme pressure to increase the number of fishing vessels in both categories C and D.

b. Improve infrastructure: A feasibility study is already underway to evaluate the current and future needs of the industry as it continues to grow at its current rate. The big island of Savaii is favourable for the developments of onshore facilities capable of catering for large number of vessels and its central location allows for easy access by the fishing fleets from the nearby fishing zones.

c. Seafood Monitoring Authority: The current level of fish export rejects from the canneries in American Samoa causes grave concerns amongst the local authority. This prompts a number of quality control workshops carried out to teach all those involved in fish handling the best methods of maintaining good fish quality. Furthermore, a project to establish a Seafood Monitoring Authority was initiated early this year, 2001. This project is now in Phase 2, and it is mandated to establish a competent, local verification authority that is consistent with the requirements and recognized by our current trading partners(i.e.U.S) and potential partners such as EU countries.

d. Reciprocal Fishing Agreements: Neighbouring EEZs such as Tonga, Tokelau, Niue and American Samoa will be approached regarding the issue of bilateral access fishing agreements with Samoa. Informal discussions with the Kingdom of Tonga regarding the likelihood of establishing a reciprocal fishing agreement between the two neighbouring EEZs were already carved out.