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SOUTH PACIFIC COMMISSIONNINTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 24 - 28 January, 1977)

COUNTRY STATEMENT - AMERICAN SAMOAFISHERIES DEVELOPMENTS AND FUTURE PLANS

The Office of Marine Resources continued fisheries development and management activities with the local fleet and on large scale commercial levels in Fiscal Year 1976. Two major changes occurred at the end of FY 1976; 1) the Office of Marine Resources was transferred to affiliate with the American Samoa Community College, and 2) the appointment of a young Samoan, Henry S. Sesepasara, by Governor Frank Barnett to head the office.

Four major projects were undertaken in FY 1976 with primary goals of supplying fresh fish for local people and expanding employment opportunities through the fisheries industry. All these four projects are continued for FY 1977.

Commercial Fisheries Development

The 50' R/V Alofaga was fishing for ten months to conduct an economic feasibility test of a multiple-method fishing operation. Three main fishing techniques were utilized during the operation; bottom-handlining, trolling, and pole-and-line using live bait. A total of 19 bottomfishing and trolling trips were made with a total catch of 3546 lbs. This yielded about 186.6 lbs./trip or 354.6 lbs./month. A total of 50 pole-and-line fishing trips were made with a total catch of 31,285 lbs., an average of 625.7 lbs./trip or 3128.5 lbs./month.

The Alofaga also made 14 pole-and-line trips for the baitfish trials during the months of October and December 1975, and March and April 1976. A total of 7488 lbs. of tuna (skipjack & yellowfin) were caught, an average of 535 lbs./trip. The overall catch of the Alofaga for FY 1976 totaled 42,319 lbs. in 83 trips which covers about 121 fishing days.

105/77

This project is continued with major emphasis on technical assistance to the commercial fishermen. The basic plan for fisheries technical assistance is 1) determine needs in local gear technology and marketing systems; 2) identify applicable gear and suppliers, and 3) use recruited expertise to train fishermen in the proper application of new gear and techniques.

Fisheries Statistical Analysis

Twenty-one locally-owned and built fishing dories were selling their catches to the residents of American Samoa during FY 1976. During any one month an average of 5.5 dories were laid up for repairs, re-engining or re-possession by the government due to failure to make loan repayments while 15.5 were fishing. With the growing number of outlets for fresh fish, it became more and more difficult to collect catch and economic data from the fleet. However, data were collected for 485 trips during the year and an average of 6.6 dories per month. These trips resulted in a total catch of 89,092 lbs. of fish and an average of 184 lbs. per trip. Assuming equal effort and success for the entire fleet (an average of 15.5 vessels per month), the total 1976 catch is estimated at 209,231 lbs. Catches were worth an average of \$.55/lb. to the fishermen, so they grossed about \$115,077.00 in sales during the year.

Average catch per trip showed a healthy 50-pound increase during the past three years from 134 lbs. to 184 lbs. Average catch per bottom-fishing trip has progressed from 140 lbs. in FY 1974 and 139 lbs. in FY 1975 to 160 lbs. in FY 1976. Average catch per trolling trip showed a marked increase from 115 lbs. in FY 1974 to 237 lbs. in FY 1975 and then dropped back slightly in FY 1976 to 225 lbs.

Poor fishing during recent years has resulted in a decline in the number of longliners based in American Samoa and a consequent decrease in the number of vessel landings from 576 in FY 1975 to 292 in FY 1976. Collection of catch and biological data, however, continued. From the potential of 292 vessel-trips, 248 catch logs (85%) were collected and 242 albacore length samples of 50 fish each (83%) were measured. Additionally, 15 random samples of albacore were weighed and sexed.

Sportfishing Survey

A five-year sportfishing survey consisting of 135 standard trips was completed. A total of 1,098 fish weighing 12,805 lbs. and averaging 11.7 lbs. were caught. An average of 8.1 fish weighing 94.9 lbs. was caught each trip which averaged 5.8 hours in length. The largest fish caught during the past year was a "Sa'ula" (blue marlin) which was partially eaten by sharks before it was landed. Its weight was estimated to have been 477 lbs. using a formula based on length and girth.

Seasonal trends in availability were demonstrated for "Masimasi" (dolphin) and "Aku" (skipjack tuna). Most species seemed to bite best during the late afternoon and evening though "Masimasi" were more likely contacted during the middle part of the day. The data also indicated that billfish are most often encountered within five miles of shore. It was concluded that there was great potential for developing a sportfishing industry in American Samoa and that such an industry should be encouraged by the government and local businessmen.

As part of the continuing survey of American Samoa's inshore reef fishes, a total of 672 species have now been collected, cataloged and added to the reference collection at the Jean P. Haydon Museum of American Samoa. A collection of photographs of these fishes is also being assembled.

Baitfish Project

The Baitfish Project aims to raise small freshwater fish (Mexican mollies) for use in live bait tuna fishing with pole-and-line.

Improvements to the baitfish hatchery at Taputimu farm begun in FY 1975 and continued into FY 1976 with the segment goal being the production for fishing test of 200 buckets of mollies; roughly 1,500 pounds of fish. Installation of new generators by the Government of American Samoa reduced the power fluctuations to a minimum, and a new 3 h.p. pump in the well provided 65 gallons of water per minute - this greatly increased the hatchery's water supply.

The Taputimu hatchery consisted of 10 brood tanks and 3 rearing ponds. Ten more brood tanks were set up for storage of wild stock, fry holding and density experiments. The improved water supply allowed expansion of the hatchery until by January, 1976, the project consisted of the original brood tanks plus eight rearing ponds totalling 220,000 gallons. The improvements in water quality and care were reflected in continual monthly fry production increases and resulted in a total of more than 1.4 million mollies produced, about 2,000 lbs. Of these, 1,400 lbs. were used in 14 trials conducted on the vessel Alofaga as discussed above.

The baitfish trials aboard the Alofaga proved the effectiveness of the mollies in stopping the tuna schools and holding them around the boat. An experienced baitfisherman from California who observed the trials suggested that a complete commercial trial with the mollies is needed to test their economic feasibility. This requires the production of about six million fish or 14,000 lbs. of fish and contracting a commercial bait-boat from California for the trial. The Office of Marine Resources now aims to produce the required amount of bait while the Pacific Tuna Development Foundation (PTDF) is funding a commercial bait-boat from California to conduct the trial. The commercial trial is now scheduled for the end of the year, October-December 1977.
