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EXPANSION OF ALBACORE FISHING IN TONGA

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COUNTRY STATEMENT
TONGA

TUNA (ALBACORE) FISHERY IN TONGA

(1) INTRODUCTION

The Kingdom of Tonga comprises of 150 islands, of which 36 are inhabited, and is situated in the South Pacific between Latitudes of 15° and 30° South and Longitudes of 173° and 177° west. Tonga consists of three (3) main groups of islands : Tongatapu, Ha'apai and Vava'u.

The total population is approximately 100,000, of which 65,000 are concentrated on the main island of Tongatapu, where the capital Nuku'alofa is situated. The newly created Ministry of Fisheries now has overall responsibility for the management of Tonga's fisheries resources, and appropriate development of the fishing industry. Tonga has been operating longline fishing using secondhand boats donated by the government of Japan since 1967. Many fishermen have been working on these vessels, and it can be assumed that Tonga by now has a substantive resource of experienced fishermen for this type of fishing.

For reasons, this secondhand fishing vessel has never worked profitably and the government has had to heavily subsidise the operation of these vessels.

Until 1982 the Government of Tonga took delivery of its first new tuna longline vessel ("Lofa") provided under the Japanese Grant Aid Programme. Lofa has been fully operational along commercial lines, which are similar to the Japanese and Korean systems but take into account local conditions. The results obtained are impressive and certainly justify government's determination on to pursue the concept of establishing a national Deepsea Fishing Company.

2. BACKGROUND

The Tongan people have traditionally relied upon the sea as an important source of food. In planning for the future, the government recognizes the need to develop the fishing areas that exist further offshore. Under the current Sixth Five Year Development Plan (DPVI) (1991 - 1995), the government is emphasizing productive activities, including fisheries, in order to accelerate production, promote the diversification of the economy, generate new jobs, and raise overall productivity.

Government has established a newly formed public company with a majority government ownership, known as Sea Star Fishing Company Ltd (SSFCL) to own and operate the country's only tuna longliner MFV Lofa. This company, which aims at assisting the government in undertaking a high-priority development project in the fisheries, thus contributing to employment, income and foreign exchange earnings, help fishing industry and open new investment opportunities in tuna fishery and other related activities.

3. RESOURCES

The Kingdom's fishery resources are classified into:-

- inshore water fisheries comprising the shallow reefs, lagoons, reef shelf areas, reef slopes, seamounts and inshore zones up to a depth of 1,000 meters. This resources have an annual estimated sustainable yield of about 18,900 MT.
- offshore fisheries, comprising the offshore pelagic. The potential annual sustainable yield of tuna in these waters is about 48,000 MT, of which roughly 90% is albacore tuna, a premium species for the canned tuna market.

Tonga's resource is albacore, yellowfin and other tunas. The skipjack tuna season is rather short and cannot support a locally based fleet. The albacore resource within Tonga waters and waters immediately to the South of Tonga, and means by which the fish may be captures are well known. The Lofa has been fishing for the past 10 years, and has accumulated a useful amount of fishing statistics. Catch rates by the Lofa, and historical data from other fishing boats indicate that the resource level in the intended fishing grounds is sufficient to support a fishing fleet working out of Tonga.

4. FISHING GROUNDS

Tonga's waters and other rich fishing grounds surrounding it are geographically in the centre of the migratory path of the South Pacific's largest albacore resource, making this fish Tonga's principal tuna resource. Albacore found in these fishing grounds averages more than 15 kg in size per fish and is mainly caught with the longline method of fishing. For many years, Tonga's albacore resource has been mainly exploited by the only government longliner (Lofa) and about 120 - 140 foreign fishing vessels fishing inside Tongan waters without permit from Tongan Government, which has only one small patrol boats and was therefore in no position to catch illegal fishing vessels in its waters. This situation started to change during the later part of 1989 with the arrival of the first of three larger, faster and better equipped patrol boats donated by the Australian Government.

5. PRODUCTION

Tonga's fish production in 1989 was only about 6,600 MT, of which about 35% comes from its coastal fisheries and other 65% comes from offshore fisheries, involving larger demersal and pelagic species including snapper and tuna. Catch from the coastal fisheries mostly consumed locally and 80% of catch from the offshore fisheries goes to the cannery in Pagopago and Levuka, Fiji. In 1989, the country's artisanal fishing fleet consisted of about 350 canoes, 440 dinghies with outboard motors, 30 sailing boats and 40 inboard motor boats, on an overall total of about 860 vessels.

6. PAST OPERATION

(a) Vessel

A 37 meter 188-GT standard Japanese steel longliner (named the MFV/Lofa), modified and outfitted for training and research and built to Tongan specifications, was acquired in late 1981 under Japanese grant aid at value set at TS2.5 million.

(b) Management

Since 1982 the Lofa has been operated by the Ministry of Fisheries under the direction of the Lofa Management Committee. The prime purpose of the operation was to operate Lofa in such a manner in order to determine the practical economic feasibility of establishing a National Commercial Tuna Longline Fishery which will operate on the longterm either through the formation of a company.

(c) Fishing

The Lofa is targeting its fishing efforts on albacore tuna which is caught at 100 to 150 fathoms. Albacore is seasonal in Tongan waters, and seems to prefer a water temperature of about 17°C, which in its turn may relate to a surface water temperature of about 18 - 19°C. Good catch rates are experienced in areas where this water temperature occurs - at about latitude 26 - 28°S, in June to September, when about 120 - 130 kg per 100 hooks can be expected. During the summer reasonable catch levels can be achieved in Tonga waters when the surface water temperature is much higher (25 - 28°C).

(d) Markets

The canneries in American Samoa or Fiji are the immediate markets for Tonga's raw fish. Lofa carries its own fish to the cannery, which means that the boat may be away from the fishing grounds for periods of up to one month. If the cannery cannot offload (normally the period is two to four weeks). During this period, the fish concentrations will have moved, and the beginning of each trip the master has to find the concentrations again.

Lofa has landed export catches at both canneries of Levuka and Pagopago. The remaining by-catch remain at the Nuku'alofa Market for sale to public.

(e) Employment

The officer and crews are recruited on a contract basis, which is related to written conditions of employment. On joining the vessel they are required to sign ships Article of Agreement, which have been drawn up in accordance with the Tonga Merchant Shipping Act.

The crew and officer's income were made up of three amounts : a basic weekly salary, a sea allowance while out of port and share of 35% of net profits.

(f) Results

The operation of Lofa commenced on 5th February 1982 and was completed on 26 June 1991 when the Government decided to transfer of Lofa to the new fishing company, Sea Star Fishing Company Limited (SSFCL).

Lofa caught 2674 tonnes, from this catch 2179 tonnes of Tuna (catch composition ie: Albacore 76%, yellowfin 17%, Bigeye 3%, Marlin 3% and others 1%) was landed at both Levuka and Pagopago canneries. A further 495 tonnes of miscellaneous species (catch composition ie: marlin 55%, shark 14%, butterfly 6%, oil fish 4%, kingfish 20% and other 1%) were landed at Nuku'alofa for domestic consumption.

The value of export fish amounted to TS4,796,207.00 and the value of fish landed in Nuku'alofa was TS473,331.00. The total value of landing was TS5,269,538.00. In addition the crew earned a further estimated TS108,000 from sale of sharkfin in Pagopago and Nuku'alofa.

The running expenses amounted to TS4,000,722.00 (ie: local and overseas TS3,641,951.00 and insurance TS358,771.00). Total net earnings was TS1,268,816.00.

It can be seen therefore that "Lofa" is operating on a marginal profit/break even basis. However the depreciation of the vessel, return on capital investment has not been taken into account non has the cost of providing full management and administration costs.

7. CURRENT OPERATION

The Government's stated objectives for fisheries under the country's Sixth Five-Year Development Plan (DPVI) are to raise production, improve marketing and processing, and create more job opportunities. To raise production, emphasis has been placed on the exploitation of offshore pelagic fisheries with the idea of increase the number of longliner vessel.

The Government has established a new public fishing company (named the Sea Star Fishing Company Limited or SSFCL). SSFCL has been formed to serve as Executing Agency of the Project and is governed by a Board of Directors. SSFCL will coordinate closely with the Ministry of Fisheries in all relevant matters concerning the Government's role in Fisheries. The Board of Directors is the policy - making body of the new company.