

17 October 1979

ORIGINAL : ENGLISH

SOUTH PACIFIC COMMISSIONELEVENTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 5 - 10 December 1978)

COUNTRY STATEMENT - TUVALUSUMMARY

Fisheries in Tuvalu have traditionally been subsistence orientated and are at present in transition towards a more organised and commercially based industry. The major constraint regulating the rate of progress is the meagre resources at the disposal of the Fisheries Division and the fishermen of Tuvalu generally, although this is gradually changing with more input in fisheries being made by government and the various aid agencies. The Fisheries Division is making progress however, and has widened the range of its activities in the last year. Besides regular but limited fishing activity, several new projects have been initiated including a small bêche-de-mer industry ; collection of fishery statistics, and in organising fish supply on Funafuti by the building of a fish market and the creation of a fish marketing authority. Future developments planned for 1980 include a feasibility study for an aquaculture project, the establishment of a Fishermen's Loan Scheme, the placement of fish aggregating devices about the islands, and a boatbuilding project. Tuvalu declared a 200-mile fisheries zone in 1979, and in the short term hopes to collect license revenues, until such a time that it may exploit and directly profit from the 200-mile resources.

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COUNTRY STATEMENT - TUVALU

GENERAL

1. Tuvalu comprises nine coral islands with a total land area of 2,511 ha (just under 10 sq miles) and a population of 9,000 people. Five of the islands, Nanumea, Nui, Nukufetau, Funafuti and Nukulaelae are true coral atolls with a continuous eroded reef platform surrounding a central lagoon. Three of the islands, Nanumanga, Niutao and Niulakita are reef islands comprising but a single islet composed of sand and coral material thrown up by wave and wind action. The last and largest island of the group, Vaitupu is intermediate in character between an atoll and a reef island, having a virtually land-locked central lagoon. Only the lagoons of Funafuti and Nukufetau are navigable by ocean-going vessels. The islands lie in a north-west to south-east chain of approximately 330 km in length, between latitudes 5 and 11 degrees south and longitudes 170 and 180 degrees east. The islands have no true continental shelf and are surrounded by extremely deep ocean; in most cases the depth falls dramatically off to 400 - 600 fathoms or more within a mile offshore.

2. Traditionally the Tuvaluan fishery has been a subsistence one, with handlining for demersal or semi-demersal species mainly confined to lagoons or to the immediate edges of the offshore reef. Fishing for pelagic species is conducted for up to six miles offshore by canoes, or in more recent years by 14 - 15 ft wooden or aluminium skiffs powered by outboard engines.

SITUATION REPORT

3. Fisheries in Tuvalu is the responsibility of the Fisheries Division, based under the Ministry of Commerce and Natural Resources.

The Division currently is comprised of the following staff :

- |                               |   |   |
|-------------------------------|---|---|
| 1 Fisheries Officer           | - | Elisala Pita  |
| 1 Fish Processing Officer     | - | Mr Keith Machell (under UK technical assistance)                                      |
| 1 Assistant Fisheries Officer | - | (Diploma in Tropical Fisheries USP)   |
| 2 Fisheries Assistants        | - | One with SPC bêche-de-mer training experience and Fishery Cadet course in New Zealand |
| 9 Fishermen                   |   |   |

In 1978 the Division possessed only one small aluminium skiff, in 1979 the Division has three aluminium skiffs (largest 18ft). It is hoped that this shortage in fishing vessels will improve in 1980.

The current activities of the Division are as follows :

#### Bêche-de-mer programme

4. Bêche-de-mer activity commenced in May 1978, after funding by UNDP. To date, the Division has surveyed all but one of the five islands with lagoons. Only two islands Funafuti and Nukufetau have been found to possess commercially exploitable resources. Training programmes together with material assistance have been given to local fishermen on both Funafuti and Nukufetau with positive results obtained.

5. Fishermen, especially on Nukufetau are successfully producing dried bêche-de-mer (teatfish, Microthele nobilis) for sale to the Fisheries Division, which so far has exported 1 ton to the Fiji market, realising \$4,000. With the number of processors and the volume of product slowly increasing, the Division hopes to be able to export 5 to 10 tons in the coming year. It is also investigating the market prospects for exporting other species of bêche-de-mer notably prickly fish (Thelenota ananas).

#### Fishing activities

6. With the Division's limited resources, particularly with regard to boats and refrigeration equipment, the scope of the Division's fishing activities is restricted. For 1978 through to the middle of 1979, the Division only possessed one small skiff, which besides fishing was also used for bêche-de-mer surveys. While the situation has improved to the extent that it now has three aluminium skiffs at its disposal, the Division seriously requires larger boats with greater range if it is to operate economically and extend its fishing activity.

7. At present the Division's three skiffs are used for trolling and hand lining (at night) - with all the catch (6 tons from August 1978 to August 1979) sold locally. With fuel costs continually increasing the economics of operating small skiffs powered by outboards is becoming questionable, and steps such as providing trolling booms and reels on boats are being taken in an effort to increase their efficiency.

8. The Division hopes to expand its activities in 1980, when its 30 ft GRP vessel the Eileen is repaired, and it also takes possession of two Western Samoan built catamarans, provided from UNDP funds. UNDP and UK assistance is also providing cold storage and ice-making equipment.

#### Statistics collection

9. A statistics collection programme commenced in January 1978 with FAO/UNDP technical assistance. Fish landings on Funafuti were regularly monitored on a monthly basis. The average monthly landing on Funafuti in 1978 - 1979 was 12.5 tons.

#### 200-mile fisheries zone

10. 200-mile legislation was enacted in late 1978 and Tuvalu declared its 200-mile territorial fishing zone on the 1st January 1979. The aim of the zone being to collect licence revenues as a short term expedient until such time when Tuvalu can properly exploit its own resources.

11. While preliminary discussions have taken place with the governments of Japan, South Korea and Taiwan, no licensing agreement is yet in practice. Incursions of the zone, mainly by Korean and Taiwanese vessels, are regularly reported, and in July 1979 a Taiwanese longline vessel was arrested and successfully prosecuted under the new legislation and fined a total of A\$20,000.

#### Fish market

12. There is a noted shortage of fish on Funafuti, and in 1977 imports of canned fish amounted to A\$24,255 dropping in 1978 to only A\$7,148. At present there is no established fish market or distribution system on Funafuti. Fish caught in excess of the fishermen's own needs is sold at various landing sites around the island resulting in an unreliable and fluctuating level of supply, and poor fish quality.

13. Under UK assistance, plans have been finalised to establish a central fish market on Funafuti with storage, ice making and processing facilities. The aims of the newly created Fish Market Authority are :

- (i) to control landing and marketing of fish for local consumption;
- (ii) later, once local supply has been satisfied, to handle fish products such as katsuobushi for export;
- (iii) to improve upon the range and quality of fish for sale on Funafuti;
- (iv) to offer incentives to increase the activities of local fishermen, and eventually to organise fishermen into a cooperative;
- (v) to provide storage facilities to even out the fish supply.

### FUTURE DEVELOPMENTS

#### Aquaculture

14. Under UNDP assistance for 1980 it is proposed that a consultant visit Tuvalu to conduct a feasibility study for the construction of milkfish cultivation ponds. Possible sites for such ponds exist on Funafuti, Vaitupu and Nukufetau. The setting up of a milkfish aquaculture project is considered an essential first step in developing Tuvalu's own fishing industry.

#### Fishermen's loan scheme

15. Under the National Loans Board (presently being created) it is proposed to incorporate a Fishermen's Loan Scheme, which would offer low interest loans to fishermen throughout Tuvalu and stimulate fishing activity by providing them with boats and engines. Allied to this scheme is a further proposal to send two Tuvaluans to Western Samoa for a boatbuilding training course, together with the placement of a Peace Corps volunteer to organise outboard engine maintenance courses in Tuvalu.

#### Artificial floating devices

16. Following articles on these aggregating devices by the Pacific Tuna Development Foundation in the SPC Fisheries Newsletter and their success in Hawaii, UNDP has agreed to provide funds for the construction of four such devices in 1979-1980. Three such buoys will be located circumferentially about Funafuti for evaluation, and if successful, further buoys will be placed about other islands in Tuvalu. It is hoped that the placement of such devices will save a great deal of time and fuel presently expended in searching for tuna schools, and further serve as an added stimulus to local fishing activity.

Survey of ocean resources

17. It is the long-term objective of Tuvalu to exploit and to directly profit from the fish resources within its 200-mile zone. While the results of the recent SPC skipjack survey were encouraging, they were obtained over a short period; a longer and more detailed commercially orientated survey is needed. Such an evaluation is considered as an essential prerequisite for the development of Tuvalu's fishing industry, and it is hoped to conduct such a survey in 1980.

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