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SOUTH PACIFIC COMMISSION

SEVENTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 5 - 9 August 1985)

COUNTRY STATEMENT - FIJI

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Introduction:

1. The Fiji Fisheries continued to play a very significant role in Fiji's economy in 1984. The Government earned \$18.05 million in foreign exchange through export of fish and fish products. The artisanal fishery sector continued to enhance the development plan of increasing local fish production towards meeting local demands. An estimated 5800MT of fishery products worth \$9.11 million was locally consumed with an estimated 10,000MT produced by the artisanal and subsistence fisheries.
2. However a number of constraints continued to hinder effective exploitation of fishery resources. These were the lack of infrastructure and support services for fishery activities, a shortage of qualified and experienced personnel, lack of investment capital and an uncertainty of the endurance of resource on increased exploitation.
3. As strategical measures the Division has undertaken to encourage more participation from the private sector to invest in the industry; will continue to accept short term consultancy work on very specialised projects and continue to carry out resource assessment work to ascertain the extent which the resource can withstand increased exploitation.
4. These roles in fact would be additional to the activities currently undertaken by the 112 staff manning the Fiji Fisheries and facilitated by the wide distribution of 18 vehicles and 9 vessels in the four administrative divisions in Fiji. These resources were complemented by substantial quantities of aid in kind and a number of officers working under Technical Co-operation.

Fish Production

In 1984 a total of 25307.27MT of marine products were landed showing a decrease of 2.9% compared to 1983. Tuna landings was 8969.97 tonnes, artisanal fishery landings was estimated at 5812.72 tonnes and subsistence was estimated at 10,000 tonnes, and 624.58 tonnes comprise bait fish catch and the miscellaneous marine products.

A) Industrial Fishery Sector:

Of the total tuna landings, poles and line vessels contributed 50.98%, purse seiners 6.44% and longline 15.97%, whilst imports accounted for 26.61%.

Tuna Landings (tonnes)

	Albacore		Yellowfin		Skipjack		Total	
	1984	1983	1984	1983	1984	1983	1984	1983
Pole and line	-	-	580.11	681.3	3992.7	4403.3	4572.81	5084.6
Long line	1161.988	1251.6	113.790	347.4	156.71	400.6	1432.49	2000.6
Purse seiner	0.063	-	238.138	343.29	319.06	588.4	557.26	931.69
Imports							2407.41	
TOTAL	1162.05	1252.6	932.03	1371.99	4468.51	5392.3	8969.97	8016.89

Tuna Sales

	Quantity		Value (F\$ Million)	
	1984	1983	1984	1983
Canned Tuna (Export)	- 589543 Ctns	771470 ctns	16.09	16.42
Canned Tuna(Local)	- 8678 Ctns	7034 Ctns	0.12	0.76
Frozen Tuna (Export)	- 63845 tonnes	493 tonnes	0.65	0.53
Fish Meat (Local)	- 682.2 tonnes	741 tonnes	0.34	0.31
			\$17.20	\$18.02

* including canned petfood, standard carton = 48.7oz cans

Export Values are CIF.

B) Artisanal Fishery Sector:

Total landings is accounted by fresh and frozen fish, non-fish, salted and smoked fish sold through municipal markets, retail shops, restaurants and butchers, the National Marketing Authority (a statutory body) and roadside stalls.

Local Fish and Non Fish Sales

		<u>Quantity (tonnes)</u>		<u>Value (\$ x 100)</u>	
		1984	1983	1984	1983
Municipal market	Fish	925.32	813.34	1,625.32	1,538.22
	Non-fish	1588	1450.34	766.34	880.95
National Marketing Authority	Fish and Non-fish	276	290.6	277.13	365.56
Other Outlets (Rest, hotels, shops etc)	Fish	2759	2360.61	5440.0	4484.3
	Non-fish	233.4	489.20	910.37	732.25
Rural Producers	Smoked fish	21.3	69.62	43.99	264.86
	Salted fish	9.7		38.63	
		5812.72	5617.53	\$9,106.46	\$8,458.17

* These estimates were derived from market survey work carried out by the Resource Assessment and Development Section of the Division.

Fishery Trade 1984

The country earned F\$18,056.40 million in foreign exchange through fish exports and lost F\$8,218.302 million in imports of fishery products.

A) Export of Fishery Products

		<u>Quantity</u>		<u>Value (F\$ x 100)</u>	
		1984	1983	1984	1983
Tuna (canned)		589543 Ctn	771470 Ctn	16,090.0	16,416.1
Tuna (frozen)		63845tonnes	492.568tonnes	650.0	526.0
Trochus Shells		340.1 "	334.1 tonnes	646.19	317.4
Beche-de-mer		53.1 "	32.9 tonnes	451.25	394.8
Mother of Pearl Shells		23.6 "	22.3 "	84.96	44.6
Sharkfins		8	7.7	64.0	61.62
Frozen Local Fish		4.6tonnes	3.1 tonnes	46.0	15.50
Aquarium fish(live)	12866 individuals		0	24.0	-
Frozen Crabs		-	1.5 tonnes	-	12.00
				<u>\$18,056.40</u>	<u>17,788.02</u>

B) Import of Fishery Products:

	<u>Quantity</u>		<u>Value (F\$ x 100)</u>	
	1984	1983	1984	1983
Live Fish (NO)	110.487	17,153	23,161	3,123
Fish and fish products (kg)	7056.208	7,797,413	8,195.141	8,945,356
		51,275		507,121
TOTAL	7166.695		8,218.302	9,455,600

THE WORK OF THE FISHERIES DIVISION:

Fiji Fisheries has 3 major sections; EXTENSION, ADMINISTRATION and the RESOURCES ASSESSMENT and Development. The three sections are self defined however the various programmes undertaken by each will be discussed in brief.

A) EXTENSION SECTION:

Its role is the transfer of technology to the Fishermen and to provide the support services which fishermen need. Under this section the following programmes were implemented in 1984.

- (i) The construction and sale of 37 FAO designed 28 footer vessels, by the Boat building programme. Sixteen boats were allocated to students who participated in the two-four months training session conducted at Lami in 1984. Twenty one vessels were sold to commercial fishermen. The boat building programme with training continued to maintain its popularity as demand still far exceeded ability to supply.
- (ii) Of the support services rendered, \$34,428.00 worth of commercial fishing gear, 2528 tonnes of ice valued at \$132,390.00 were sold to fishermen. \$305,691.00 from 186 individual applications was lent to the commercial fishery sector, in 1984, by the Fiji Development Bank. Funds were used to establish new Fishing Projects or for the expansion of the existing projects.
- (iii) There was a significant increase in the number of employment opportunities created in the Commercial Fishery sector. In 1984 1538 full time and 3,816 part time employment was created, an increase of about 5% over the previous year. However vessels registered remained the same as in 1983. The increase in the number of crew is attributed to an evolving trend of fishermen operating bigger boats.
- (iv) Three one-week rural training programmes where 50 fishermen were trained on fundamental gear technology, Fisheries legislation, outboard and inboard engine maintenance, fish handling, were conducted at Sigatoka, Tavua and Nausori. Financial constraints prevented the Division from conducting more of these courses during the year.

- v) Technical support and advisory services continued to be available to rural fishermen on exploitation, processing and marketing. The Food Processing Unit continued to boost beche-de-mer and salted mullet production. In 1984, 53.1 tonnes of dried beche-de-mer and 9.7 tonnes of salted mullet were produced.
- vi) The regulatory activities carried out in 1984 include the initiation of the review of the Fisheries Legislation. In addition 1538 fishermen's license were issued (1580 fishing boats were registered) to the artisanal fishery sector. Whilst the Industrial fisheries sector was issued licenses for a fleet of eleven pole and line vessels one purse seine and six longliners to exploit the tuna resources in the zone.
- vii) Law enforcement activity continued to be carried out both in our territorial waters and the 200 miles exclusive economic zone in 1984. Lack of manpower resource and proper facilities did not allow us to perform this activity more efficiently in 1984.

B) RESOURCE ASSESSMENT AND DEVELOPMENT: has the primary role of experimenting and modifying fishing technology, identifying resources of commercial value and the management of resources exploited. Programmes undertaken in 1984 comprise:

- i) the persistent collection and compilation of local fish sales data and the analysis of catch data supplied by the pole and line vessels. The Data is fed into a HP9836A desktop micro-computer with printers where they are stored for analysis and graphic presentation. These provide the bases of our Fisheries statistics.
- ii) Fish Stock Assessment Work carried out in 1984 include sales survey of fish market outlets (Municipal market, retail shops, restaurants, NMA, Hotels, roadside stalls) and the monthly supply of baitfish catch data by pole and line vessels. A total of 52,878 buckets of bait fish (95.18MT) was caught from 1,092 sets in 794 nights. Approximately 95.18MT of bait was used to catch 4355.5MT of tuna, an equivalent of 21.8kg bait to a ton of tuna.
- iii) A joint FIJI-TUVALU-JAPAN offshore resource survey of the EEZ's funded by JICA started in October 1984. Using the Tuvalu's pole and line vessel the Te-Tautai, the programme is for a 3 year term. The programme anticipates to cover Tuvalu and Fiji's exclusive economic zones by the end of the three year term.
- iv) A total of 22 FAD's were deployed at water depths ranging from 64-1100m. The programme continued to suffer heavy losses as by December 1984 31.81% of rafts deployed were lost. FADs were lost through sharkbites and drifting. However fishing trials around FADs in 1984 produced good catches as proven by SPC Masterfishermen's work.

v) The Division continued to benefit from the SPC Deep Sea fishing Programme. A 3 month snapper survey programme was successfully carried out in Vanua Levu, where 18 fishermen were trained (including 2 from Tonga) catching 3000kg of fish between them in 33 days actual sea time. The rest of SPC Master fisherman Paul Mead's time was spent on fishing trials around FADs, using vertical long line technique.

vi) For any mangrove reclamation work, the Fisheries Division had the task of assessing loss of marine life, then present the report in a Tribunal where an Independent Arbitrator will make his ruling over the recompense of loss of fishing rights.

A total of 526ha of mangrove land was applied for developing by 35 developers in 1984. Also 35 separate assessments were made by the Fisheries Division for the loss of fishing rights.

vii) To evaluate the clam population in the region, the Fiji module of ACIAR Giant Clam project was initiated in mid-1984. Isolated reefs being the target areas for poachers had been surveyed. The general trend observed is low stock of clams were found in reefs close to inhabited islands of Fiji. This has been also true in isolated reefs where poaching has been frequent. The remaining 2 years of the programme will focus on population dynamic study of this resource.

viii) Freshwater Fishery continued to be treated with importance. The Australian Small Grants Scheme funded a tagging programme of the native freshwater fish Kuhlia rupestris (Flagtail, ika droka) and a sampling programme to assess the potential of eels as an export commodity. The tagging programme is aimed at studying the growth of ika droka and their movements, in rivers. The two inland reservoir fisheries at Monasavu and Vaturu Dam continued to be monitored. People living close to the two reservoir sites had been catching fish from the two massive water impoundments for fish protein.

C) AQUACULTURE DEVELOPMENT PROGRAMME: is to develop fish farming both for subsistence and commercial purposes. Aquaculture programmes in 1984 were;

i) The initiation of seaweed project in April 1984. The project was introduced having only 14kg (out of the 100kg) of seaweed brood stock surviving the shipment from Tonga. Over a period of 8 months culture, 15 tonnes of seaweed were grown from the initial stock. Culture trials were carried out at Malake Island and Verata, using the seaweed species Eucheuma cottonii. The project is a joint venture between the Fiji Government and Coastal Biologicals limited but funded by the Industrial Development Unit of the Commonwealth Fund for Technical Co-operation. Growth rate of the sea weed doubles its weight every 2 weeks. Planting and harvesting time only needs a period of 11-15 weeks, therefore having a short life cycle.

- ii) Raviravi Shrimp Project went through another expansion programme in the capacity of the hatchery; completion of staff quarters and construction of three new ponds. The hatchery production capacity now stood at 8 million from the 1 million in 1983 and total pond area had increased to 24ha. However 1.2 million post larvae were produced at the hatchery in 1984. Ponds harvest produced 3.4 tonnes valued at \$24,477.90 (local market price of \$7.50/kg) from 14 rounds of harvests, over the year.
 - iii) Naduruloulou Fish Station continued to concentrate on the reproduction of grass carps and larval rearing of Macrobrachium rosenbergii in 1984. The project continued to be financially supported by grant aid from the Japanese Government. The station received 110,000 grass carp and silver carp fingerlings from Japan for reproduction trials in the attempt to spawn grass carp locally. About 32,000 grass carp fingerlings were released into the Rewa river. The construction of a new prawn hatchery was completed in 1984. However about 5300pls, were produced during the larval rearing trials for Macrobrachium, using the existing grass carp hatchery.
- Despite all these, a major review of the functions of the joint venture programme was carried out over the year, aimed at increasing the proficiency of the project.
- iv) Under the PCV Aquaculture programme 1200 tilapia fingerlings were stocked in small ponds owned by the rural subsistence fish farmers.

D) INFORMATION SERVICES:

Following a PSC review of Library activities, the Fisheries Library after the extension of the building was recognised. The Food Fishes of Fiji Chart No. 2 was printed has been put out for sale since. The services of a PCV Graphic has helped upgrade the quality of advisory pamphlets publication.
