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SOUTH PACIFIC COMMISSION

SIXTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 13-17 August 1984)

COUNTRY STATEMENT - FIJI

Country Statement - Fiji

INTRODUCTION

1. Despite the setback of hurricane damage during 1983, the Fisheries sector continued to play an important role in Fiji's economy. Fishery exports now rank second to sugar and in 1983 \$17.8 million were earned in foreign exchange. The small-scale commercial fishery sector produced an estimated 5600 tonnes of fishery products worth \$8.56 million which were locally consumed, together with the estimated 10,000 tonnes produced by the subsistence fishery sector.
2. A number of constraints hinder effective exploitation of fishery resources. These are identified as a lack of infrastructure and support services for fishery activities, a shortage of qualified and experienced personnel, lack of investment capital, and an uncertainty as to the extent to which the resource can withstand increased exploitation. On the positive side, the private sector has shown an increasing interest in investing in the industry.
3. The Fisheries Division of the Ministry of Agriculture and Fisheries undertakes to overcome these constraints using available facilities and resources. Extension support and research projects which include the collection of fishery industry data are pursued to this end.
4. The Division's resources consist of 112 staff, 9 vessels and 18 vehicles distributed in 9 stations throughout Fiji. Substantial quantities of aid-in-kind, and a number of officers working under Technical Cooperation Programs and Volunteer Programs complement the Division's own resources.
5. Fishery statistics are derived from a number of sources, including the industrial tuna fleets, the artisanal and subsistence fisheries, and municipal markets and other sales outlets. Those concerning subsistence and small-scale commercial fisheries particularly should be regarded as estimates only.

Fisheries Statistics

6. An HP9836A desktop minicomputer unit with plotter and printer facilities, provided to Fisheries Division under New Zealand Grant Aid, was installed in 1982. The unit is utilized for the storage, analysis and graphics presentation of fishery industry data.

Tuna Fishery

7. Tuna landings totalled 8017 tonnes in 1983, a slight decrease on 1982 figures with pole-and-line vessels contributing 63% of the total landings, purse seiners 12%, and 25% contribution from longline vessels. The percentage supplied by longline vessels has steadily declined in recent years.

Tuna Landings (tonnes)

	<u>Albacore</u>	<u>Yellowfin</u>	<u>Skipjack and others</u>	<u>Total</u>
Pole and line	-	681.3	4403.3	5084.6
Longline	1252.6	347.4	400.6	2000.6
Purse seine	-	343.29	588.4	931.69
	<u>1252.6</u>	<u>1371.99</u>	<u>5392.3</u>	<u>8016.89</u>

Tuna Sales

	<u>Quantity</u>	<u>Value F\$(million)</u>
Canned Tuna (Export) *	771,470 ctn.	\$16.42
Canned Tuna (Local)	7,034 ctn.	\$ 0.76
Frozen Tuna (Export)	493 tonnes	\$ 0.53
Fish Meal (Local)	741 tonnes	\$ 0.31
		<u>\$18.02 million</u>

* including canned petfood, standard carton = 48 x 7 oz cans

Export values are C.I.F.

Local Commercial Fishing Activities

8. 1752 fishing licenses were issued in 1983, and 1714 fishing vessels were registered, 41% of which were fishing outside demarcated areas (outside the reef).

Infrastructure provided by Japanese grant aid in 1982, (three ice plants, a fish collection centre, two collectors and two refrigerated vessels) was all put into operation for the first time during Hurricane Relief activities and continues to function. The collection centre is operated by the National Marketing Authority. Effective operation of the vessels is hampered by financial constraints. Private enterprise interest in fish marketing has grown strongly and the sector is now very competitive.

Local Fish and Non Fish Sales

	<u>Quantity (tonnes)</u>	<u>Value \$x1000)</u>
Municipal Markets - fish	813.34	1,538.22
- non-fish	1450.34	880.95
National Marketing Authority		
- fish	290.6	365.56
- non-fish		
Other Outlets: - fish	2360.61	4,484.30
- non-fish	489.20	732.25
Rural Producers: - fish	143.82	192.03
- fish products		
(smoked salted fish)	69.62	264.86
Total:	5617.53	8,458.17

<u>Export of Fishery Products</u>	<u>Quantity</u>	<u>Value(F\$ x 1000)</u>
Tuna (canned)	771,470 (ctns)	16,416.1
Tuna (frozen)	492.568 (tonnes)	526.0
Sharkfin	7.7 "	61.62
Beche-de-mer	32.9 "	394.8
Trochus shells	334.1 "	317.40
Mother of Pearl Shells	22.3	44.6
Frozen Crab	1.5	12.0
Frozen Local Fish	3.1	15.5
		17,788.02

Import of Fishery Products

7865.9 tonnes of fishery products valued at \$9.5m were imported in 1983.

	<u>Quantity</u>	<u>Value F\$</u>
Live fish (No)	17,153	3,123
Fish and Fish Products (kg)	7,797,413	8,945,356
	51,275	507,121
	7865.841 kg	\$9,455,600

9. Subsistence Fishing Activities

The subsistence fishery production, estimated in 1979 to be 14,000 tonnes, is now being reassessed and it appears that 10,000 tonnes may be a more accurate estimate. Subsistence fishing activities have no doubt been assisted to some extent by the introduction of more efficient gear at the village level and the general development of the artisanal fisheries sector.

Development Activities

10. The work of the Fisheries Division is sub-divided into three categories Administration, Research and Extension Services. Administrative activities relate to the internal day-to-day operation of the Division which includes such activities as the procurement **and allocation** of funds and equipment. Activities of the Research section include resource surveys, the development of new and improved methods for fish capture, fish handling, processing and marketing, as well as the collection of data on the local and international markets for fishery industry products, and environmental issues.

11. The Extension Section is involved in the transfer of fishery related information and technology to the Industrial, Commercial and Subsistence Fisheries sector. Other services provided by the Extension Section include ice sales, engine and vessel repair facilities, gear sales and organized rural fishermen's training.

12. The major projects and activities undertaken in 1982 are briefly outlined as follows:

Tuna and Baitfish Resource Assessment

13. Thirteen pole-and-line, one purse seine and five longline vessels operated in Fiji during 1982. Analysis of catch data supplied by the pole-and-line vessels has provided valuable information in tuna catch effort statistics (Fig 2), its distribution trends both seasonally and geographically as well as the percentage of tuna being caught around fish aggregation devices (FADs).

14. Monthly baitfish catch data, continues to be supplied by pole and line vessels and is routinely analysed. A descriptive paper on the 1981-82 fishery was produced during 1983. Total production during 1982-83 was 63,649 buckets (an estimated 114.5 tonnes), taken in 2323 sets.

15. A joint resource survey of the EEZ's of Fiji and Tuvalu, funded under Japanese aid, is scheduled to begin later this year. The three-year programme will involve the charter of the Te Tautai and involve the use of various gears including gillnet, pole and line and the deployment of FAD's.

16. A total of 13 FAD's were deployed by the Fisheries Division during 1983, in addition to the much larger numbers deployed by the Western Fishing Group and Ika Corporation. Many of these were placed in localities where communities affected by Cyclone Oscar might benefit. 8 FAD's were still in position at the end of the year.

17. Fishing around FAD's by coastal fishermen, mostly in the form of trolling, is increasing. Fishing on FAD's near Suva by the Division's smaller vessels produced a respectable 25kg/hour.

18. A substantial amount of equipment has been provided by Korean & Hurricane Relief Aid which will enable the Division to construct and deploy more units in selected locations throughout Fiji. The deployment of these units is encouraging small-scale commercial fishermen in exploiting pelagic resources, thus shifting fishing pressure away from coastal resources.

Resource Surveys

19. Following completion of the initial survey of the Lau Group in 1982, surveys of Bua-Macuata, Rotuma, Rabi and Lomaiviti were completed during 1983. Results are already available in most cases. The survey reports are intended to assist development planners, as well as highlighting resource potentials from the Division's point of view.

Coastal Resource Management

20. A study of the fishes associated with Fijian mangroves was completed in 1983, and an interdepartmental workshop convened to discuss mangrove resource management. As a result of this meeting, submissions made to Cabinet resulted in a directive that a mangrove management plan be drawn up with some urgency. It is intended that this be done, with the assistance of SPREP funding, before the end of this year.

21. The Division's involvement in foreshore reclamation application and arbitration relating to resource compensation continues.

22. A study of emperors (Lethrinidae), one of the most important and valuable components of the subsistence and commercial catch was initiated in areas near Suva late in 1982. This work involves both market and biological sampling.

23. The Division's market survey team continued to collect and analyse data from all municipal market outlets and 85% of other retail outlets. This information is assimilated to monitor gross changes in the pattern of supply and demand of fishery products, its species composition, and price trends.

Fish Handling and Marketing

24. The Division's involvement in the area was upgraded during 1982. Several one-day workshops were held for fishermen and an educational booklet in simple format was produced in English, Fijian and Hindi versions. A colour poster depicting 60 of the major food fishes was produced during the year and it is hoped to produce others of this nature.

Reservoir Fisheries

25. The Monasavu hydro reservoir, stocked in 1982 with Tilapia nilotica and nilotica/mossambica hybrids become the site of a productive local fishery during 1983 which shows little sign of diminishing. It is anticipated that other species will be stocked during the less productive second phase of the reservoir's ecological development.

26. Vaturu Dam, a smaller impoundment which is intended to serve as a water supply with possible recreational use, has been stocked with largemouth bass obtained from New Caledonia.

Aquaculture Development Program

27. The Division's Aquaculture program, funded by Japanese Grant aid, was established in 1982 and aimed at utilizing aquaculture potential in increasing inland fishery productivity. This program has provisions for major improvements at the existing carp station which will become the freshwater finfish station with facilities for a Macrobrachium rosenbergii hatchery as well as mariculture activities. Results from trials on the culture of M. rosenbergii larvae using make-shift hatchery facilities in 1982 proved successful, and a larger hatchery was completed at Naduruloulou during 1983.

28. The Joint Venture Project (France Aquaculture and Fiji Government) continued into its 2nd phase, after Phase 1 results were encouraging. Nine harvests produced a total of 3.4 tonnes, valued at F\$31,000.

29. Work with induced spawning of grass carp and production of tilapia for village ponds is continuing.

Rural Fishing Activities

30. The Fish Processing Unit continued to transfer modern fish handling and processing techniques to fishermen living in rural areas. In 1983 about 58.7t of beche-de-mer, salted mullet and smoked fish worth \$500,100 were produced and sold both for local consumption and export.

31. Technical assistance and advice were provided by the Division to the fifty six rural fishing groups which were in operation in 1982, producing 144 tonnes of fish.

32. Twenty six trainees, nominees of fishing schemes and village groups, completed six months training in all aspects of fishing as a business and returned to their respective villages with 28-foot fishing vessels constructed by the Division.

33. The program for follow-up work was continued to monitor the performance of, and to facilitate technical assistance to these vessels. As part of the training and support services a 28-foot demonstration vessel was built and commenced operation in early 1983. Hurricane relief activities however took priority for much of the year.

34. In the aftermath of Hurricane Oscar the demonstration vessel and other vessels were used to assist fishermen in areas affected by the hurricane. The program was initiated, funded and supported by UNDP and SPC, with extremely good results.

Service to Fishermen

35. The Division's boatbuilding program constructed 42 twenty-eight-foot fishing vessels. Twenty six of these vessels, including those which were equipped with sail and mast were allocated at cost to participants of the 6 months training program, while the remainder were sold to commercial fishermen.

36. The Division continued to vet loan applications for fishing purposes on behalf of the Fiji Development Bank and give advice to fishermen on all aspects of fishing activities.

37. 2066 tonnes of ice valued at \$104,000 were produced by the 6 ice plants and sold to fishermen.

Regulatory Activities

38. The Fiji Government formally declared its 200 mile EEZ on 1 December 1981, and thereby claimed the right to exploit, conserve and manage the natural resources, including fishery resources within that zone. Some 24 fishing vessels were licensed to fish within the zone.

39. Law enforcement activities continue to be hampered by a shortage of staff and lack of suitable vessels. A study funded under Australian aid examined the dynamite problem in the Western Division; information generated has already resulted in more successful prosecution of suspected offenders.

40. A review of the Fisheries legislation is scheduled for 1984 and is already well advanced.
