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COUNTRY STATEMENT - FIJI

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### 1. Introduction

Like most Pacific islands states, Fiji looks to fishing activities for a substantial portion of its subsistence needs, and increasingly as a means of developing the domestic economy. The fisheries sector will now rank (behind sugar and tourism) as Fiji's third largest foreign exchange earner. In accordance with this development, the Fisheries Division of the Ministry of Agriculture and Fisheries is charged with a responsibility to increase fish production in Fiji. The two major objectives of fisheries development are to generate employment opportunities and cash inputs into rural communities and to expand the country's export-oriented industrial fisheries for skipjack and yellowfin tuna and other species. The main constraints on the overall aim of increasing fish production are identified as the lack of an adequate infrastructure (distribution and marketing network, port and service facilities), the absence of suitable equipment and expertise (vessels and gear at the village level, training facilities, knowledge of processing and marketing techniques), capital restrictions (particularly on the growth of the tuna fishery) and other more specialised problems, such as the control of most inshore areas by discrete social units, and a basic lack of knowledge as to the ability of the resource to withstand increased exploitation.

### 2. Current status of the industry

#### i) Landing, sales

There are a large number of outlets for local fish sales and accurate estimation of local commercial production is difficult. Surveys show that approximately 1933 tonnes of fishery products were sold in 1980 through municipal markets and authorities. A further 2659 tonnes were sold through other outlets such as shops, hotels and roadside stalls. Previous surveys of the subsistence finfish catch has indicated is of the order of 14,000 tonnes, with an unknown amount of molluscs, crustaceans etc.

The cannery at Levuka received 8283 tonnes of raw tuna, an increase of 17% on 1979. The poor catch by the pole and line fleet (2,500 tonnes) was offset by the improved catches of the 30 contracted Taiwanese and Korean longliners.

The total Fijian fish production for 1980 was rated at nearly 27,000 tonnes. Approximately 4688 tonnes of tuna were processed to produce 339,647 cartons of canned tuna valued at \$8.7 million. In addition, 3615 tonnes of unprocessed tuna worth \$5.4 million were exported. Imports of fish and other aquatic products totalled 12-8 tonnes, valued at \$13.7 million.

ii) Employment in the fishing industry

1187 commercial fishing licences were issued in 1980, and licences for 1224 bots, ranging from open punts to pole-and-line vessels. 2,552 people were employed as or by commercial fishermen with approximately 200 more working for Ika Corporation which operated 11 vessels (5 of its own, 5 chartered) varying between 57 and 254 GRT. The numbers of vessels and particularly operators involved in subsistence activities greatly exceed licensed fishing.

3. Current development activities

The activities of the Fisheries Division are aimed at reducing and eliminating the constraints on increasing fish production. Projects are planned in line with national development in favour of rural growth, and to ensure that local people derive maximum benefit from the exploitation of marine resources, in terms of employment and earnings. Additional aims are the substitution of imports and an increase in exports when local demand is satisfied. The Divisions' work of promoting fish production falls into 3 broad categories: extension work and the provision of service facilities; resource assessment and development; and administrative duties. The aim is to minimise the existing constraints to fisheries development by the development and transfer to producers of suitable techniques and technologies and the provision of the necessary supporting infrastructure. The following paragraphs detail some recent activities in these fields.

i) Extension and service facilities

(a) The programme of small boat construction in Suva initiated in 1978 was given a boost with the donation of 54 20 HP. Yanmar engines to the project under Japanese aid. Construction of a training hostel was also made possible, enabling small groups of trainees nominated by fishing groups to receive 6 month fisheries training, then return to the group with a fully equipped vessel which they have seen constructed and been trained on. The first course successfully concluded in July. By that time, the boatbuilding scheme had supplied 56 low cost vessels to fishing groups, using subsidized labour, since 1978. The vessels have proved both efficient and effective in operation, and production will continue.

(b) Sale of commercial gear to fishermen at cost was continued from Suva, Lautoka, Labasa and Savusavu. More than F\$21,000 worth of equipment, ranging from gloves to gill nets was sold, but demand was not fully satisfied due to shortfalls of specific items and delays in delivery.

(c) The Fish Processing Unit continued its programme of visits to rural areas to supervise production by low-technology methods of salted and smoked fish, beche-de-mer, etc. Approximately 7.7 tonnes of finished produce resulted from these activities, generating F\$10,530 for local fishermen and processors. The unit also acted as a collection and grading centre for beche-de-mer from other island groups, enabling the supply of quantities large enough to interest foreign buyers.

(d) Service and advice were provided to 17 fishing groups. Production from these schemes totalled 39.6 tonnes.

(e) The Refrigeration Unit continued to provide ice to local fishermen. Adequate supplies of ice are now available in Northern and Western Divisions and new facilities just installed will ease the shortfall in Central Division. Total production in 1980 was 1824 tonnes which was sold (below real cost) for \$44.708 (15.4% more than in 1979).

(f) 136 loans were approved by the Fiji Development Bank following assessment and technical advice by Fisheries Division officers. Further technical advice was provided in numerous verbal consultations, and training courses in rural areas on a variety of subjects from book-keeping to fish processing proved very successful.

(g) Technical assistance and advice was given to 37 individuals or communities interested in small scale marine or freshwater fish culture. Some ponds have been completed, and Puntius, grass carp and Tilapia have been distributed. Two ventures have successfully bred Macrobrachium rosenbergii post larvae, but completion of the full life cycle is yet to be achieved.

(h) An engine servicing workshop and a mobile training unit outboard service facility were supplied to Vanua Levu.

iii) Resource assessment and development

(a) Exploratory deep water shrimp trapping has established the presence of significant stocks of 5 species of deepwater (60-420+ fathoms) carid shrimp which may support a local fishery, as indicated by the result of a three month commercial survey during the tuna off-season in 1980. Current work is directed at overcoming handling, processing and marketing problems which have occurred.

(b) Continued examination of catches of deepwater snapper is enabling a gradual picture of geographical and depth distributions of major species to be compiled. Many fishermen are now directing their efforts toward this fishery rather than the inner reef stocks and are benefiting from instruction by Divisional personnel on fishing techniques. A number are voluntarily supplying catch information to the Division, and further follow-up extension work is planned. Much was learned for the first visit of the DSFD Project (SPC) to Fiji late in 1980, and the second visit planned for this year, has attracted much interest.

(c) The squid survey has yielded poor results in general (less than 50 kg per night on average) and will be discontinued in the near future unless the squid gill nets now being tried in conjunction with the jigs produce a dramatic improvement in catches.

(d) The 1981 baitfish catches appear to have returned to normal levels, following the very poor catches during 1980. The quality of catch information being obtained from the fleet has been substantially upgraded, and a biological study of two of the major species undertaken. A video film has also been prepared to assist discussions on access problems with villagers.

(e) Monitoring of skipjack tuna catches is also carried out as a means of assessing vessel performance by the pole-and-line fleet, (which is operated by the Government owned Ika Corporation) and in order to observe behavioural characters or patterns relevant to improving methods of exploitation. This work has assumed a greater importance as a result of 1980's poor skipjack season; during this period the Ika Corporation entered into a fishing agreement with the Tuvalu Government, to the mutual benefit of both parties, and two vessels fished in Tuvalu waters over a four month period; as with baitfish catches, information provided by the vessels has been upgraded and with the acquisition of a desk top computer later this year, future analysis should be carried out more efficiently and in greater detail.

(f) As in other Pacific island countries, great interest is being shown in fish aggregation devices, as a means of increasing both the artisanal and industrial catch. The Division has anchored three rafts which have produced up to 5 tonnes per day for pole and line vessels. Trials using a Samoan alia (catamaran) around these rafts are due to commence shortly. Nelson Fisheries (NZ), under charter to Ika Corporation, has anchored 60 devices and catches around these rafts for 350 tonne purse seiner have so far been very encouraging.

iv) Administration

(a) Divisional administration attempts to ensure the smooth running of the Division's work programme on a day to day basis, the effective use of the Division's staff and equipment and suitable methods of financial control and budgeting.

(b) Licences for commercial fishermen are issued and records of the distribution of fishermen's catch and effort maintained. Fishery regulations are reviewed and revised if circumstances dictate and are enforced by Fisheries officers, fish wardens, police, navy, and market observers.

4. Future National Fisheries Development Planning

Development planning is aimed at further reducing the constraints to increasing fish production. The Fisheries Division will undertake to provide as many services as possible not currently available through the private sector but will encourage private enterprise wherever feasible.

- Concurrent establishment of ice making machinery and improved landing/storage facilities in isolated areas.
- Establishment of a collection system using refrigerated carrier vessels to service these areas.
- Upgrading of National Marketing Authority facilities, particularly more sophisticated methods of processing and packaging, and marketing.
- Deployment of increasing numbers of trained fisheries personnel in isolated areas
- Expansion of the skipjack tuna fishery.
- Development of a greater volume of fish exports, including specialist products (collectors shells, precious corals, beche-de-mer, shark fins, hides, etc.)
- Installation at the village and commercial level of mariculture and aquaculture programmes.
- Improvement of fishery data collection and processing systems to enable rational management policy formulation.
- Support and encouragement of existing and new rural fishing schemes with organised training in business management.
- Establishment of hatcheries for Macrobrachium, green-lipped mussel, oysters.
- Surveys of the effects of development projects in other fields (hydro-electric, power development, sewage dumping, sand dredging, etc.) and their possible utilisation by the fisheries sector.

- further investigation of unproven resources as they are identified or become accessible
- utilization of offshore resources within Fiji's EEZ (to be declared later this year).
- research on population dynamics of commercially exploited species such as tuna and baitfish
- processing and marketing studies on local products currently not fully utilized.

As can be seen, these ambitious plans will, if successful, contribute greatly to reducing the current constraints on Fiji's fishing industry. Much of the proposed work in this field relies and will continue to rely on aid funds donated by various national and international organisations, and by capital provided under joint venture, licensing and other schemes.

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