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COUNTRY STATEMENT - SOLOMON ISLANDS

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INTRODUCTION

The Solomon Islands "National Development Plan" for the years 1975 through 1979 state the aims of Government and the Ministry of Natural Resources with regard to the Fisheries sector are:-

1. Management of the marine resources of the Solomon Islands and the preservation of the marine environment.
2. Improved availability of locally caught fish protein throughout the country and substitution of processed frozen fish imports.
3. Increased employment in the Fishing industry at all levels.
4. Increased revenue to Government from fishing activity.
5. Increased control and management participation in all aspects of the fishing industry by Solomon Islanders.

It is generally accepted within the Solomon Islands that the fisheries targets as laid down in the National Development Plan have been met and that general development has exceeded expectation.

The Fisheries resources of the Solomon Islands are probably the major untapped resource which as yet, has hardly been utilised. With the introduction of a 200mile fishery limit on the 1st January 1978, over which the Solomon Islands claim jurisdiction over all marine resources as belonging to the coastal state, this broadens the scope by which fisheries will be developed in these islands.

The Solomon Islands Government therefore places high priority on fisheries development and supports it by maintaining an ever strengthening Fisheries Division in personnel and with vigorously seeking overseas aid so as to allow the Division to pursue projects quickly and with sufficient cash backing. The staff composition of the Fisheries Division as on 1st January, 1980 was as follows:

Chief Fisheries Officer	
Principal Fisheries Officer	- Licencing
Senior Fisheries Officer	- Development

Senior Fisheries Officer	- Management
Fisheries Officer	- Malaita District
Fisheries Officer	- Western District
Fisheries Officer	- Marketing
Fisheries Officer	- Training
Fisheries Officer	- Statistics
Asst. Fisheries Officer	- Eastern District
Asst. Fisheries Officer	- Western District
Asst. Fisheries Officer	- Malaita District
Asst. Fisheries Officer	- Makira District
Asst. Fisheries Officer	- Central District
Asst. Fisheries Officer	- Refrigeration (x 2)
Fisheries Assistants	- Bosuns, engineers, field staff (x 9)

I. BACKGROUND

Solomon Islands is a scattered archipelago extending over 1,400 km from one extremity to the other, covering a total area of some 29,000 sq.km. Six large islands - Choiseul, New Georgia, Santa Ysabel, Guadalcanal, Malaita and Makira - account for most of the country's 5;650 sq.km. The main islands are all mountainous, covered with thick tropical rain forests and intersected by rivers. There are few areas of alluvial plains, the major one being on North Guadalcanal.

The country is divided into seven provinces, with populations ranging from 10,000 to 60,000. The three most densely populated provinces, Malaita, Western and Guadalcanal contained two-thirds of the total population of 197,000 at the time of the 1976 census. The capital city of Honiara, situated on the north coast of Guadalcanal is distinct from the province and has 16,000 inhabitants; other urban centers have less than 2,000 inhabitants each. The populations of the remaining four provinces vary from 10,000 to 15,000. By 1979, the estimated population of Solomon Islands was 221,000.

Most of the population reside in small, widely dispersed settlements along the coasts. 60% of the people live in localities with fewer than 100 inhabitants and more than 80% in localities with fewer than 200. The country's division into numerous islands, a low population density and the dispersion of the population in small settlements make inter-island shipping the main mode of transportation.

Village life is important in the Solomon Islands. The communal ownership of most land, the extended family system and an ethic of sharing goods and property between relatives influences the country's socioeconomic milieu.

The most disturbing feature of the rural areas, where 90% of the population resides, is the sparsity of opportunities for earning cash income. The per capita cash incomes in rural areas are low in absolute terms as well as relatively to those in urban areas. Because of the emphasis on large-scale agriculture, and the high dependence of rural households' cash income on the price of copra, the cash income of rural households from crop production has grown at a slower pace than other monetary incomes. Greater attention is therefore being given to enlarging and diversifying opportunities for earning cash incomes in smallholder primary industries since, with the subsistence activity providing a relatively comfortable standard of living, rural production and incomes can only be substantially increased through the expansion of opportunities for selling marketable surpluses for cash.

II. RURAL FISHERIES DEVELOPMENT

(i) Fisheries Development

Commercial development of the fish resources of Solomon Islands is of very recent origin. In the early 1970's surveys indicating the availability of commercial quantities of tuna led to the establishment of the Fisheries Division within the Ministry of Natural Resources in 1973.

Although initial efforts were directed towards the establishment of a commercial tuna fishing industry, in 1975 attention was also focused on the traditional fishing activities of the rural sector (artisanal fisheries) where both the skills of the fishermen and the available fish resources were in abundance.

Since that time, a bi-modal path of fisheries development has been pursued by the Fisheries Division. On the one hand, the joint venture tuna industry established with a Japanese Company has become a major income earner for Solomon Islands, bringing in valuable foreign exchange and providing employment opportunities for a large number of Solomon Island people.

On the other hand, development of the artisanal fishing sector has provided valuable income-earning opportunities for rural villagers, enabled the training of village fishermen and increased the availability of fresh fish to both rural and urban markets. The rural fisheries scheme has become an integral component of Solomon Islands rural development programme.

(ii) The Rural Fishing Industry

Prior to these developments, traditional fishing activities were typically of a subsistence nature, with bartering generally being the sole form of exchange. The lack of effective storage and marketing facilities was seen as a major stumbling block to the expansion of artisanal fishing. The generally low population density and transport difficulties in the widely scattered islands of Solomon Islands compounded these difficulties. At the same time, the limited opportunities for local employment or for agricultural activities (often confined to subsistence farming plus copra production) indicated an urgent need for alternative income-earning opportunities.

To overcome these limitations, a pilot fish collection and marketing scheme was launched in 1975 based on the supply of flake ice and insulated collection boxes to fishermen. Using scheduled Government and private shipping services and, where possible, the existing road structure, ice was sent out to the fishermen and the fish/ice returned to the marketing centres (principally to Honiara, the capital).

The supply of improved technology in the form of two block ice-making machines in 1976 (donated by Japan) and fibreglass insulated boxes in later years enabled a substantial increase in the potential for the regular supply of fresh fish to the rural and urban markets.

Since that time, a co-ordinated programme of development has been pursued incorporating three main activities. These are firstly, the provision of ice-making facilities and insulated boxes to fishing groups in the rural areas; secondly, the development of marketing centres (including, where necessary transport to these centres) and a guaranteed price scheme; and thirdly, the provision of training programmes in fishing techniques and marketing organisation to fishermen and fishing groups.

By 1980, twelve ice machines had been installed in the seven Provinces of Solomon Islands (see Map I) and - insulated boxes supplied. Fisheries centres had been established in each of the Provinces (see Map 2). These centres provide market outlets for fish caught, house ice-making facilities, and have been the focus for training and extension programme in the Provinces. They are operated by the Provincial Fisheries Officer attached to each Province, together with an assistant fisheries officer and appropriate support staff. Some of the centres are large and well equipped, while others, particularly newly formed centres, presently operate with minimal facilities. Appendix II provides details of present and proposed facilities for the Provinces.

The expansion in market outlets for the fish catch was advanced with the formation of SIACO, a semi-commercial company, in 1977. The initial purpose of the company was to provide improved marketing and retailing facilities for the Honiara market and ensure the effective operation of the fish pricing policy. Although experiencing initial trading difficulties, SIACO is being developed as a major component of the rural fisheries programme. By providing a direct outlet for the fish catch, maintaining an appropriate price structure, and offering a regular supply of fresh fish to the large Honiara market, SIACO is becoming a key element in the expansion of the artisanal fishing industry. A facility similar to SIACO has since been established on the well-population island of Malaita and is operated by the provincial authorities.

In April 1979, a fish collection vessel, donated by the Japanese Government, came into operation. This vessel was operated by SIACO, conducting regular trips to the Provinces (principally to the resource abundant but isolated Marovo Lagoon in the Western Province) and depositing the catch in Honiara for sale by SIACO. Despite some setbacks including breakdowns, this vessel has been instrumental in the expansion of marketed fish production, particularly in the Western Province, where the lack of shipping has been a major constraint to fisheries development.

Both SIACO and the fish collection vessel have experienced problems associated with the development of a new industry. However, as the fisheries training and extension programmes are extended, ice making using facilities made available, marketing infrastructure (including transportation) developed and pricing policy monitored, the long-term future of this integrated programme is assured.

(iii) PRODUCTION

Total production from the rural fisheries sector is difficult to assess due to the subsistence nature of the industry. Marketing records have, however, been kept by the Fisheries Division since September 1977. As an estimated 60 percent of all fish sold is done with the assistance of Fisheries Division staff, it is possible to assess total fish sales.

COMMERCIAL DEVELOPMENT

i Joint Venture Company

The Government of the Solomon Islands through the Fisheries Division continue to work closely with Solomon Taiyo to achieve meaningful and worthwhile development. 1979 proved to be a record year for catch rates per vessel. The fleet operated by the company increased from twenty at the beginning of 1979 to twenty-three catchers at the year close.

The final catch records for 1980 are not available at the time of writing. Early returns were disappointing although catches have improved considerably since July. The number of vessels fishing to the company is now 20, this figure includes 5 new vessels recently commissioned. (Two vessels operated by N.F.D. also land to the company).

POLE AND LINE CATCH RECORDS

<u>YEAR</u>	<u>PERIOD</u>	<u>TOTAL CATCH</u>	<u>NO. BOATS</u>	<u>CATCH/DAY/BOAT</u>
1971	6 months	4711 tonnes	6	6.75 tonnes
1972	12 months	8005 tonnes	15	3.39 tonnes
1973	10 months	6508 tonnes	12	3.35 tonnes
1974	12 months	10331 tonnes	10	4.69 tonnes
1975	12 months	7168 tonnes	12	2.95 tonnes
				<u>CATCH/UNIT EFFORT/BOAT</u>
1976	12 months	14809 tonnes	15	4.34 tonnes
1977	12 months	13004 tonnes	20	2.92 tonnes
1978	12 months	15712 tonnes	20	3.66 tonnes
1979	12 months	23842 tonnes	23	4.67 tonnes
1980*	Jan - Aug	9890 tonnes	22	-

During 1976 and 1977 Solomon Taiyo sponsored a longline survey designed to evaluate the Solomon Islands domestic (200 mile) potential using a local base and crews. The preliminary survey results were encouraging and showed a profit. The local crew (16 against 5 Japanese) showed a efficiency in working this method and no problems were experienced with the crews spending prolonged periods at sea. Discussions then commenced to upgrade the survey into a pilot commercial operation.

The pilot operation was successful, the two vessels employed catching an average in excess of 2 tonnes per fishing day. The vessels continued operations through 1979, and 1980 again with satisfactory catches, and all fish consigned to the high value Japanese shashimi market.

* Figures not finalised.

Further longline vessels will be operated by the company in 1980 on a transshipment basis.

Generally, the Solomon Islands Government are happy with the progress made by the Joint Venture Company and would like to continue to use the Company as a vehicle to mount other surveys of the marine resources of these islands.

Initial trials for purse seining round anchored rafts commenced this year. As yet, insufficient data is available so it is not known whether this will be an area for further expansion.

ii) Baitfish

Another project which came into existence during 1979 was the feasibility trials into the possible localisation of the baitfish industry. At present all bait-fish caught, is by the catcher vessels themselves using the traditional method of under-water lights and net. It was hoped that the villages, in the proximity of the baiting grounds would be able to catch the bait, hold in storage cages and sell to the catcher vessels. This would have allowed a greater cash flow in the more rural areas.

A project funded by UNDP supplied an FAO baitfish expert plus equipment and early results were encouraging. It was proven that fish could be caught successfully using local fishing craft and labour.

Keeping bait alive was found to be more difficult and it was decided that this would not be possible given the limited levels of rural technology.

The baitfish expert has continued his work in Solomon Islands and is occupied in identifying new and untapped bait grounds. The principal area for this survey has been in the Eastern Outer Islands and quantities of bait have been identified.

iv) National Fisheries Developments Ltd.

One of the major new developments to take place in the Solomon Islands has been the formation of National Fisheries Developments Ltd. This is a joint venture with Government holding 75% of the shares and Solomon Taiyo the remainder. The reason for setting up this company, was that the composition of the fleet supplying the joint venture company, Solomon Taiyo Ltd., was four vessels owned by the company and sixteen charter vessels. The result of this was approximately 40% of the cash income of the company was being lost overseas in charterage fees.

The initial understanding of this new company will be the construction of 10 (ten) 20 metre ferro-cement skipjack vessels. As each vessel is commissioned, the company will operate the craft as a commercial unit. All marketing of fish caught by the company's vessels will be through Solomon Taiyo for sale on the international markets.

The project has been funded by a 3.6 million dollar loan from Asian Development Bank with technical expertise provided by New Zealand aid.

Initial work has included the setting up and consolidation of the building yard and supply system.

One vessel has been completed and commenced fishing operations this month. A second vessel is nearing completion and should be operational in January 1981. Two more hulls have been completed ready for fitting out.

Two pole and line training vessels have been obtained from Japan. Both vessels fish commercially when not pursuing a training role and have proven very successful with catch rates comparable to the best of the joint venture fleet.

Turtle Program

Fisheries Division has supported a turtle program since 1975. The program is aimed at stock management and collection of biological data.

Initial information has been published in a document entitled "Marine Turtles of the Solomon Islands". Results of more recent work will be available at the end of this year.

OTHER FISHERIES PROJECTS

i) FISHERIES RESEARCH

A 65 ton fisheries research vessel has been commissioned in 1980; the M.V. Walo. This vessel is in the process of fitting out with a large variety of fishing gear and in the development of expertise by the crew. Principle tasks during 1980 have been the localization and experimental fishing of baitfish populations in the Eastern Outer Islands. This is being undertaken as a preliminary to a possible 18 month commercial survey of skipjack resources.

Baitfish localization and research is a primary concern of the Management Section and will continue in all aspects of bait fishing, utilization and population studies through 1981 and 1982.

A full research programme will be run during 1981 and concurrent projects are scheduled. These will include deep water trapping for prawns and demersal fish, beam trawl surveys, pelagic trawling, longline studies, turtle surveys and deep line reef fish studies. Depending on the results of these preliminary surveys a three year research programme will be developed for the purposes of resource assessment. As far as possible, the Development Section will be involved in all research activities.

ii) DATA PROCESSING

The increased flow of data from the research programmes and the accelerating and diversifying commercial fisheries precludes its manual analysis. A small desk top computer will be commissioned in late 1980/early 1981 for data compilation and analysis for licensing for report generation and for data exchange between governments, through the Forum Fisheries Agency.

iii) ECONOMIC RESEARCH

Economic research into the functioning of commercial fishing ventures is considered of very high importance. This is especially so since the possibility of increasing the number of Joint Venture Agreements to introduce competition within the fishery is considered desirable.

While there is no Fisheries Economist on staff the increased ability to automatically process information will help the analysis of economic data.

iv) TRAINING

The Fisheries Division has operated an intensive training program since 1977.

Initial efforts were concentrated on the training of fisheries staff to allow localisation of the division. While this is still an important element of the training program the bulk of this work has been done. Efforts are now concentrated on the training of rural fishermen and nationals in the commercial fisheries sector.

Small training centres have been established in many of the district areas and regular rural training courses held throughout the year. The courses are operated by Provincial fisheries staff and include, outboard motor maintenance, net making and repair, iceing the catch, improved fishing techniques, business management etc etc.

These courses have proven highly successful and are often overlooked. It is intended that facilities will be improved in the near future to provide fisheries training centres in every province of Solomon Islands.

A Fisheries Training Program has been incorporated into the syllabus of the Honiara Technical Institute as an addition to the Marine Training establishment.

The facility exists to train crews for the manning of the commercial pole and line and longline vessels.

Shore based training aids include marine engines, generators, refrigeration plant, mock up bridges and navigation equipment, line hauling systems etc. The school has the use of two pole and line vessels for practical training and longline vessels will be available in 1981.

As previously stated, training of fisheries staff is ongoing but in a rapidly reduced volume. Higher levels of staff are trained overseas for middle management posts. Staff for non established or low established positions are trained within the division and receive upgrading with short term overseas courses.

These courses were previously provided by the Government of Japan. However, the training given at Nelson Polytechnic this year (for **four of our** staff) has **been most useful** and is highly recommended.

v) SMALL VESSEL FISHING PROJECT

Following the services of the S.P.C. deep reel fishing survey in Western Province, the survey has been continued by Fisheries Division staff.

A Samoan type" catamaran plus fishing master was provided by UNDP during 1979/80. The program was very successful, all major fishing areas have been test fished with catch rates averaging 1Kg/reel/hour (shark catch not included).

An interesting result of these surveys has been the consistently high catch rates from the catamaran compared with the second survey vessel (a 9 metre monohulled launch)

vi) SMALL VESSEL BUILDING PROJECT

A project is now underway to provide 15 small vessels to be used by rural fishing groups.

The results of the survey will greatly assist final project decisions and provide information for vessel design, fishing group ability, fishing area resource and operating costs.

Depending on results from the initial vessels performance, the project may be extended.
