

SOUTH PACIFIC COMMISSION

TENTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 13 - 17 March 1978)

COUNTRY STATEMENT - SOLOMON ISLANDS - 1977

by

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SUMMARY

Prior to 1971, Fisheries in the Solomon Islands was mainly in the subsistence sector and the only commercial exploitation taking place was in the traditional Pacific Island marine products - Bêche-de-mer, trochus, turtle shell, etc. This small industry was useful in as much as it generated the much needed cash into the rural economy. Although useful, it was not substantial enough in resources to provide Government with revenue when the eventual day of independence arrived.

From that year full-scale commercial surveys were undertaken to tap the resources of tuna that were known to inhabit the waters of the Solomon Islands. In 1973 a joint venture agreement was signed between Taiyo Fishery Company of Japan and the Solomon Islands Government to harvest the resources that the survey results confirmed. This industry has continued to flourish; until at the time of writing there are two freezer stations, two Arabusi smoke factories and one cannery. A further freezer station is planned for construction during the year.

To supplement the catch of the joint venture company, a newly formed company came into existence during the year. The company, National Fisheries Developments Ltd., is to build ten skipjack vessels and operate them on their completion. The project is funded by an A.D.B. loan with New Zealand technical assistance.

4. 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, 1978 was as follows:

Chief Fisheries Officer	
Senior Fisheries Officer	- Management
Senior Fisheries Officer	- Development
Fisheries Officer	- Masterfisherman
Fisheries Officer	- Western District
Fisheries Officer	- Marketing
Fisheries Officer	- Training
Asst. Fisheries Officer	- Statistics
Asst. Fisheries Officer	- Eastern District
Asst. Fisheries Officer	- Western District
Asst. Fisheries Officer	- Malaita District
Asst. Fisheries Officer	- Marketing
Asst. Fisheries Officer	- Skipjack field officer

5. Although all the above posts are presently expatriate held Solomon Islands students are at various overseas training institutions and with the first graduates arriving back next year, it is hoped that total localisation of the Division can take place within the next four to five years.

6. A major item of equipment that the Division has been lacking - a research vessel - has been approved during 1977. The vessel will be of ferro-cement construction and has been funded by British aid. The vessel is presently being built in the U.K. and hopefully should be on station during the latter part of this year.

7. Development of the Solomon Islands fisheries could still be considered to be in its infancy, the first commercial enterprise started in 1973 with the formation of a joint company by the Solomon Islands and the Japanese company, Taiyo. The Fisheries Division itself only became a separate functioning body in 1974 when it succeeded in breaking away from the control of Agriculture.

8. The future of fisheries involves the progressive development and management of the offshore fisheries through the auspices of our Joint Venture Company (Solomon Taiyo Ltd.) and our own newly formed commercial company, National Fisheries Developments Ltd. Government will undertake the development of the semi-commercial village level fisheries and the marketing for such will be conducted through SIACO, a public owned by Government sponsored fish marketing company.

LOCAL FISHERIES DEVELOPMENT

A. Fish Collection and Marketing

9. In 1975 a pilot scheme was launched using a small cube ice machine to distribute ice supplies to fishermen in remote areas using insulated boxes. The scheme met with virtual instant success. The scheme expanded in August 1976 when the Taiyo Fishing Company of Japan donated two "Resco" block ice machines, one of which was installed in Honiara to supplement the initial machine while the other was commissioned in Auki on the island of Malaita.
10. Using scheduled Government and private shipping and, where possible, the existing road structure, ice is sent out to the fishermen and fish/ice returned to the market centres. The original insulated boxes used in the scheme were broken/written off domestic refrigerators, these are now gradually being replaced by aluminium boxes locally made and injected with poly urethane insulation and also by fibre-glass containers. The former are paid for through U.K. aid project while the latter are a donation from New Zealand aid. Ice storage trials in the various containers have been carried out and the tests to date have proved that ice has a varying storage life of between five and ten days depending on where the container was held and the number of times the lid was removed.
11. The scheme has expanded until, at the time of writing, there are six ice plants in operation within the Solomons, three in Honiara and three in the out-stations. There are a further four on order, two electric as are all the existing units and two diesel for trial in the more remote areas of the country. It is hoped that with the introduction of more ice plants the construction of permanent concrete ice and fish storage bins will commence.
12. Local marketing has proved a problem as the catching component had developed in advance of the marketing infra-structure. However, with the injection of aid funds into this element of the project in 1977, the majority of the problems have been overcome. A public company, SIACO, was formed under the direction of the Fisheries Division, to carry out this all-important function. A technical officer, funded by U.K. aid, has been recruited under contract to undertake the daily operation of the company.
13. The formation of the company has created a vehicle through which to assist further fisheries development. Products such as rock lobster, oysters, crabs, prawns and other edible marine products are now being exploited by islanders now that the necessary infra-structure is available.
14. It is estimated that 6 to 8 tonnes of fish is now entering Honiara weekly. The majority of this fish can be attributed directly to the project or at least to private schemes that copies the project in design and are utilising project facilities, i. e. ice supplies.

15. The SPC funded lobster project that was aimed at assessing the management parameters of a developing lobster fishery came to close in the latter part of 1977. The project commenced in the Solomon Islands in June 1975 under the direction of SPC Officer Jim Prescott. It is not intended to elaborate further on this project as this will be a separate agenda item.

16. Another SPC funded project, the Outer Reef Fisheries Project, has been operating in the Solomons since June 1977. This project will come to a close with the termination of the project in January of this year. The project base has been Gizo in the Western District and it can be reported that the project has met with some considerable success. This success can be contributed mainly to the efforts of the Project Manager who worked long and hard to maintain the project vessels in an operational condition. As with the former SPC project this too will be a separate agenda item.

17. Completed in the early part of 1977 was a survey to determine the resources potential of the many offshore banks and sea-mounts. This survey was undertaken using a 20-metre converted skipjack fishing vessel. The vessel was rigged with eight electric reels. Catches fluctuated greatly from as little as a few hundred kilos per day to as high as several tonnes. The main species catch were Etelis marshi and Etelis carbunculus. The main problem associated with the survey was that the vessel did not have any onboard refrigeration making it virtually impossible for overseas marketing trials to be carried out. It is hoped however, that a further survey will take place later this year as we hold good prospects that this mode of fishing will act as a "fill in" for our skipjack vessels during the "off season", December through February.

18. One of the major developments to take place in the Solomon Islands during 1977 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 present composition of the fleet supplying the joint venture company, Solomon Taiyo Ltd., is 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. As all delegates will be aware, this is a substantial amount for a developing country to lose in foreign earnings. The concept therefore of this newly formed company is for a locally owned company to own and replace these catching units, thus keeping the cash within the country.

19. The initial undertaking 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.

20. The project is being funded by a \$3.6 million dollar loan from the Asian Development Bank. Technical expertise during the construction phase is being provided through New Zealand aid.

21. To train the crews for the manning of these vessels it is proposed that the Honiara Technical Institute and Marine Training School will be upgraded with aid funds from the European Development Fund. It is planned to instal training aids such as a marine engine, generators, mockup bridges, etc. similar to what will be installed in the vessels in the shore training establishments. The first intake of students will be in January 1979.

22. Another project that is planned to come into existence during the coming year, is the feasibility trials into the possible localisation of the bait fish industry. At present all bait fish caught is by the catcher vessels themselves using the traditional method of under-water lights and net. In future it is hoped that the villages, in the proximity of the baiting grounds will be able to catch the bait, hold in storage cages and sell to the catcher vessels. This should allow a greater cash flow in the more rural areas. The project is to be funded by UNDP.

23. Surveys have taken place during the year into the reef fish stocks but initial results have been disappointing mainly due to the size of vessels used in an area susceptible to strong trade winds and strong currents. Preliminary trials were undertaken into the possibility of using traps as a means of harvesting in deep water prawns and shrimps. This project ties in directly with local marketing development and it is hoped that the project will broaden its scope on receipt of additional traps from the local manufacturers.

24. The fish silage industry has progressed steadily during the year and supplies 50% of the pig farmers' feed requirements. All silage is produced using waste fish and offal from the Solomon Taiyo cannery. The Fisheries Division also conducted feed trials and all results to date have shown that the feed/weight ratio is far above traditional local feeds.

25. Since 1975 the Fisheries Division has supported a turtle programme aimed at stock management. Five species have been identified in the Solomon Islands.

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|------------------|-----------------------------------|
| (a) Hawksbill | (<u>Eretmochelys imbricata</u>) |
| (b) Greenback | (<u>Chelonia mydas</u>) |
| (c) Leather | (<u>Dermochyls coriacea</u>) |
| (d) Olive Ridley | (<u>Lepidochyls olivacae</u>) |
| (e) Loggerhead | (<u>Caretta caretta</u>) |

26. The first three species are known to nest extensively in the Solomons. Most tagging however has been done on the Hawksbill and Greenback turtles and a sanctuary has been declared on the Arnavon Island group in the Western District. Funds are presently being sought to upgrade the area into a research station under the direction of an experienced biologist.

JOINT VENTURE COMPANY COMMERCIAL DEVELOPMENT

27. The Government of the Solomon Islands through the Fisheries Division continues to work closely with Solomon Taiyo to achieve meaningful and worthwhile development. 1977 however, has proved a disappointing year after 1976 which proved to be record year for catch rates per vessel. Although catch rates were considerably down, the value of fish exported did rise due to the world wide increase paid by the major tuna packers.

28. The fleet operated by the company increased from fifteen at the beginning of 1976 to twenty catchers at the year's close.

29. Surveys were conducted during the year in the Shortland Islands using a mothership and two catcher boats. Discussions are still taking place with regard to the survey results and it is hoped that by early this year the company will have completed plans for the construction of a freezer base in the area.

30. During the past three years Solomon Taiyo have sponsored a long-line survey designed to evaluate the Solomon Islands' domestic (200 mile) potential using a local base and crews. The preliminary survey results are most encouraging and show a profit. The local crew (16 against 5 Japanese) showed an efficiency in working this method and no problems were experienced with the crew spending prolonged periods at sea. Discussions are now under way to upgrade the survey into a pilot commercial operation. It is expected to add a further vessel by the middle of the year rising to four vessels in 1980. All fish caught during the pilot operation period are intended for the high value Japanese sashimi market.

31. Generally, the Solomon Islands Government is 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.

CATCH RECORDS

<u>YEAR</u>	<u>PERIOD</u>	<u>TOTAL CATCH</u>	<u>No. BOATS</u>	<u>CATCH/DAY/BOAT</u>
1972	6 months	4,711 tonnes	6	5.75 tonnes
1972	12 months	8,005 tonnes	15	3.39 tonnes
1973	10 months	6,508 tonnes	12	3.35 tonnes
1974	12 months	10,331 tonnes	10	4.68 tonnes
1975	12 months	7,168 tonnes	12	2.95 tonnes
1976	12 months	14,809 tonnes	15	4.93 tonnes
1977	12 months	13,004 tonnes	20	3.25 tonnes

EMPLOYMENT

	<u>YEAR</u>	1973	1974	1975	1976	1977
<u>SEA</u>	Sol. Isl.	50 (32%)	140 (49%)	150 (53%)	207 (58%)	303 (66%)
	Jap.	105	144	131	153	154
	Total	155	284	281	360	457
<u>SHORE</u>	Sol. Isl.	150 (96%)	280 (96%)	292 (96%)	426 (97%)	436 (96%)
	Jap.	6	11	13	15	20
	Total	156	291	305	441	456
<u>TOTAL</u>	Sol. Isl.	200 (64%)	420 (73%)	442 (75%)	633 (79%)	739 (81%)
	Jap.	111	155	144	168	174
	Total	311	575	586	801	913

FISHERIES MANAGEMENT

32. The Fisheries Division considers the role of fisheries management to be one of its primary functions. So to collect and monitor the data from the skipjack fishery. The main information being sought at this stage is weight/length frequencies although as the back log of work is cleared up it is anticipated that bait data will be compiled.

33. The migratory species (i. e. tuna) management will probably prove the most difficult to effect, and regional participation is required. To this end the Fisheries Division has been keeping in close touch with Pacific development through SPC and SPEC regional meetings.

34. Local fishery management data has been collected and processed over the past few years. With the expansion of this fisheries development this aspect of management is expanding in conjunction. As the infra-structure and fishery developes, so it should become easier to collect the relevant data from which some assessment of productivity and dynamics can be made.

35. Included in the management brief is the responsibility for pollution and conservation control. At present problems can be dealt with on a one-off basis as the pressures are not excessive. However, legislation is at present being framed to tighten control and the Division is building up a capability to monitor activities and advise where necessary any control.
