

SOUTH PACIFIC COMMISSION

EIGHTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 4 - 8 August 1986)

SUMMARY REPORT OF THE SOUTH PACIFIC COMMISSION 1985/86 ACTIVITIES UNDER THE
FISHERIES WORK PROGRAMME - COASTAL RESOURCES

(Paper prepared by the Secretariat)

1. The activities of the South Pacific Commission in the development of coastal fisheries throughout the region, covering the period August 1985 to July 1986, will be reported in detail under Agenda items 5 and 6. A summary is presented here to facilitate discussion under these items.

2. Coastal resource staff at 31 July 1986 consisted of the following 8 posts/personnel: Fisheries Adviser (B.R. Smith); Assistant Fisheries Officer (G.L. Preston); Fisheries Training Officer (Capt. A.C. Robertson); Master Fisherman (P.D. Mead); Master Fisherman (P. Taumaia); Master Fisherman (L.B. Chapman); Fish Processing Officer (D. Burford); Secretary/Administrative Assistant (K. Legras). Miss S. Rodgers, former Secretary/Administrative Assistant, left the Commission in June.

I - DEEP SEA FISHERIES DEVELOPMENT PROJECT

3. During the last twelve months, the Deep Sea Fisheries Development Project has operated in five countries: Cook Islands, Marshall Islands, New Caledonia, Tonga and Tuvalu; and has now completed 40 country assignments since the project was initiated in 1978. In response to requests from individual countries and in line with recommendations from successive meetings of the Regional Technical Meeting on Fisheries, the average length of each country visit has increased substantially, as has the complexity of the tasks undertaken by the master fishermen during individual assignments. Details of country visits completed during 1985/86 are given below.

Table 1: DEEP SEA FISHERIES DEVELOPMENT PROJECT ACTIVITIES
1 August 1985 - 31 July 1986

<u>Country, dates, masterfisherman</u>	<u>Primary Objectives</u>	<u>Activities of masterfisherman</u>
New Caledonia June 85-November 85 L. Chapman	Gear development, training	Experimental fishing around FADs, training of fisheries demonstration team and local fishermen in FAD-fishing and deep-bottom fishing techniques.
Tonga March 85-February 86 P. Mead	Training	Training of fishermen purchas- ing new government-built fishing boats in deep-bottom and other fishing methods, boat handling and maintenance, etc. Activities covered the three major centres, Tongatapu, Vava'u and Ha'paiti.
Marshall Islands January 85-September 85 P. Taumaia	Training	Training government demonstra- tion team and island fishermen in deep-bottom fishing techniques.
Cook Islands November 85-July 86 L. Chapman	Experimental fishing, gear development	Experimental fishing around FADs, including use of vertical longlines and palu-ahi. Investigations of effective bait fishing methods with emphasis on bottom set gill nets. Training in fish handling techniques.
Tuvalu October 85-June 86 P. Taumaia	Training gear development	Training of local fishermen in FAD-fishing techniques, particularly vertical long- lining. FAD deployment.

4. While the training of local fishermen in deep-bottom hand-reel fishing techniques continued as an important activity, increased emphasis was placed on the development of new or improved fishing gears or methods, focusing on FAD fishing regimes as a priority area. Gear development and experimental fishing activities formed the major part of the Cook Islands country visit and important components of the assignments in New Caledonia and Tuvalu. A simple vertical longline technique has been developed which has proven to be effective in catching the larger deeper swimming tunas associated with FADs, and this has now been adopted by fishermen in a number of countries. Substantial contributions of fishing gear were again made by FAO/UNDP Regional Fisheries Development Programme RAS/85/004, which the Commission acknowledges with appreciation.

5. In addition to the formal country visits listed, one of the Masterfishermen, Paul Mead, was again seconded for six weeks to instruct SPC Nelson Course trainees in small boat fishing techniques during the practical fishing module of the 1986 course held in Vava'u, Tonga.

6. Now in its ninth year of operation, country interest and demand for this project remains high, with ten requests received to date, from American Samoa, Cook Islands, French Polynesia, Federated States of Micronesia, New Caledonia, Niue, Palau, Solomon Islands, Tokelau, and Western Samoa.

Gear Development Unit

7. Following extensive discussion on the scope of activities undertaken by the masterfishermen during country assignments and the effectiveness of the project in the two major functional areas, training and gear development, the 1985 Regional Technical Meeting on Fisheries "noted the importance and potential value to the region of the gear development work carried out by the Deep Sea Fisheries Development Project, and recommended that the project be restructured in the following manner to place increased emphasis on this activity and to enhance its effectiveness.

- (i) One of the masterfishermen to be assigned full-time to the development of new and innovative fishing gears and fishing methods suitable for use in the Pacific Islands.
- (ii) This assignment should be for an initial period of two years and located at a suitable site within the region. Every effort should be made by the host government and the South Pacific Commission to ensure that the programme has every support.
- (iii) Where gear development activities are undertaken during individual country projects, longer term arrangements would be desirable."

8. In response to this directive the Secretariat proceeded with planning to establish a gear development unit as a distinct entity within the framework of the Deep Sea Fisheries Development Project. Operational guidelines for this activity together with the specific arrangements for its first assignment in Vavau, Tonga are presented in a separate document.

Reporting of Deep Sea Fisheries Development Project Activities

9. At the end of each Deep Sea Fisheries Development Project country visit, the Masterfisherman concerned submits a draft report of his activities to SPC Headquarters. This is then used as a basis for an official, approved report from SPC to the country concerned on the conclusions and recommendations of the visit. Preparation of the final report requires considerable editorial, data analysis, and background research work by SPC fisheries staff at Headquarters.

10. In most cases, draft reports have been submitted to SPC reasonably promptly by field staff at the end of their assignments. However, due to manpower shortages at Headquarters, a considerable backlog of final reports has accumulated in recent years. In late 1985, the number of coastal fisheries staff based in Noumea increased from 2 to 4, and this made it possible to accord the reports a higher priority as recommended by the 17th Regional Technical Meeting on Fisheries. Some of the outstanding reports (4) have recently been forwarded to SPC member governments for approval, others (7) are nearing completing, and the remainder will be treated as of the highest priority, with the aim of removing the backlog by the end of 1986.

11. The Commission appreciates that the value of these reports to member governments tends to diminish as their publication is delayed. We have therefore adopted the interim measure, from January 1986, of forwarding an unedited copy of the Masterfisherman's draft report to the country concerned, for internal use. These drafts are not approved for general distribution by the Commission, and do not have the Commission's endorsement.

12. A further reporting activity recommended by a series of SPC Regional Technical Meeting on Fisheries has been the analysis of the fishing information collected over the 8 years of the Deep Sea Fisheries Development Projects operation. This activity was first recommended in 1981, when it was envisaged as a three-year project to be undertaken by a full-time fisheries scientist. The Commission's subsequent inability to locate funding for the project resulted in it's being reduced in scope, and in recommendation that it be carried out using existing resources. Given the manpower shortages already existing only limited progress has been made on this work. A large part of the data has been logged into computer files in preparation for detailed analysis, and discussions were held with both ORSTOM and the NMFS regarding the analytical procedures to be used, but the analysis has yet to be completed. A preliminary descriptive report summarising basic catch and effort data from different locations where the project had operated from is in preparation and will be circulated at this meeting if possible. Further work on this project will be resumed as a priority activity after the backlog of country reports has been completed.

II - FISH HANDLING AND PROCESSING PROJECT

13. Approved by the Twenty-fourth South Pacific Conference in Noumea, and funded by the New Zealand Government for two years, the objectives of the project are:

- (1) to assist countries in the improvement and upgrading of fish handling practices in all sectors of the national fishing industry;
- (2) to promote the use of and assist with the development of simple processing techniques suitable for use in Pacific Island countries.

14. This project became fully operational in April 1986 with the appointment of the Fish Handling Officer Mr David Burford. His first activity has been to assist and provide on-site direction to the SPC Fish Handling and Processing Course now underway in Port Vila, Vanuatu (see WP.6, Page). Mr Burford will provide follow-up training assistance to graduates of this course during subsequent country visits and involve them in all aspects of the project in-country training activities.

15. As for the masterfisherman of the Deep Sea Fisheries Development Project, the Fish Handling and Processing Officer will be available, on request, to provide specialist technical advice and training assistance in all aspects of post harvest fish handling, processing, and product development. It is anticipated that each country assignment would last 2 to 3 months during which time the Fish Handling Officer will conduct training workshops and courses catering to individual country needs, and directed at industry workers at all points along the distribution chain, from fishermen through to retailers, with the primary objective of improving the overall quality of fish products reaching the consumer. This should lead to increased consumer demand for fish products in domestic markets and enhanced export value where this potential exists. There has been considerable early interest in this project with three countries to date indicating their requirement for assistance under this programme.

III - REGIONAL FISHERIES TRAINING PROJECT

16. This project, implemented in August 1985, was conceived as an umbrella project which would co-ordinate all ongoing SPC fisheries training activities, and which would develop and promote a programme of short-term vocational or specialized training activities tailored to meet the specific needs of individual countries or groups of countries.

17. Activities undertaken under this project have followed the guidelines established by the 1985 Regional Technical Meeting on Fisheries. In the last twelve months considerable progress has been made, and is briefly reported below by priority task area.

(i) Review of existing training arrangements and dissemination of this information to member countries

Every effort has been made through extensive correspondence, library search and personal contact and interviews with fisheries and education officials in all countries visited by SPC staff, to identify educational and technical institutions or organisations, both inside and outside the SPC area, which are involved in the provision of training programmes, formal or informal, of particular or potential relevance to fisheries departments and industries in the Pacific Islands.

A draft Directory of fisheries training opportunities presently available to Pacific Islanders is tabled at this meeting for critical review and comment (W.P. 10). Before the manuscript is finalized, relevant excerpts from the draft will be forwarded to all listed institutions and organisations for comment to ensure that the individual course summaries are accurate and up-to-date. This document is seen primarily as a working tool for fisheries officers and industry managers to assist them in the selection of appropriate training courses for individual staff members and to promote greater co-ordination and forward planning of training activities at all levels.

In an attempt to gauge the relevance of some of this training, a student questionnaire has been developed for completion by past participants at some of the more popular courses. The results obtained are as yet inconclusive but do provide some interesting insights into the way the trainees perceive the training offered.

(ii) Assess the training needs of individual member countries through consultative visits and develop action programmes to address these needs.

The Fisheries Training Officer has now visited eight member countries (American Samoa, Fiji, Niue, Papua New Guinea, Solomon Islands, Tonga, Vanuatu and Western Samoa) for consultations on national training needs and priorities. Every effort will be made to visit remaining countries in the coming year.

The benefits of these visits have been substantial and far reaching in their effect, not least of which has been a raising of the general awareness of the importance of training issues in individual countries, and the identification of specific areas where further training assistance is required under the SPC programme. It has also contributed to SPC understanding of the particular problems and constraints faced by countries in the field of training and this hopefully will be reflected in more responsive programmes and procedures in the future. On a more somber note it has also highlighted some specific problem areas which need to be addressed and these will be discussed in detail under Agenda item 6(ii).

Several national level training activities are now under development as a direct result of these discussions, including a course in Beche-de-mer collection processing and marketing for Papua New Guinea fisheries extension officers, and a third refrigeration training course to be held in Kavieng, Papua New Guinea, and number of other initiatives are being considered.

A major finding of the survey has been the high priority accorded by most if not all countries to training aimed at upgrading national fisheries extension services, and in particular in extension techniques and personal communication skills. This has led to two regional level activities (1) a catching methods and extension skills course scheduled to be held in Fiji in September 1986, and (2) the selection of this subject as the topic for the 1986 meeting workshop (Agenda Item 8) during which it is hoped to clearly define the role and skill requirements of the fisheries extension office, and based on this understanding, develop a suitable programme of training activities at national and regional levels to assist countries to improve the effectiveness of their extension staff.

(iii) Continue existing or planned activities

(iv) Develop regional training programmes in priority areas

As indicated earlier, training activities gained considerable momentum with the formal implementation of the Regional Fisheries Training Project and the appointment of a Fisheries Officer. This is particularly evident in the list of regional training courses (Table 2) which have been carried out, are underway, or are in late planning stages for execution in 1986.

Course	Location dates	Length of course (weeks)	No. trainees
1. SPC/Nelson Polytechnic Pacific Island Fisheries Officer Training Course	Nelson NZ/ Vava'u, Tonga 10/2-18/7	23	12
2. SPC/FAO/UNDP Regional Refrigeration Training Course	Rarotonga Cook Islands 9/6-17/10	19	18
3. SPC Fish Handling and Processing Course	Port Vila Vanuatu 9/6-15/8	10	16
4. SPC Catching Methods and Extension Skills Course	Suva Fiji 29/9-7/11	6	12
5. Fish Finder/Colour Sounder Courses	Noumea New Caledonia 31/7-2/8 11/8-13/8	3 days	12

18. A general outline of each of the above courses is provided in WP 6, and more specific details will be presented under Agenda Item 6(i).

Training attachments

19. Mr Baleivanualala, a Senior Fisheries Officer from Fiji, will spend eight weeks on attachment to SPC (13 July - 5 September 1986) as part of an FAO/UNDP sponsored training programme also involving similar length attachments to FFA and the FAO/UNDP South Pacific Regional Fisheries Development Programme.

20. Attachment training is regarded as a very effective mechanism for promoting the rapid interchange of experience and technical information within the region, and will receive increasing emphasis within SPC training and field programmes in the coming year.

IV - SPC GRANTS-IN-AID (FISHERIES)

21. The following accounts only for those SPC grants-in-aid which apply to fisheries related fields.

Inter-country study visits

22. Two study visit requests approved for 1985 (Kiribati, Tuvalu) were not taken up and the funds withdrawn. One study visit was approved for 1986; Mr Filipe Viala, Senior Fisheries Assistant with the Fiji Fisheries Division spent one week in Noumea (12-19 June 1986) and studied most aspects of the ornamental coral collection industry in New Caledonia, including harvesting techniques and exploitation patterns, processing for export, local artifact production, and of particular importance, government resource monitoring and management measures.

Short-term expert and specialist services

23. Two requests have been approved under this award for 1986.

- i) A survey of the economically important algae of YAP, Federated States of Micronesia. The study will involve a two-week field survey to be carried out by Dr. R. Tsuda of the University of Guam with assistance of a graduate assistant. SPC will cover all direct costs of the consultants with the University of Guam contributing staff salary costs.
- ii) A feasibility study of a trochus and giant clam hatchery for Yap State (FSM). This request has been approved in principle and awaits some clarification and agreement on the overall scope and structure of the study.

Applied research experiments and fieldwork

24. The following projects have been approved and are now in late planning or early execution phases.

- i) FIJI - Funding support for a Fisheries Division publication considered to have considerable relevance to other countries in the SPC area, namely a manual on the criteria for certifying fish which have been killed by explosives.
- ii) FSM - Supplementary funding for a follow-up survey on the outer islands of YAP to determine the effectiveness of an earlier (1985) trochus reef reseeded programme. This is seen as an essential first step in planning for future programmes of this nature.

- iii) KIRIBATI - A survey of the potential for commercial exploitation of the deep-water shrimp resources of Kiribati. SPC will provide the services of a suitable specialist and appropriate fishing gear, with the Kiribati government contributing operational costs of the vessel and crew and counterpart staff for a four to six week survey period.
- iv) KIRIBATI - An evaluation of the potential for pearl shell culture in Kiribati, with initial focus on Tarawa and Bataritari. E.V.A.A.M. (French Polynesia) have generously offered to assist with this evaluation mission and to provide training for I-Kiribati on culture techniques at pearl farms in French Polynesia.

V TRAVEL, COMMUNICATIONS, AND DISSEMINATION OF INFORMATION

Duty Travel

25. Duty travel in connection with the coastal resources work programme was undertaken to the following countries.

Fisheries Adviser: Cook Islands, Fiji (2), Hawaii, Tonga, Vanuatu (2).

Assistant Fisheries Officer: American Samoa, Canada, Fiji, Tuvalu, Vanuatu, Western Samoa.

Fisheries Training Officer: American Samoa, Australia, Fiji (2), New Zealand, Niue, Papua New Guinea, Solomon Islands, Tonga (2), Vanuatu (3), Western Samoa.

Masterfisherman (P.Mead): Tonga, New Caledonia.

Masterfisherman (L.Chapman): Cook Islands, New Caledonia.

Masterfisherman (P.Taumaia): Marshall Islands, Tuvalu.

Fish Handling and Processing Officer: Vanuatu.

Advisory and Information Services

26. The Fisheries Adviser and Assistant Fisheries Officer maintained this clearing house function and responded to a large number of requests from member countries for technical information on a diverse range of topics. While time consuming this is regarded as a vital service to governments and the section maintains contacts and up to date information on a wide variety of development and resource-related subjects.

27. Quarterly production of the Fisheries Newsletter has been maintained as far as possible with three issues published and a fourth in preparation. The response from readers has been very encouraging, and particularly gratifying has been the increasing response from fisheries officers themselves who are now regularly sending in articles and informative reports on current activities etc. for inclusion in the newsletter.

Other publications

28. A number of publications have been produced or are now in the final stages of preparation ; two reports resulting from a consultancy on the specimen shell resources of Tuvalu prepared by Mr Brian Parkinson, a handbook entitled "Notes on the Construction of the FAO Wooden Fishing Reel", a second handbook "Trolling Techniques for the Pacific Islands - a handbook for fishermen" by Garry Preston and Steve Belews. The latter is the first of a planned series of fishing method handbooks and has been produced with the generous financial support of the Commonwealth Foundation and the FAO/UNDP South Pacific Regional Fisheries Development Programme.
