

30 SEPT. 1983

SOUTH PACIFIC COMMISSION

FIFTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES  
(Noumea, New Caledonia, 1 - 5 August 1983)

REPORT

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August 1983

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	<u>Page</u>
VIII. OTHER BUSINESS	12
IX. ADOPTION OF THE REPORT	12
X. SUMMARY OF RECOMMENDATIONS	13

Annexes

ANNEX I - List of Working Papers presented at the meeting	17
ANNEX II - List of Participants	19

CONTENTS

	<u>Page</u>
I. OPENING ADDRESS	1
II. APPOINTMENT OF CHAIRMAN AND OTHER OFFICE BEARERS	1
III. APPROVAL OF AGENDA AND TIMETABLE	1
IV. REVIEW OF COASTAL FISHERIES WORK PROGRAMME	2
A. Deep Sea Fisheries Development Project	2
B. Deep Bottom Resources Survey	3
C. SPC Grants-in-Aid	3
D. Training	3
E. Collection and dissemination of information	4
F. Other business	4
V. FISH AGGREGATION DEVICES	5
A. New opportunities for small-scale fishermen	5
B. The implications of the findings of the SPC FAD design study	5
VI. OCEANIC FISHERIES	6
A. Review of progress with priority items of the Tuna and Billfish Assessment Programme	6
B. The future requirements for the conservation of the tuna resources of the region, and the role of the Tuna and Billfish Assessment Programme	7
VII. WORKSHOP ON ASPECTS OF FISH HANDLING AND PROCESSING	9
A. Onboard handling and simple processing of the catch	9
B. Quality control in freezer systems	9
C. Simple processing techniques for the preservation of fish for subsistence, internal and export markets	10
D. Marketing and distribution systems with particular reference to economic factors	10
E. Training	10

I. OPENING ADDRESS

1. The Secretary-General, Mr Francis Bugotu, formally opened the meeting with an address welcoming delegates and emphasising the importance of this year's meeting, particularly to the tuna fisheries of the region.

II. APPOINTMENT OF CHAIRMAN AND OTHER OFFICE BEARERS

2. Following the recommendation from last year's meeting that the Government of Tonga provide the Chairman and the Government of Tuvalu, the Vice-Chairman, Mr Semisi Fakahau and Mr Elisala Pita respectively were appointed to these two positions. The meeting agreed to the Secretariat's suggestion that membership of the drafting committee be rotated among delegates to enable a wide participation. Delegates were subsequently approached individually and the following drafting committee roster arranged:

Monday : New Caledonia, Vanuatu, French Polynesia, Tonga  
Tuesday : United States of America, Kiribati, France,  
American Samoa  
Wednesday: France, Kiribati, Guam  
Thursday : Tonga, Federated States of Micronesia, Guam,  
American Samoa  
Friday : New Caledonia, Federated States of Micronesia,  
Vanuatu, French Polynesia.

III. APPROVAL OF AGENDA AND TIMETABLE

3. The revised wording of agenda item 6(a) was noted by the representative of Papua New Guinea who suggested that the original wording be re-adopted. After some discussion the representative of Vanuatu proposed that the wording "The future requirements for the conservation of the tuna resources of the region, and the role of Tuna and Billfish Assessment Programme" be adopted as a compromise. This was accepted by the meeting.

4. A change to the order of presentation was agreed, such that consideration of item 6(b), Review of progress with priority items of the Tuna and Billfish Assessment Programme, precede item 6(a). It was proposed that items 1 to 6 be completed by Wednesday and that item 7 be considered on Thursday.

5. The provisional agenda was then amended and adopted.

AGENDA

1. Opening address
2. Appointment of Chairman and other office bearers
3. Approval of agenda and timetable
4. Review of Coastal Fisheries Work Programme
5. Fish aggregation devices:
  - (a) New opportunities for small-scale fishermen
  - (b) The implications of the findings of the SPC FAD design study
6. Oceanic Fisheries:
  - (a) Review of progress with priority items of the Tuna and Billfish Assessment Programme. (This item incorporates a meeting of the Expert Committee on Tropical Tunas.)
  - (b) The future requirements for the conservation of the tuna resources of the region, and the role of the Tuna and Billfish Assessment Programme
7. Workshop on aspects of fish handling and processing
8. Other business
9. Adoption of report

IV. REVIEW OF COASTAL FISHERIES WORK PROGRAMME

A. Deep Sea Fisheries Development Project

6. One correction was made to working paper 1, in which reference to UNDP was deleted and replaced by FAO (Table 1 and paragraph 7).

7. The Fisheries Adviser, Mr Bernard Smith, and SPC Master Fishermen, Messrs Paul Mead and Lindsay Chapman, summarised SPC activities under the Deep Sea Fisheries Development Project and illustrated several country visits using slides taken by the master fishermen. Subsequent discussion highlighted the difficulties faced by member countries in developing their coastal fisheries, and in particular, problems associated with: the introduction of technology appropriate to local conditions (French Polynesia); bait supply (Cook Islands); marketing (American Samoa, Tonga and Kiribati); resource assessment and management (American Samoa, Tonga and Kiribati); and appropriate vessel design (Tonga, French Polynesia, New Caledonia and Tokelau). Several delegates expressed their appreciation of the work done by the project. The meeting directed the drafting committee to incorporate these sentiments in a recommendation on the future direction to be taken by the project.

Recommendation No. 1

The meeting commended the South Pacific Commission on the success of the Deep Sea Fisheries Development Project and recommended its continuation with sustained emphasis on the development of small-scale fishing gear and techniques.

B. Deep Bottom Resources Survey

8. Discussion of this topic was closely associated with that of the Deep Sea Fisheries Development Project. It was noted that although little statistical information on deep bottom fish stocks existed in most SPC member countries, there was considerable interest in aspects of resource management, and that several organisations had made significant advances in the assessment of local deep bottom resources. M. René Grandperrin, observer from ORSTOM, referred to working papers 9 and 12 and described the research on deep bottom snappers conducted in Vanuatu by ORSTOM, in co-operation with the Vanuatu Fisheries Department. The meeting noted with satisfaction the progress made towards arrangements for the analysis of accumulated Deep Sea Fisheries Development Project data, about which the Secretariat undertook to report to next year's meeting, and made the following recommendation.

Recommendation No. 2

The meeting recommended that the South Pacific Commission continue to co-operate with other organisations in the collection and collation of data on deep bottom fish stocks, and to encourage member countries to gather such data where possible.

The representative of France observed that ORSTOM was ready to give technical support in the analysis of such data if the Secretariat felt that this would be helpful.

C. SPC Grants-in-Aid

9. The Fisheries Adviser briefly reported on SPC grants-in-aid during 1983, and noted that the consultancy on fish aggregation devices (FADs) would be presented under agenda item 5(b).

D. Training

10. The meeting expressed its satisfaction with the SPC Fisheries Officer Training Course held at Nelson Polytechnic in New Zealand, and its wish that the course be continued in future. It was noted that the ad hoc nature of the course made planning of training difficult for member countries.

Recommendation No. 3

The meeting recommended that the South Pacific Commission endeavour to locate long-term funding for the South Pacific Commission Fisheries Officer Training Course.

11. The Secretariat noted that the Commonwealth Secretariat and the Commonwealth Foundation have already indicated their willingness to provide longer-term contributions.

12. In order to permit evaluation of the training offered by the course, the Fisheries Adviser requested that member countries report on trainees' performance subsequent to their return home.

E. Collection and dissemination of information

13. The Fisheries Adviser noted the difficulties experienced in regular production of the Fisheries Newsletter in its previous format, and hoped that the changes that have been made are in line with the needs of member countries. A handbook on tuna baitfish identification entitled A guide to the common baitfishes of the South Pacific Commission area has been completed and is now awaiting printing. A limited number of copies were made available for inspection at the meeting.

14. The Fisheries Adviser also announced the planned production of two handbooks on fishing techniques. The representative of Vanuatu noted that a large number of copies should be printed to allow wide circulation, and SPC was requested by the meeting to seek additional funds for this purpose.

F. Other business

15. The representative of Vanuatu requested clarification on the status of the bêche-de-mer resource assessment carried out by SPC in Fiji two years ago. The Fisheries Adviser noted the difficulties so far experienced in obtaining the consultant's final report, and indicated that efforts would continue to secure this.

16. At the request of the Secretariat, Dr Antony Lewis briefly reported on the meeting of the Expert Committee on Ciguatera in which he had participated.

17. The representative of Vanuatu stressed the need for a reliable guide to those fish species commonly implicated in cases of ciguatera poisoning in view of the intention of many member countries to develop markets for anticipated increased production. The existing SPC manual on this topic was considered to be too general to meet this need, and the possibility of revising this document was briefly discussed. The Secretariat advised that discussions had been held with the author of the earlier report, Dr Raymond Bagnis, and was of the opinion that the amount of work involved would be substantial. In view of the fact that previous meetings had not attached high priority to this task, it has been set aside because of more pressing matters.

## V. FISH AGGREGATION DEVICES

### A. New opportunities for small-scale fishermen

18. In reference to working paper 3 the Assistant Fisheries Officer, Mr Garry Preston, briefly summarised SPC activities in the development of small-scale fishing gear and techniques. Most of the work reported was conducted around FADs, and more detailed explanations of the techniques employed, the problems encountered, and the results were given by Master Fishermen Paul Mead and Lindsay Chapman. A number of delegates and observers went on to describe their own experiences in this area. Although considerable progress had been made by the Project, the meeting noted that a great deal of work remained to be done in many areas, and that this should be incorporated into future Deep Sea Fisheries Development Project visits, as well as national fisheries development programmes. The master fishermen were commended for providing opportunities for individual governments to develop these activities further and tailor them to local conditions.

### B. The implications of the findings of the SPC FAD design study

19. The Fisheries Adviser summarised the development of FAD deployment programmes in the region, and the problems which led to the recommendation by last year's meeting for this study to be undertaken. Mr Smith thanked those involved in identifying the expertise required for the study and particularly the NOAA Data Buoy Center of the U.S. Department of Commerce for making Lt. Richard Boy available as a consultant.

20. Lt. Boy then went through the detailed draft report (working paper 2) highlighting the advantages and disadvantages of various FAD components, and particularly emphasised the need for FADs to be regarded as complete systems. He went on to present a recommended mooring design, which met the study criteria of two years' life expectancy, moderate cost, and general applicability to Pacific Island conditions. Lt. Boy explained in detail how to modify the design to cope with local variations in operating conditions. The presentation generated considerable discussion among the participants, which closed with the meeting expressing its appreciation of the work done by the consultant and the Fisheries Adviser in producing this valuable report.

## VI. OCEANIC FISHERIES

### A. Review of progress with priority items of the Tuna and Billfish Assessment Programme

21. The Tuna and Billfish Assessment Programme Co-ordinator, Dr Robert Kearney, opened discussion of this item by commenting on the funding of the Programme. Confirmed funding will carry the Programme through until April 1984, and further funds recently committed by the Government of France and possibly other sources should enable the Programme to run until its scheduled termination in September 1984.

22. In referring to working paper 4, the Tuna Programme Co-ordinator reviewed progress with priority items within the Programme. Under item 8, ORSTOM research scientist, Dr Alain Morlière, outlined the progress of the French Government in implementing its satellite imagery service, in accordance with the request made at last year's meeting. The system should come into operation during 1985, and data from the geostationary satellite would make it possible to obtain sea surface temperatures and meteorological information, while data from the satellite in polar orbit will provide information about terrestrial sources and the lagoon.

23. It emerged from Dr Kearney's presentation that in view of recent developments in Pacific tuna fisheries, some reassessment of the Programme's priorities may be necessary. There followed a lengthy discussion of the Programme's work, during which Dr Kearney presented information detailing recent developments in the tuna fisheries of the Western Pacific, and particularly the recent increases in purse seining. Much attention was given to the interactions between fisheries, and many participants described relevant experience in other parts of the world.

24. M. Jean-Paul Rebert, observer from ORSTOM, gave a slide presentation outlining changes in the thermal structure of the Pacific during the 1982-83 El Nino phenomenon, the most intense and prolonged so far recorded.

25. The Chairman then invited the Tuna Programme Co-ordinator to give his views on changes of priority within the work programme. Dr Kearney commented that this would be to some extent determined by the length of time the Programme had to run, but that major priority areas were:

- (a) Collection and evaluation of catch and effort data;
- (b) Assessment of interaction between fisheries, particularly those involving yellowfin;
- (c) Collection of biological information on yellowfin and other tunas.

26. The other items listed in working paper 4 would have to be dealt with on an ad hoc basis, although some, such as the question of observer programmes, could be incorporated to meet the high priority objectives.

27. There was a series of questions regarding the extent of the data already received by the Programme and the additional data required for assessment of the stocks. Dr Kearney estimated that of the total catch of skipjack taken in the SPC area, only 35 per cent were declared to the South Pacific Commission. Statistics are currently provided by domestic fisheries, joint venture vessels, licensed Japanese fishing boats, and some Taiwanese and Korean vessels. Data are not available to the SPC from U.S. purse seiners and vessels fishing international waters within the SPC area. To achieve an adequate coverage, these data would need to be collected, together with information from outside the area. A system of verification would also be required, which could include the collection of unloading data, catch sampling, and observer programmes.

28. Commenting on observer programmes, the Tuna Programme Co-ordinator referred to difficulties in obtaining the funding required to appoint a co-ordinator of regional observer programmes, as recommended by last year's meeting, and to the problems of separating the dual objectives of data collection and surveillance, the latter of which was seen as being outside SPC's mandate. Dr Kearney noted, however, that SPC had placed observers on two Japanese purse seiners. These trips produced useful information which will help to improve the data collection systems.

29. In reviewing the activities of the Tuna and Billfish Assessment Programme, the delegates noted that most of the present knowledge about skipjack in the Western Pacific has been obtained through the activities of the Programme and its predecessor, the Skipjack Survey and Assessment Programme. If the Tuna Programme was not continued, the region would be put back in the position it was before the Skipjack Programme started.

B. The future requirements for the conservation of the tuna resources of the region, and the role of the Tuna and Billfish Assessment Programme

30. After an exchange of views on the continuation of the Programme in its present or a modified form, the meeting expressed its strong support for the Programme and proceeded to discuss the priority items on the assumption that this work would continue. It was felt that statistical coverage in general needed improving, and the meeting discussed at length how such improvements might be achieved. The importance of precisely defining the objective of a statistical programme was noted, as this would determine the type of data that would be needed. There was a consensus that additional statistics were required both from within and outside the region. Major gaps in the present coverage and the ways of filling these were discussed, and this led to the question of funding and staffing the Programme should it be extended. Dr Kearney pointed out that recruiting and retaining appropriate staff was a major problem, and that no formal approach for funding an extension of the Programme has so far been made. He was, however, of the opinion that funding would be easier to solicit if the Programme was strongly supported by this meeting and the Twenty-third South Pacific Conference.

31. The meeting then discussed various proposals aimed at broadening the collection of statistics beyond those now available to the Programme and particularly those from outside the region. Mr August Felando, observer from the American Tunaboat Association, informed the meeting that U.S. purse seiners provided statistics to international organisations under treaty obligations, but that there was no such arrangement in the SPC area. Dr Paul Hooker, observer from the Indo-Pacific Tuna Programme (IPTP) of the Food and Agriculture Organization (FAO), outlined the possibilities for interchange of data with IPTP. The representative of France offered to provide information on the functions of the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Inter-American Tropical Tuna Commission (IATTC) to the Secretariat for translation and distribution.

32. Subsequent discussion centred around the following major topics: funding and duration of any extension of the Programme; involvement of other interested organisations and distant-water fishing nations in the statistical network, and the organisation and timing of a meeting to facilitate this; the value of additional tagging of yellowfin and skipjack; and the need for and problems of conservation and management of a single species in a multi-species fishery. The meeting discussed the need for future funding of the Programme and, in view of the priority attached to the assessment of interactions between tuna fisheries, noted that additional funding for further tagging work would be needed. The discussion yielded the following recommendations.

Recommendation No. 4

The meeting commended the work carried out by the Tuna and Billfish Assessment Programme and strongly recommended its continuation for two years in the first instance, with priority accorded to the collection and evaluation of catch and effort data and assessment of interaction between fisheries.

Recommendation No. 5

The meeting recognised that there are substantial gaps in the catch and effort data available to the Programme, but was unable to identify methods of obtaining the information required. Accordingly, the meeting recommended that the Twenty-third South Pacific Conference explore ways and means of obtaining input from the distant-water fishing nations in pursuing the objectives of the revised work programme. The meeting suggested that this include the convening of a meeting of coastal states, distant-water fishing nations, and international organisations with an interest and experience in this field, such as the Forum Fisheries Agency (FFA), FAO, IATTC and ICCAT, to identify methods of collection, integration, and analysis of statistical and other scientific data on highly migratory species in the region. The meeting understood that the information generated from the Programme would be used to identify issues relating to the conservation of highly migratory species in the region. The suggested meeting would therefore need to explore possible structural arrangements which might be required for the conservation of tuna stocks of the region.

33. The Secretariat's suggestion that the Forum Fisheries Agency be invited to co-sponsor the meeting was briefly discussed.

#### VII. WORKSHOP ON ASPECTS OF FISH HANDLING AND PROCESSING

34. The Fisheries Adviser opened this item by noting that methods of onboard handling and processing of the catch currently in use in the Pacific were generally very basic. He outlined the need for improvement in these areas to upgrade fish quality, particularly where long-term storage or development of export markets was envisaged.

##### A. Onboard handling and simple processing of the catch

35. The Fisheries Adviser presented two SPC training videos, entitled "Handle It Right" (Parts I and II), in which Master Fisherman Lindsay Chapman demonstrated proper methods of bleeding, cleaning, icing, filleting, packing and freezing of fish. The meeting commended the quality and usefulness of the videos as a training aid, and several participants indicated that they would like to have their own copies. The meeting requested the Secretariat to seek funding to enable further editing, incorporating some modifications suggested by the participants, and distribution of the videos in the various formats used in the region. The videos were followed by a demonstration by Mr Chapman of several of the items covered, using fresh fish. In discussing the points raised, the meeting noted the need for countries to develop simple codes of practice tailored to meet the varied requirements of different market situations.

36. Dr R. Poulter, of the Tropical Development and Research Institute (United Kingdom), offered to make available to participants literature on filleting and processing, and Mr David James of FAO, information on the very difficult shark leather trade.

37. The meeting then discussed, with reference to background paper 4, the successful air-shipping of fresh fish from American Samoa to Hawaii. Following questions on import requirements in Hawaii, Mr Doyle Gates of the U.S. National Marine Fisheries Service offered to forward this information to SPC for circulation among member countries. Mr James noted that the FAO "Infofish" project had produced a register of import regulations in major fish-importing countries, and had recently reported on the potential of Hong Kong, Singapore and Tokyo as alternative export markets. He pointed out the very high quality requirements of these markets and the seasonality of the trade.

##### B. Quality control in freezer systems

38. Dr Poulter gave a presentation in which he specified the proper practices and techniques for freezing fish in top-quality condition. Discussion followed, in which a number of participants, while recognising the high quality requirements of many export markets, noted that local markets tend to have less stringent standards. This permitted poor handling practices and lack of product control in freezers.

C. Simple processing techniques for the preservation of fish for subsistence, internal and export markets

39. Dr Poulter again addressed the meeting and described the three major categories of fish preservation: sterilisation (which includes canning, cooking, pickling and smoking); reduced temperature (freezing and chilling); and reduced water activity (salting, smoking and drying). A number of participants described these activities in their own countries.

D. Marketing and distribution systems with particular reference to economic factors

40. Mr Crick Carleton, consultant economist, gave a presentation in which he outlined the difference between welfare and commercial objectives in fisheries development. Mr Carleton detailed the advantages and disadvantages of government and private involvement in fish collection and marketing systems. The discussion that followed centred on the difficulties of achieving commercial objectives in government-run projects, the encouragement of private involvement and risk-taking, and the need to be aware of hidden costs and subsidies.

E. Training

41. The need for training in fish handling and processing at various levels was discussed. It was noted that although each country had its own special requirements, there were particular needs for training in the areas of refrigeration and small business management. The meeting recognised the need for both local- and regional-level training, the former to be directed to fishermen and industry workers, and the latter towards producing instructors within the region. The integration of fisheries subjects into school curricula was also suggested.

42. Mr Harry Sperling, UNDP Regional Fisheries Co-ordinator, described a planned course on refrigeration to be held in Rarotonga early in 1984, and advised that the United Nations Development Programme (UNDP) would fund participants from Forum and Micronesian countries. The Cook Islands representative announced his government's willingness to entertain participation by all SPC countries, subject to funding being available. The representative of Vanuatu advised the meeting of a proposed workshop on fish handling and processing to be funded by the Commonwealth Secretariat. The Vanuatu Government had agreed to host this workshop if the need was shown for such a course.

43. The meeting recognised the benefits of exchanging local expertise available within the region, and the representatives of UNDP and SPC reminded participants that both these organisations had funds for this purpose. Mr James also advised the meeting that FAO was able to fund a training workshop at instructor level for the region, perhaps in conjunction with SPC.

44. A number of participants noted the need for training in basic business procedures, and the representative of French Polynesia advised the meeting that a 14-week course in aquaculture management held at Moorea touched on many aspects of this subject.

45. Mr James offered to forward a list of relevant FAO publications to SPC for distribution in the region. Dr Poulter also offered to make available TDRI publications and expertise in answering specific enquiries related to fish handling and processing problems.

46. Following the discussion, the meeting made the following recommendations:

Recommendation No. 6

Identifying training in fish handling and simple processing as a priority need in the region and considering the undoubted success of the Deep Sea Fisheries Development Project, the meeting strongly recommended that the South Pacific Commission either expand the present Deep Sea Fisheries Development Project or establish a similar project to make available practical specialists in fish handling and simple processing to provide longer-term in-country training and assistance in this important area.

Recommendation No. 7

Recognising the considerable amount of experience and information available within countries of the region, and the need to summarise this information and make it readily available on a regional basis, the meeting recommended that the South Pacific Commission:

- (a) compile a list of fish processing gear and equipment used throughout the region, with comments on the performance and suitability of such equipment;
- (b) identify avenues and opportunities for technical training both within and outside the South Pacific Commission area;
- (c) facilitate the exchange of experienced personnel among countries of the region to meet short-term training requirements in specialised areas.

#### VIII. OTHER BUSINESS

47. In view of the increased emphasis on gear development work now incorporated into the Deep Sea Fisheries Development Project, the meeting recognised that longer country visits may be necessary in some instances. The meeting directed the Secretariat to use its discretion in extending country visits where significant regional benefits would accrue, and noted the Secretariat's advice that this would affect the number of country visits the Project could complete each year.

48. In reply to a question by the representative of the Federated States of Micronesia, the Tuna Programme Co-ordinator assured the meeting that full supporting technical documentation would be made available to participants prior to the proposed meeting referred to in recommendation No. 5, should this meeting be approved by the Twenty-third South Pacific Conference.

49. The representative of Kiribati requested clarification of the status of the Expert Committee on Tropical Tunas, whose meeting was included as part of agenda item 6(a). The Tuna Programme Co-ordinator explained that the Expert Committee was a committee of the whole meeting, normally including two invited experts. He also explained that the report of an independent review of aspects of the Tuna and Billfish Assessment Programme's work, which was required by donor governments, would shortly be printed and distributed to all fisheries officers.

50. In electing the Chairman and Vice-Chairman for the next SPC Regional Technical Meeting on Fisheries, the meeting agreed to adopt a procedure whereby these offices would rotate alphabetically among member countries. Under this system, the Government of Tuvalu agreed in principle to provide the Chairman for the next meeting, and the Government of Vanuatu, the Vice-Chairman.

51. Mr Pita expressed thanks on behalf of the meeting for the hard work and guidance provided by the Chairman. The Fisheries Adviser expressed the meeting's appreciation for the support received by the staff of the Commission and this was endorsed by Mr Sperling.

#### IX. ADOPTION OF THE REPORT

52. The report of the meeting was adopted and the meeting closed.

X. SUMMARY OF RECOMMENDATIONS

REVIEW OF COASTAL FISHERIES WORK PROGRAMME

Deep Sea Fisheries Development Project

Recommendation No. 1

The meeting commended the South Pacific Commission on the success of the Deep Sea Fisheries Development Project and recommended its continuation with sustained emphasis on the development of small-scale fishing gear and techniques.

Deep Bottom Resources Survey

Recommendation No. 2

The meeting recommended that the South Pacific Commission continue to co-operate with other organisations in the collection and collation of data on deep bottom fish stocks, and to encourage member countries to gather such data where possible.

Training

Recommendation No. 3

The meeting recommended that the South Pacific Commission endeavour to locate long-term funding for the South Pacific Commission Fisheries Officer Training Course.

OCEANIC FISHERIES

The future requirements for the conservation of the tuna resources of the region, and the role of the Tuna and Billfish Assessment Programme

Recommendation No. 4

The meeting commended the work carried out by the Tuna and Billfish Assessment Programme and strongly recommended its continuation for two years in the first instance, with priority accorded to the collection and evaluation of catch and effort data and assessment of interaction between fisheries.

Recommendation No. 5

The meeting recognised that there are substantial gaps in the catch and effort data available to the Programme, but was unable to identify methods of obtaining the information required. Accordingly, the meeting recommended that the Twenty-third South Pacific Conference explore ways and means of obtaining input from the distant-water fishing nations in pursuing the objectives of the revised work programme. The meeting suggested that this include the convening of a meeting of coastal states, distant-water fishing nations, and international organisations with an interest and experience in this field, such as the Forum Fisheries Agency (FFA), FAO, IATTC and ICCAT, to identify methods of collection, integration, and analysis of statistical and other scientific data on highly migratory species in the region. The meeting understood that the information generated from the Programme would be used to identify issues relating to the conservation of highly migratory species in the region. The suggested meeting would therefore need to explore possible structural arrangements which might be required for the conservation of tuna stocks of the region.

WORKSHOP ON ASPECTS OF FISH HANDLING AND PROCESSINGTrainingRecommendation No. 6

Identifying training in fish handling and simple processing as a priority need in the region and considering the undoubted success of the Deep Sea Fisheries Development Project, the meeting strongly recommended that the South Pacific Commission either expand the present Deep Sea Fisheries Development Project or establish a similar project to make available practical specialists in fish handling and simple processing to provide longer-term in-country training and assistance in this important area.

Recommendation No. 7

Recognising the considerable amount of experience and information available within countries of the region, and the need to summarise this information and make it readily available on a regional basis, the meeting recommended that the South Pacific Commission:

- (a) compile a list of fish processing gear and equipment used throughout the region, with comments on the performance and suitability of such equipment;
  - (b) identify avenues and opportunities for technical training both within and outside the South Pacific Commission area;
  - (c) facilitate the exchange of experienced personnel among countries of the region to meet short-term training requirements in specialised areas.
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ANNEX ILIST OF WORKING PAPERS PRESENTED AT THE MEETING

## SPC/Fisheries 15/Informal 1 - List of participants

- WP.1 - Summary report of South Pacific Commission activities under the Fisheries Work Programme - coastal resources
- WP.2 - An improved FAD mooring line design for general use in Pacific Island countries
- WP.3 - Summary of SPC work in the development of small-scale fishing gear and techniques
- WP.4 - Review of progress with priority items within the Tuna and Billfish Assessment Programme
- WP.5 - Regional requirements for resource assessment and conservation and some alternative institutional arrangements
- WP.6 - Guidelines for establishment and management of collection, handling, processing and marketing facilities for the artisanal fisheries sector in the South Pacific Commission area
- WP.7 - Country statement - Fiji
- WP.8 - Country statement - Western Samoa
- WP.9 - Etat d'avancement des recherches par l'ORSTOM en matière de pêche au Vanuatu, par R. Grandperrin et F. Brouard
- WP.10 - Observer programmes
- WP.11 - Les dispositifs de concentration de poissons en Polynésie française - Bilan par B. Ugolini et F. Leproux
- WP.12 - La pêche aux poissons démersaux profonds à Vanuatu : Etude préliminaire, par F. Brouard et R. Grandperrin
- WP.13 - Country statement - Australia
- WP.14 - Communications between Solomon Islands Government and the South Pacific Commission with reference to item 6(a) on the draft agenda
- WP.15 - Country statement - Kingdom of Tonga

- SPC/Fisheries 15/WP.16 - Country statement - Guam
- WP.17 - Country statement - Federated States of Micronesia
- WP.18 - Proposed agenda for the workshop on fish handling and processing
- Background Paper 1 - The requirements for conservation of the tuna resources of the Western and Central Tropical Pacific
- 2 - Aquaculture development : The Pacific Way?  
by Dr K. Roger Uwate and Peniasi Kunatuba
- 3 - Preliminary report of an examination of a failed mooring line from Fiji : A suspected case of fish bite, by B. Prindle
- 4 - Air-shipping of fresh fish from American Samoa to markets in Hawaii, by Richard M. Howell
- 5 - Review of Papua New Guinea's research work programme in coastal waters, by Kanudi Fisheries Research Station, Konedobu
- 6 - Agenda Item 8 of the report of the 1983 Planning and Evaluation Committee - Conservation of the tuna resources of the Western and Central Tropical Pacific
- 7 - Papua New Guinea summary - fish aggregation devices, by Kanudi Fisheries Research Station, Konedobu
- 8 - Fifteenth Regional Technical Meeting on Fisheries
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ANNEX II

LIST OF PARTICIPANTS

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