

SPC
639.2099
REG
1996
81

SPC/Fisheries 26/Working Paper 3
10 July 1996

ORIGINAL : ENGLISH

SOUTH PACIFIC COMMISSION

TWENTY-SIXTH REGIONAL TECHNICAL MEETING ON FISHERIES
(Nouméa, New Caledonia, 5-9 August 1996)

REPORT ON SPC COASTAL FISHERIES PROGRAMME ACTIVITIES
APRIL 1994 - JULY 1996
(Paper prepared by the Secretariat)

OVERVIEW.....	2
INFORMATION SECTION.....	3
RESOURCE ASSESSMENT SECTION.....	6
WOMEN'S FISHERIES DEVELOPMENT.....	11
TRAINING SECTION	13
POST-HARVEST SECTION.....	20
CAPTURE SECTION	26

OVERVIEW

With the re-establishment of the Women's Fisheries Development Project, the Coastal Fisheries Programme now comprises six co-operative sections: Information, Resource Assessment, Women's Fisheries Development, Training, Post-harvest and Capture. With the suspension of the Coastal Fisheries Coordinator position due to straightened core funding, the heads of these sections now report directly to the Fisheries Programme Manager.

The activities and staffing of the Coastal Fisheries Programme are entirely funded from extra core-budgetary sources apart from the positions of Fisheries Development Adviser and, since March 1996, one Master Fisherman. Major funding is supplied by the Governments of France, the United Kingdom, Australia, and New Zealand and the United Nations Development Programme, and minor support activities are funded from several other sources.

Expenditure in 1995 by the Coastal Fisheries Programme was approximately 1,300,000 units, broken down as follows:

	1994 Expenditure (Units)	Indicative expenditure for 1995(Units)
CF Programme Administration	157,117	21,288
Information Section	169,472	259,329
Training Section	435,581	394,400
Women's Fisheries Development Section	33,036	78,353
ICFMaP (Resource Assessment/Post-harvest Sections)	482,601	479,729
Capture Section	304,635	66,193
Total	1,582,442	1,299,292

The Coastal Fisheries Programme staff establishment includes the following positions:

Coastal Fisheries Coordinator	Vacant, pending funding availability
Fisheries Information Adviser	Jean-Paul Gaudechoux
Fisheries Information Officer	Aymeric Desurmont
Attachment Officer (Training/Information)	Vacant, to be recruited in 1996
Project Assistant (Information)	Erina Avazeri
Fisheries Resource Adviser	Tim Adams
Inshore Fisheries Scientist	Paul Dalzell
Attachment Officer (ICFMaP 1)	Esaroma Ledua
Attachment Officer (ICFMaP 2)	Sione Matoto
Project Assistant (Resource Assessment)	Kay Legras
Fisheries Education & Training Adviser	Michel Blanc
Fisheries Training Officer	Magnus Bergstrom
Project Assistant (Training)	Christine Briffa
Womens Fisheries Development Officer	Patricia Tuara
Post-harvest Fisheries Adviser	Steve Roberts
Project Assistant (Post-harvest)	Marie-Thérèse Bui
Fisheries Development Adviser	Lindsay Chapman
Fisheries Development Officer	Satalaka Petaia
Master Fisherman	Steve Beverly
Master Fisherman	Vacant, pending funding availability
Master Fisherman	Vacant, pending funding availability
Master Fisherman	Vacant, pending funding availability
Project Assistant (Capture)	Marie-Ange Roberts

INFORMATION SECTION

General

Fisheries Information services were established by the South Pacific Commission in 1989, with the goal of improving the Fisheries Programme's capacity to process and disseminate fisheries-related information. The Information Section coordinates the provision of information, both routinely and on request, to assist fisheries scientists, development officers, extension agents, planners, managers and others involved in developing and managing fisheries at national, regional and international levels. Many such individuals work in remote locations with poor communications and inadequate access to advice and information on technical fisheries-related topics.

Information services will continue to be an important function of the SPC Fisheries Programme. Until the beginning of 1995, the Section comprised the position of Fisheries Information and a Project Assistant. Additional funds, identified in 1994, have allowed the employment of a Fisheries Information Officer and a Fisheries Information and Training Associate. The Information Section staffing and most of its operational costs, have been funded since 1989 by the Government of France.

National-level activities

Information requests

Responding to information requests is a routine activity for all sections of the SPC Fisheries Programme, and is coordinated by the Information Section. Under normal circumstances, a request is discussed among SPC Fisheries staff members with technical knowledge of the subject area, and either a listing of useful literature/information sources, or specific technical advice, or both, are prepared. This may be supplemented using bibliographic searches conducted through the SPC library on internal or external databases. In some cases, where information obtained through these sources is inadequate to address the needs of the request, further assistance may be sought from other PIMRIS nodes or from elsewhere.

The frequency of information requests from regional fisheries workers has been increasing over the past seven years. This trend seems to be a response to the increased emphasis placed on fisheries information by SPC and other PIMRIS participating agencies, and a resulting increased awareness on the part of regional fishery workers about the sorts of services that are available. The trend is expected to continue in the coming year.

Training attachments

At the request of the Papua New Guinea Government, the librarian with the Department of Fisheries and Marine Resources [superseded by the NFA—National Fisheries Authority] undertook a 4-week training attachment with the Information Section in October 1994. The purpose of the training was to familiarise this person with the publication of a newsletter [NFA has started the publication of their own Fisheries newsletter]; while also being trained with information searching, collection techniques and arrangement in the SPC library. This attachment was very successful and subsequently, this person was offered the newly-established Fisheries Information and Training Associate position.

Regional-level activities

Special Interest Groups

A major activity, since 1990, has been the establishment of Special Interest Groups (SIGs) on fishery related topics of interest to regional fishery workers. The SIGs were developed as a result of the SPC Workshop on Pacific Inshore Fishery Resources, held in March 1988, where participants expressed concern about the absence of mechanisms to promote contact and information exchange among regional fishery workers. In establishing the SIGs, the most important areas of interest in the region are determined by canvassing regional fishery workers using a questionnaire. More than 750 responses to the questionnaire have been received up to the end of April 1996, 80 % from the region, and returns are continuing.

Responses to the questionnaire surveys have been used to identify the most common areas of interest to fishery workers in the region, and those that should therefore be targeted through SIGs. In addition, several SPC fisheries meetings and workshops have recommended the establishment of SIGs. Based on this guidance, 8 SIGs have now been established, on Beche-de-mer, Pearl Oyster, Ciguatera, Trochus and the shell industry, Traditional Marine Resource Management and Knowledge, Fisheries Education and Training, Fishing Aggregation Devices, and Live Reef Fish. This latest SIG was established as a result of a recommendation arising from the SPC/FFA Workshop on the Management of South Pacific Inshore Fisheries, where participants expressed their interest for a SIG on live reef fish export fisheries (including both fish for food and organisms for aquaria).

Further SIGs should be established in 1996/97, including one on Women in Fisheries which will be prepared in collaboration with the Women's Fisheries Development Section.

As part of the support offered to each SIG, SPC undertakes to circulate literature, technical materials and correspondence relevant to the interests of group members on an approximately six-monthly basis. This is mainly done in the form of an information bulletin, compiled with the assistance of an external technical specialist (selected on their regional experience combined with expertise on the subject in question) and relying heavily on contributions from members of the SIG. Using technical coordinators in this way ensures that the standard of the information circulated is maintained at a high level and is relevant to the needs of the region. Fifty-nine bulletins have been produced so far in 1996 (both in English and French).

SPC Fisheries Newsletter

The SPC Fisheries Newsletter is produced on a quarterly basis, in both English and French. The Newsletter has been published more or less regularly since April 1971 and provides timely information on SPC Fisheries Programme activities and on regional developments, as well as providing technical information on topical aspects of fisheries. The Newsletter acts as an effective vehicle for the regular exchange of information and experience amongst the fisheries officers of the region. The Newsletter is typically about 40 pages long and is widely distributed within the region (more than 600 addresses on the mailing list).

Fisheries Address Book

The FAO/UNDP Regional Fisheries Support Programme (FAO RFSP) used to publish annually the well-known 'Addresses useful to Pacific Islands fisheries personnel'. This publication was greatly appreciated in the region. In 1992, the FAO RFSP ceased its activities and the South Pacific Commission decided to carry on publication of the address book. The 1996 edition has been distributed widely in the region. In addition to more than 1,000 addresses covering 49 countries and territories, basic fisheries statistics, Exclusive Economic Zone areas and a map are included for each Pacific Island country or territory.

Fisheries acronyms

Mainly intended for government fishery officers in Pacific Island countries, a booklet presenting more than 500 acronyms has been designed for use by both anglophone and francophone readers. Each acronym is related to its full name with its translation. Also, when the acronym refers to an organisation, some basic information (type of organisation, location of headquarters, etc.) is added. It is hoped that this publication will find its place alongside the well-known Fisheries Address Book on fisheries officer's desk.

Pacific Island Marine Resources Information System (PIMRIS)

The Information Section is one of the mechanisms (along with the SPC library) whereby SPC participates in the Pacific Island Marine Resources Information System (PIMRIS), a joint activity between SPC, the Forum Fisheries Agency (FFA), the University of the South Pacific, the South Pacific Applied Geoscience Commission (SOPAC) and the South Pacific Regional Environment Programme (SPREP).

The agencies participating in PIMRIS provide a variety of services to member countries, including the provision of bibliographies and literature searches, in-country assistance in organising information collections, and question-and-answer services, as well as collaborating on the compilation of a computerised bibliographic database, called MOANA, on Pacific marine resources. The Information Section participates in these activities, and represents SPC on the PIMRIS Steering Committee, which has now met eight times, including the meeting of July 1996. A report of this meeting is presented as an Information Paper to this RTMF.

Assistance given to other CFP sections

The Section has been very active helping other CFP Sections in finalising and publishing technical reports (in English and French), which were backlogged for several years. They include the FAD Handbook, volumes 1 & 2 [Capture Section], On-board handling of sashimi-grade tuna, a practical guide for crew members [Training Section], the Marine Resources of Palmerston Island (Cook Islands), the Aitutaki trochus fishery: a case study, and Perspectives in Aquatic Exotic Species Management in the Pacific Islands (volume 1 & 2) [Resource Assessment Section].

This trend towards Fisheries Programme internal publishing is expected to increase in the future because of the Section's capability to handle and disseminate technical information quickly.

Conclusion

The gathering, repackaging and dissemination of information is one of the functions that SPC as a whole is ideally equipped to carry out on behalf of its member countries. Promoting the flow of information to technical workers in the region is central to the operation of all sections of the Coastal Fisheries Programme.

The past two years have seen an increase in the awareness of, and demand for, SPC's information services in the fisheries sector. The Information Section will continue its present activity, hopefully at an expanded level, in order to meet this need. In particular, efforts will be made to gradually increase the number of SIGs.

RESOURCE ASSESSMENT SECTION

General

The Resource Assessment Section is funded mainly by the Integrated Coastal Fisheries Management Project (ICFMaP) and comprises two professional positions, the Fisheries Resources Adviser (FRAD) and the Inshore Fisheries Scientist (IFS), plus a Project Assistant (PA). In addition, three training attachment positions of 12 months duration have been made available for Pacific Island fisheries scientists and are designated as Fisheries Management Associates. Two of these posts are currently occupied by fisheries research officers from the Republic of Fiji and the Kingdom of Tonga. Staff and operational costs are funded by the British Government until 1997 and are supplemented by support for specific activities from other donors.

The ICFMaP project succeeds the earlier Inshore Fisheries Research Project (IFRP) which officially terminated in June 1994. This new project has a more evolved focus than the IFRP which had the broad objective to provide member countries with advice on research necessary for managing coastal fisheries, on an ad-hoc basis. ICFMaP, which extends over three years (1994-1997) is designed to concentrate on the management of specific fisheries resources in member countries, in a pre-programmed manner. Priorities for sub-projects were set after invitations were extended early in 1995 to all SPC member countries to request collaborative project services, and six countries responded to this invitation.

The first year of the project was devoted to reviews of coastal fisheries in the Pacific and convening a major international workshop on the management of coastal fisheries. Project activities during the second and third year of the ICFMaP are devoted mainly to field assignments in six member countries (Cook Islands, Tonga, Palau, Papua New Guinea, Fiji and Tokelau) to assist these countries in the formulation of management plans for specific coastal fisheries resources.

National level activities

During the transition between the IFRP and ICFMaP and during the first year of the new project, other national assignments and short country visits were also conducted at the request of member countries. A summary of these and the progress of the six ICFMaP management sub-projects is given below.

Assignment dates & staff	Project	Summary of activities
Pitcairn May-June 1994 Consultant & IFS	Survey of the fisheries resources of the Pitcairn Is group	Commercial fishing vessel granted survey license to fish around Henderson, Oeno and Ducie Is. Consultant observer recruited to conduct record of activities
Northern Marianas May-June 1994 FRAD & attachments from Palau, Guam, Marshall Islands & Cook Islands	Trochus survey and management plan	Assess the effects of a 14 year moratorium on the trochus fishing in Saipan, Tinian and Rota and to recommend on the revoking of the moratorium
Western Samoa April-May 1995 IFS and OFP staff	Review of fisheries statistical data collection	Review present methods of collection of fisheries statistics and improve database reporting of information summaries
Cook Islands November 1995 FRAD, IFS, FAM, WFDO,	Aitutaki lagoon fisheries management plan	Conduct field studies on fisheries in Aitutaki Lagoon in response to concerns over level of fishing on coastal fishes and demand for lagoon fisheries management plan.
Fiji February-March 1996 FRAD, IFS, FAL, FAM	Management of coastal fisheries in Macuata Province, Vanua Levu	Conduct field studies on commercial and subsistence fisheries in Macuata province and carry out gill-net fishing in response to questions about revoking traditionally imposed commercial gill-net ban
Fiji June 1996 FAL, FAM	Management of Ba River kai fishery	Conduct field studies on the population abundance of kai or river mussels in the Ba River
Tonga May 1996 IFS, FAL, FAM & ORSTOM attachment	Stock assessment of shallow water reef fishes, with emphasis on species favoured by aquarium trade	Conduct a detailed stock assessment of the shallow reef fish populations at Tongatapu and review activities of aquarium-fish fisheries with respect to bans on hookah breathing apparatus
Tonga May 1996 IFS, FAL, FAM & attachment from Papua New Guinea	Follow-up stock assessment of sea-cucumber resources in the Ha'apai Islands	Conduct a detailed stock assessment of sea cucumbers in the Ha'apai Islands following 5 years of intensive exploitation and after an initial survey conducted by IFRP in 1990

Regional level activities

Regional level activities	Update
Ciguatera research and management	This activity restricted mainly to continued compilation of case history data. Case history database incorporated into ICLARM FishBase database
SPC-FFA Workshop on Coastal Fisheries Management	Workshop convened in Noumea between 26 June - 7 July 1995. Background and country papers from workshop published in February 1996. Workshop report and keynote papers scheduled for publication in late 1996
SPC-FFA Review of Fisheries Research Activities in South Pacific	Review completed and published as Background Paper 36 in SPC-FFA Workshop on Coastal Fisheries Management
Review of Coastal Fisheries in South Pacific	Review completed and included as Background Paper 30 in SPC-FFA Workshop on Coastal Fisheries Management.
Coastal Fisheries Database	Continued progress with data entry and development of reporting routines. Species names in database coded to follow ICLARM FishBase, and sub-routine added to include local fish names in different member countries
Advisory services	Advice on a variety of fisheries management topics sought from American Samoa, Cook Islands, Federated States of Micronesia, Guam, Marshall Islands, Niue, Palau, Papua New Guinea, Pitcairn Island, Solomon Islands, Tuvalu, World Bank, East-West Centre, South Pacific Trade Commission, ICLARM etc

Publications

Six technical reports were published under the auspices of the IFRP and ICFMaP between March 1994 and August 1996, four of which were produced with the assistance of the Fisheries Information Project. Two of these concerned the problems of exotic species introductions into the Pacific and quarantine issues, and were published jointly with the South Pacific Regional Environment Programme (SPREP).

The other four reports included the results of the 1992 stock assessment study of trochus at Aitutaki, the 1988 study of the fisheries resources of Palmerston Island and a two volume set of the background and country papers from the 1995 SPC-FFA Workshop on the Management of South Pacific Inshore Fisheries. The Workshop Report and Keynote papers are currently being edited and will be published later this year.

Papers and reports which were published externally include a Japanese version of a Working Paper 8 from the 25th RTMF, on coastal fisheries production in the South Pacific. This paper also formed the background for the ICFMaP review of coastal fisheries in the South Pacific, initially presented at the 1995 SPC-FFA Management Workshop and which will be published in Oceanography and Marine Biology Annual Review during 1996. ICFMaP staff also contributed two chapters to a book on coral reef fisheries, published in 1996 and two other papers on coastal fisheries and their management at meetings in Hawaii and Australia.

The results of field activities over the past 12 months will be drafted into reports for submission to member countries and later considered for publication in the ICFMaP technical document series. ICFMaP staff also contribute regularly to the SPC Fisheries Newsletter and the various Special Interest Group Newsletters.

Future activities

ICFMaP has clearly defined objectives of completing the various fisheries management projects in six member countries. Field assignments have been conducted in the Cook Islands, Fiji and Tonga. During the next 12 months, further field assignments will be conducted in:

Papua New Guinea (management of beche-de-mer fisheries);

Palau (management of live reef fish fishery on Helen Reef);

Tokelau (management of lagoon fisheries resources at Fakaofu Atoll);

Cook Islands (follow up visit to Aitutaki assignment to monitor progress of management plan)

Work will also continue on regional initiatives such as maintaining the databases on ciguatera case histories and on coastal fisheries production. ICFMaP will also continue to respond to specific request from member countries for advice and information on coastal fisheries management, and to prepare reviews and publications on regional aspects of coastal fisheries research and management.

The recruitment of two Fisheries Management Associates between 1995-1996 greatly enhanced the information gathering capabilities of ICFMaP during short term field assignments. The two Associates presently employed will finish their attachments to the Commission in October 1996, and recruitment of a third attachment is underway.

Evaluation

This meeting marks nearly a decade since the establishment of a facility within the Commission's Coastal Fisheries Programme to respond to member countries requests for assistance with research and management of nearshore fisheries resources. During this period there has been a marked increase in both the recruitment and training of fisheries scientists and managers in member countries and an awareness of the need to manage coastal fisheries resources to maintain sustainable production. Initially the IFRP had a broad mandate to assist with coastal fisheries research activities in member countries. This has been followed by the UK ICFMaP which has focused on specific management problems and case studies in a limited number of member countries.

Rapid human population increases within most Pacific Island countries suggest that exploitation of coastal fisheries resources are likely to be driven mainly by demand from domestic markets, but the increasing prosperity of East and Southeast Asia and the demand for fish and other marine organisms from the South Pacific will also add to the pressures on nearshore fisheries. It will, therefore, become increasingly important for member countries to strengthen their own competence to manage their coastal fisheries resources. However, effective management of coastal fisheries in the region will also rely for a large part on member countries pooling their experiences and exchanging information on responses and strategies for maintaining fisheries sustainability.

There is clearly a role here for ICFMaP to play in the region beyond the present planned series of fisheries management studies in six member countries. A compilation of practical management approaches of coastal fisheries - a comprehensive "handbook" for Pacific Island coastal fisheries managers - would be a logical extension to ICFMaP, and there is the continuing need to provide advice on research and management on demand, and the need for regional coordination through which countries can share experiences, expertise and information.

ICFMaP funding, however, will expire in August 1997, and if UK funding is not renewed nor new funding sources identified, then the Commission (and the region as a whole now that FFA's coastal fisheries research funding has finished) will have no facility to provide advice on coastal fisheries resource assessment and management. Possible sources of financial assistance are being explored for a project to continue and develop these services, but there are no definite indications as yet.

Since the SPC's activities in this area are entirely funded from extra-regional aid sources, funding proposals must show that definite development, or evolution of activities, is occurring. Most donors are reluctant to fund "more of the same". The UK Government has funded the Integrated Coastal Fisheries Management Project following the Inshore Fisheries Research Project because the activity was definitely moving on from information collection to management plan formulation. However, the next step in the process requires some thought. Particularly since the real progress towards effective coastal fisheries management will actually, in most countries, be somewhat slower than any arbitrary donor project cycle. The views and ideas of the meeting are welcomed.

WOMEN'S FISHERIES DEVELOPMENT SECTION

General

This section operates under the technical supervision of the SPC Women's Fisheries Development Officer (WFDO) and comprises one project, the Women's Fisheries Development Project (WFDP). However, the Section is also involved in carrying out "women-in-fisheries" work as part of the Integrated Coastal Fisheries Management Project (ICFMaP). The Section is funded by the Government of Canada. In addition, the Governments of the United Kingdom and New Zealand, as well as UNESCO have provided funds to support specific project activities.

The WFDP was established in May 1991 in response to the growing interest shown by SPC member countries in enhancing the participation of women in fisheries activities. Situated within the Post-harvest Section, the aim of the WFDP was to assist women from coastal fishing communities in the Pacific Islands to participate more effectively in, and benefit from, fisheries activities in the region. Unfortunately, the position of the Women's Fisheries Project Officer (WFPO) became vacant in May 1992 which meant that a number of project activities were not implemented. From May 1991 to May 1992 the Project focused on providing assistance to the Women in Fisheries Support Project in Papua New Guinea. Insufficient funds prevented the recruitment of a replacement candidate until February 1995. With the recruitment of the WFDO, the WFDP was re-established but was removed from the Post-harvest section and placed within a new Women's Fisheries Development Section (WFDS) to cater to the wider scope of fisheries activities in which women participate.

The main objectives of the WFDS are to promote the increased involvement of women from coastal fishing communities in regional and national fisheries development activities; and enhance income-earning opportunities for women from these communities based on seafood harvesting, processing and marketing, using environmentally sound technologies compatible with the sustainable use of marine resources. Strategies include the provision of training, promotion of small scale income-generating ventures, and the evaluation of fisheries projects to support women.

National and Regional-level activities

The following table provides a brief outline of the section's activities between February 1995 and August 1996. The table shows activities related to national and regional projects and includes assignments undertaken either by the Women's Fisheries Development Officer or by consultants. Details of the activities are provided in the Women's Fisheries Development Section information paper.

Women's Fisheries Development activities between February 1995 and August 1996

Dates and staff	Country	Activity
April 1995 WFDO	Vanuatu	Familiarisation to ascertain involvement of women in fisheries, and make contact with relevant individuals, groups.
April 1995 WFDO	Solomon Islands	Familiarisation visit.
April 1995 WFDO	Fiji	Familiarisation visit.
June 1995 WFDO	PNG	View the activities of the Women in Fisheries Support Project. Observe the Gaba Gaba village workshop. Discuss use of technical personnel for in-country training.
July 1995 WFDO	Philippines	Prepare and present paper at the Asia/Pacific Regional Workshop on the Role of Women in Development.
October 1995 Consultant V. Wichman	Tonga	Carry out training appraisal of women in the fisheries sector. Identify and prioritise training needs with the view to provide a follow-up workshop.
November 1995 Consultant V. Wichman	Kiribati	Carry out training appraisal. Identify and prioritise training needs of women in the fisheries sector with the view to providing a follow up workshop.
Nov/Dec 1995 WFDO WFDO/Pasifika	Cook Islands	ICFMaP field work to formulate an Aitutaki Lagoon Management Plan. Filming of shellcraft video in Rarotonga.
May 1996 WFDO/Pasifika	Fiji	Commencement of script preparations for video on the setting-up of a small seafood business.
June 1996 WFDO	Tonga	Organisation of "Improved Seafood Management Skills Workshop for women of Ha'apai, Vava'u and Tongatapu".

Future Activities

In the area of training, there is the possibility of a follow-workshop in Kiribati, as an outcome of the training appraisal carried out in November 1995. UNESCO has offered to provide funds to support the workshop. Tuvalu has requested a visit by the WFDO to participate in a meeting of relevant government and non-government organisations to discuss ways in which women may increase their involvement in fisheries. At the same time, the meeting will provide information to the Fisheries department on how to develop and maintain a relationship with women in the fisheries sector.

The assistance of the WFDS has been requested through the Integrated Coastal Fisheries Management Project by Fiji and Papua New Guinea. Fiji has asked for assistance in carrying out surveys to determine the level of women's participation in the kai (freshwater clam) fishery, while Papua New Guinea is interested in the involvement of women in the bêche-de-mer fishery. The data collected in both Fiji and Papua New Guinea will assist both countries in formulating/finalising resource management plans for each fishery.

Evaluation

Although constrained by budget limitations, the Section has managed to carry out a number of activities since establishment. Requests from member countries have increased since the Section's inception. It has been particularly heartening to see the efforts of a number of member countries in providing support to women involved in the fisheries sector, through the assignment of women-in-fisheries officers, the provision of workshops, and the development of credit schemes. Support services and follow up extension work at the national level are extremely important in providing a climate conducive for development.

Future plans after 1997 include the production of comprehensive country reports detailing the role of women in the fisheries sector, training attachments and workshops, the promotion of small-scale income generating projects, and the development of a special interest bulletin. Donor support is being sought to support these activities.

TRAINING SECTION

General

The Fisheries Training Section was established in 1985 in recognition of the need for a dedicated project to provide broad-ranging training assistance to member countries and territories. Initially, the aim of Section was to coordinate all SPC fisheries training activities, and to act as a vehicle for the organisation of specialised training courses in subject fields not generally available within the region. In 1992, a four-year workplan was developed (1992-96), in line with the following three objectives: coordination of training activities, training and manpower planning, and training implementation.

The Section comprises three full-time staff: the Fisheries Education and Training Adviser (FETA); the Fisheries Training Officer (FTO); and a Project Assistant (PA/FTS). An additional position, the Fisheries Information and Training Associate (FITA), is shared with the Fisheries Information Section. This trainee position was created to enable young Pacific Island fisheries officers working in the area of fisheries training or information to be exposed for one year to the work carried out by the Commission's Coastal Fisheries Programme. The librarian at the National Fisheries Authority of Papua New Guinea, held the FITA post from February 1995 to February 1996.

The positions of FETA and PA/FTS are currently funded by the Government of Australia, while the positions of FTO and FITA are funded by the Government of France. In addition, specific training initiatives are financed from other sources including the Government of Canada, the Commonwealth Secretariat, the Commonwealth Foundation, the European Community, the Government of New Zealand, the United Nations Development Programme and the World Bank.

Early in 1995, both the Fisheries Education and Training Adviser and the Project Assistant left the Section, the former to take up a post as Head of the New Zealand School of Fisheries and the latter to take up a position as Personal Assistant to the Commission's Director of Services. The FETA position was vacant until early May when the post was filled by former FTO, Michel Blanc. Consequently, the FTO post became vacant, and was advertised in May 1995. The position was filled in November 1995 by the former director of the Micronesian Maritime and Fisheries Academy (MMFA) in Yap. The new Project Assistant started to work with the Section in February 1995, but in June she departed to fill a position in the Commission's Publications Section. This vacancy was filled in June 1995.

National-level Activities

Activity	Summary	Comment
HRD planning.	HRD plans developed for the Division of Fish and Wildlife of the CNMI and the fisheries sector of Western Samoa (1994) and FSM (1996).	HRD planning constrained by the absence of appropriate funding mechanisms. HRD work in FSM included workshop on the implementation of a fisheries manpower development plan.
Pacific Island Qualified Fishing Deckhand course.	Provision of a tutor from SICHE to assist with the pilot PIQFD course run by the Vanuatu Fisheries Training Centre in February 1995.	Tutor attachment funded by UNDP. More attachments of this type likely to be required to assist training institutions running PIQFD courses.
Training on the handling and grading of sashimi tuna.	National workshops in Papua New Guinea (December 1995) and French Polynesia (May 1996).	Growing number of requests by member countries and territories for similar workshops. Funding will need to be identified.
FAD fishing skills training.	Workshops for small-boat operators run in Tonga (April 1994) and Wallis and Futuna (September 1994). Teaching modules covering the various aspects of FAD fishing skills developed.	Similar workshops likely to be needed in countries with ongoing FAD programmes.

Activity	Summary	Comment
Training in flying-fish fishing.	Limited availability of bait was identified as a constraint to fisheries development in Futuna. Consequently, a one-week workshop on flying-fish fishing was run in November 1995.	Five local fishermen and one staff of the Fisheries Division trained in the use of the helmet/scoop net gear. Use of flying-fish as troll bait also demonstrated.
Attachment training.	During the reporting period, the Section has organised 11 training attachments in a wide range of subjects.	Countries/territories that have benefited from these attachments are Palau, Tonga, Solomon Islands, FSM, Papua New Guinea, New Caledonia and Fiji.
Country visits.	Visits to 11 member countries and territories by Section staff for national or regional training activities.	

Regional-level Activities

Activity	Summary	Comment
Directory of Training Opportunities for Fisheries Personnel.	Updating of database entries completed in May 1996. Updated version of the Directory printed and distributed in July 1996.	Diskette of updated database available on request. Updating of Directory will need to be done every 2 or 3 years.
ASEAN/PINs Cooperation in Fisheries Education and Training.	SPC paper presented to an APEC/PECC meeting in Manila, Philippines in May 1995.	Access to relevant courses in Asia is constrained by the absence of appropriate funding mechanisms.
Special Interest Group on Fisheries Education and Training.	Four bulletins published during the reporting period with circulation exceeding 300 copies	Need to encourage contribution from training institutions and fisheries departments.
Standardisation of fishing vessel crew training and certification.	One pilot Pacific Island Qualified Fishing Deckhand (PIQFD) course run in Vanuatu in February 1995. First meeting of the PIQFD coordinating group held in April 1996 in Suva. Teaching resource materials for the PIQFD course completed and distributed.	Several training institutions are keen to introduce the PIQFD course. Once resource materials are finalised, further assistance to the institutions will be required (staff training, tutor attachments...) Initiatives in this area are funded by UNDP.

Activity	Summary	Comment
SPC/Nelson Fisheries Officers Training Course.	<p>15th, 16th, 17th courses completed during the reporting period.</p> <p>Course reviewed through questionnaire survey in 1995 and syllabus subsequently modified.</p>	<p>Major funding constraints on the course.</p> <p>Working paper prepared for the meeting.</p>
Post-harvest fisheries training project.	Final narrative report of this project compiled and sent to ICOD.	Unspent funds used to run a regional workshop on the handling and grading of sashimi tuna.
Training on the handling and grading of sashimi tuna.	<p>Assistance to the Post-harvest section for the organisation of a regional workshop in Chuuk, FSM in August 1995.</p> <p>Resource materials developed (video, manual).</p>	As a follow-up to the regional training, the Section implemented in-country workshops in Papua New Guinea (December 1995) and French Polynesia (May 1996).
Fishing business management training.	<p>Regional workshop on business management for trainers of small-boat operators implemented in Vanuatu, in March 1996 and funded by UNDP.</p> <p>Resource materials (teaching manual and fishing vessel logbook) developed for the workshop.</p>	<p>Several in-country workshops planned for the second half of 1996 as a follow-up to the regional workshop.</p> <p>Possible production of a small-business management video in 1996.</p> <p>Regional course for managers of fisheries enterprises planned for late 1996 or early 1997.</p>
FAD training.	Assistance to the Capture Section for the organisation of two sub-regional FAD workshops in American Samoa and Palau.	Most countries and territories trained in FAD rigging and deployment.

Other activities

Activity	Summary	Comment
Safety at sea for small boat operators.	<p>Coordination of a safety-at-sea public awareness campaign.</p> <p>Campaign materials include tee-shirts, stickers, four posters, two videos, radio spots and a teaching manual.</p>	<p>Distribution of materials is ongoing. Very positive feedback from member countries and territories.</p> <p>Funding required for follow-up activities (TV spots, translation of materials in national languages).</p>
Video production.	Three videos produced and distributed ("On-board handling of sashimi-grade tuna", "Better safe than Sorry", "Survival at sea - A Kiribati tale").	Production of a video on the financial management of small fishing businesses tentatively planned for the second half of 1996.
Production of teaching resource materials.	Practical guide for crew members: "On-board handling of sashimi-grade tuna"; package of resource materials for the PIQFD course; teaching modules for FAD fishing skills workshops.	Ongoing association with the Public Marine Education programme based at the USP.
Publications	<p>Articles for SPC Fisheries Newsletter, AMC News, and Forum Secretariat Maritime Division Newsletter.</p> <p>Four SIG bulletins.</p> <p>Fishing vessel logbook.</p> <p>Updated version of Fisheries Training Directory.</p> <p>HRD plans for the Division of Fish and Wildlife (CNMI), Western Samoa, and FSM.</p> <p>Report on the SPC/Nelson course review.</p> <p>Report on the marketing of fresh chilled fish from New Caledonia to the Sydney Fish Market.</p>	

Evaluation

The provision of AusAid's long term financial support (1992 to 1996) for the FETA and PA/FTS positions has allowed the Section to be more confident in the promotion of services and activities beyond an annual cycle. During the reporting period, the four-year workplan developed in 1992 was followed, with most activities now completed or underway with the exception of organisational management and report-writing training. Funding for these initiatives, initially part of UNDP-sponsored Regional Fisheries Support and National Capacity Building project, was re-allocated in 1995 to support the SPC's Offshore Fisheries Development Project (OFDP) in the final year of its originally-scheduled four-year term. Implementation of these two training activities is now postponed until alternative funding for them can be secured.

During 1995, staff movements have significantly disrupted the Section's work programme, with some activities initially planned for implementation in 1995 being postponed to 1996. However, since the 25th RTMF, the Section has become increasingly active in the co-ordination of fisheries training and in manpower development planning, in addition to its more traditional role of developing and implementing training activities not covered by other institutions.

Following requests from several member countries and territories, the Section has also played an increasing role in the development of resource materials (videos, teaching manuals, posters, etc...) in support of the countries' training aspirations. A good example of this new tendency is given by the SPC campaign on safety-at-sea for small-boat operators which saw the production of an extensive range of materials in both English and French languages. These materials, widely distributed in the region, seem to be highly regarded by users indicating that an important training need has, at least partially, been addressed.

The Secretariat remains concerned with the imminent completion of two major funding cycles in support of the Training Section (AusAid financial support for the FETA and PA/FTS positions and UNDP fifth funding cycle that made possible several training undertakings). Having missed out on the CSPOD II funding opportunity, it is essential for the Section that its future activities be secured through accessing the UNDP sixth cycle and LOME IV funding. In order to achieve this, sound proposals reflecting the changing training needs of the fisheries sector in Pacific Islands will need to be put forward to donors. As an initial step, the meeting is asked to review the suggestions presented below and perhaps recommend future activities to be carried out by the Section.

Future activities

The meeting is asked to consider the following four areas in which the Fisheries Training Section is prepared to play an increased role over the next years:

Human Resource Development planning and implementation

Within this area, the work would cover the identification of constraints to fisheries sector development that are related to staff training, the analysis of these constraints, and the planning of actions for the remedy of the situation. This work can be done at all levels, from the nation's overall fisheries sector to individual administrations or fishing enterprises. In addition to this planning exercise, key fisheries personnel will be trained on the actual implementation of the HRD programme developed to meet their needs.

Institutional strengthening

National training institutions in the region need to be supported in their efforts to upgrade and diversify their facilities and training programmes in order to cope with the development of domestic off-shore fishing activities, and the growing importance given to fisheries manpower development. The Commission, through the action of its Fisheries Training Section, can play a major role in the enhancement of national training capabilities through the training of instructors, the development of appropriate curricula, the production of resource materials (teaching manuals, videos, posters, etc.) and the standardisation of training programmes at regional level. Institutional strengthening encompasses also the identification of training needs for the positions and staff of fisheries administrations.

Training assistance to the commercial fisheries sector

The commercial fisheries sector in the region has grown in parallel with the introduction of new technologies and management principles. The subsequent training needs of fisheries enterprises have so far been addressed on an 'ad-hoc' basis. It is proposed that SPC's assistance to the region's commercial fisheries sector be continued and enhanced: the Fisheries Training Section could coordinate the planning, funding and implementation of training programmes for fisheries enterprises in SPC member countries and territories. The meeting might take the opportunity to decide what training areas should be identified as priorities. The following topics are given as a guideline for discussions: sashimi tuna handling and grading, organisational and financial management of fisheries enterprises, seafood quality control and marketing, technical training (navigation aids, hydraulic systems, fishing technology, etc.), development of manpower training plans for fisheries enterprises, etc. These training activities could be implemented in-country or at sub-regional or regional level depending on target groups.

Public Marine Education

Public marine education serves multiple purposes: it informs the public on marine resources related issues, it brings an understanding of the potentialities and limitations in the use of marine environment and it gives school children and students a better understanding of the mechanisms ruling the renewal of marine resources. With the inclusion of fisheries into school curricula, students are also better prepared for possibly choosing a marine - related profession. The Fisheries Training Section could possibly expand its role in this area in collaboration with the USP's Public Marine Education programme.

POST-HARVEST SECTION

General

A post-harvest technical and advisory service, mainly as the Fish Handling and Processing Project (FHPP) has been a component part of the Coastal Fisheries Programme (CFP) since 1986. The FHPP was funded by the UK Government for most of its existence. Funding that specifically supported the project ended in August 1994 at which time the project was terminated.

Since September 1994, post-harvest fisheries activities are covered under the Integrated Coastal Fisheries Management Project (ICFMaP). The Resource Assessment Section and the Post-harvest Section of the CFP are linked together within this UK funded project. The project aims to optimise the production from Pacific Island inshore fisheries through better resource management, while simultaneously fostering the generation of greater economic returns through more efficient and effective post-harvest handling, processing and marketing of coastal resources. ICFMaP will, over its life, provide assistance to develop a minimum of six national resource management plans.

The specific development objective of the Post-harvest Section is to secure better value and returns for harvested marine resources through the introduction of new and improved seafood processing/packaging technologies, quality assurance techniques and the provision of marketing advice, with full considerations given to sustainable development and environmental protection.

The current staff complement of the Section is a single professional officer, the Post-harvest Fisheries Adviser and a Project Assistant. The approved position of Post-harvest Fisheries Officer remains vacant while the Commission continues to seek funds from a suitable donor. The Section operates under the supervision of the Post-harvest Fisheries Adviser.

Project Activities

The following table provides a brief outline of the Section's activities over the period April 1994 and June 1996. Additional further comments are provided in later sections.

Dates	Country	Activities between April 1994 and June 1996
1994		
May	Fiji	Attended a meeting of the Management Board of the Marine Studies Programme to present the case for establishing a core funded post of lecturer in post-harvest fisheries at USP. This was in response to a recommendation at the 25 th RTMF under which new arrangements for establishing of Regional Post-harvest Fisheries Centre were approved. The Management Board endorsed the plan.
May-June	Singapore	Attended the 3rd Meeting of the Project Steering Committee, ASEAN-Canada Fisheries Post-harvest Technology Project – Phase II. The aim of the visit was to look at ways for developing links between the two post-harvest fisheries projects of the two regions.
June and August	Solomon Islands / Tonga	Post-harvest Fisheries Training Project: In early 1994 member states were offered the opportunity to organise and run another series of in-country workshops for fishers and fish traders, under the Canadian funded Post-harvest Fisheries Training Project, which is jointly executed by the Post-harvest and Fisheries Training Sections. In June 1994 the Fisheries Division in the Solomon Islands ran a workshop for 12 fishers; and, in August the Ministry of Fisheries in Tonga organised two workshops, one in Ha'apai for 11 fishers and the other in Vava'u for 17 fishers, traders and Fisheries Department staff members.
1995		
Jan-Dec	Fiji and Noumea	<p>Post-harvest Fisheries Training Video Production: In 1995 a concerted effort was made to clear this backlog of video production. A further four post-harvest fisheries training videos were produced and distributed throughout the region in that year. The titles of the videos are:</p> <ul style="list-style-type: none"> . A Visit to the Fish Market – better facilities for selling better seafood . Once Upon a Fish Stall – improved seafood selling techniques . Air-freighting of Chilled Fish . On-board Handling of Sashimi Quality Tuna (by the Training Section) <p>It is hoped that these will be just as popular and useful as the fish chilling videos. Like the first set of videos, they were funded by the Canadian Government through the Canadian-South Pacific Ocean Development Project.</p>

Dates	Country	Activities between April 1994 and June 1996
June-July	Noumea	<p>Inshore Fisheries Management Workshop. One day set aside to discuss important post-harvest fisheries issues that potentially assist resource management procedures and activities. The meeting agreed that for significant export fisheries, such as trochus and bêche-de-mer, a comprehensive and up-to-date source of intelligence is needed on the status and forecast for their markets, particularly in East and South East Asia. It also stated that there is a need for a regional organisation to consider maintaining a register of international entrepreneurs and operators engaged in marine product exporting from the Pacific Islands, to improve the ability of national fisheries managers to appraise the likely compliance of companies engaged in commercial coastal fisheries; and, supported the possibility of developing a set of regional seafood quality standards plus an appropriate plan of action for introducing modern quality assurance procedures, such as HACCP or QMP, for Pacific Island nations.</p>
Aug-Sept	Chuuk FSM	<p>Regional Training Workshops on the Handling, Quality Assessment and Grading of Sashimi Tuna: A one week Regional training workshop aimed at providing tuna handling and grading skills to individuals working in the tuna long-lining industry was held in the Federated States of Micronesia in August 1995. The workshop was jointly organised by the Post-harvest, Capture and Fisheries Training Sections and funded under the Canada-South Pacific Ocean Development Program (C-SPODP) from funds remaining from the Post-harvests Fisheries Training Project. The workshop was attended by sixteen participants, fourteen from the Pacific region and two from the ASEAN region.</p> <p>The demand for training in this area is such that a national level workshop on the same subject were held in Papua New Guinea in December 1995 and a similar workshop was held in French Polynesia in May 1996. Both of these national workshops were organised by the Fisheries Training Section.</p>
Oct-Nov	SE Asia	<p>Marine resource utilisation and marketing studies: In response to the needs identified during the Inshore Fisheries Management Workshop described earlier, the first of a series of resource utilisation studies was undertaken at the end of 1995. The theme of the studies is Improved Utilisation and Marketing of Marine Resources from the Pacific Region.</p> <p>The aim of the series of studies is to identify improved commercial opportunities for Pacific Island countries to utilise living marine resources in a sustainable, and environmentally responsible manner. The first study was on "<i>Bêche-de-mer, Sharkfins and Other Products Purchased by Chinese/Asian Traders</i>". The report of this study will be available in mid-1996. A second study on "<i>The Market for Fish Jerky and Similar Value Added Dried Fish Products in Hawaii and Selected US West Coast Locations</i>" is scheduled for July 1996.</p>

Dates	Country	Activities between April 1994 and June 1996
1996		
Nov-Dec	Cook Islands	Training workshop on fish jerky manufacture in the Cook Islands: A workshop was conducted by the Post-harvest Section for the Ministry of Marine Resources (MMR) on the processing of fish jerky (marinated dried fish). The workshop took place over the period 27-30 November 1995 for entrepreneurs from Rarotonga and a number of outer islands. A rain affected week severely restricted workshop activities. The normal procedures for manufacturing jerky were impossible to demonstrate properly. Fortunately, it was possible to borrow a domestic food dryer that allowed a series of simple demonstrations to be carried out. Much of the workshop was spent helping to develop a financial plan for setting up jerky processing operations at two different outer island sites.
March	Fiji	ICFMAP Sub-project on Freshwater Clam (Kai) Fishery on the Ba River: The resource management plan for the freshwater clam of the Ba River in the Western Division of Fiji is being conducted in co-operation with the Fiji Fisheries Division over two or three visits by various officers from the CFP. The Post-harvest Section's input into the project was carried out in March 1996. The post-harvest component of the project was to review and evaluate the handling, storage and marketing practices for kai; examine whether there were any public health concerns from eating Ba river kai associated with town and sugar mill effluent and agricultural run-off; and provide an evaluation of the potential and desirability for exporting kai.
May	Washington DC, USA	Attended the "Second International Conference of Fish Inspection and Quality Control" to assess the likely impact of new quality assurance systems being introduced by the US Food and Drug Administration at the end of 1997. The Pacific region will need to actively respond to meet the new requirement, to put in place the HACCP (Hazard Analysis Critical Control Point)-based quality inspection and assurance procedures.

Other Activities

The Post-harvest Section continues to provide technical advice and information in response to written enquiries from member countries and territories. This is an important and valuable service which requires continued updating of information from various sources, including suppliers of seafood handling and processing equipment and materials, new product ideas and technical innovations, and keeping abreast of changes in seafood product regulations in other parts of the world that may have an impact on the region.

Publications/Reports

The English version of "Sea Cucumbers and Bêche-de-mer of the Tropical Pacific: A Handbook for Fishers" was distributed to member countries and territories at the end of 1994. The French version of the same very popular handbook was printed and distributed throughout the region at the end of 1995. A poster depicting live sea cucumbers and their equivalent processed bêche-de-mer in English and French was sent out at the same time.

Alternative arrangements for the Establishment of a Regional Post-harvest Fisheries Centre

The project for establishing a Regional Post-harvest Fisheries Centre was terminated because the Commission was unable to secure the necessary funds. A modified approach was accepted by the 25th RTMF in March 1994. The agreed approach was to follow a lower cost path in which some of the component parts of the original project were shared out between the Marine Studies Programme (MSP) at USP and SPC. This approach was endorsed by the South Pacific Conference later the same year and includes dropping two professional and one secretarial positions and replacing them with a single professional officer (Post-harvest Fisheries Officer) and a Project Assistant. The Marine Studies Programme, USP, is making good progress in meeting its obligation under the approved new arrangements. A lecturer in post-harvest fisheries has been recruited and a new MSP building, to be completed by the end of 1997, will include post-harvest fisheries laboratories. Courses on post-harvest fisheries topics will be included in undergraduate programmes from the beginning of 1997. Conversely SPC's component of the new arrangements has not been implemented due to difficulties in sourcing the required funds.

Women's Fisheries Development Activities

The Women's Fisheries Development Project (WFDP) was at the time of the last RTMF only active to the extent that it provided support to the Canadian funded Women-in-Fisheries Fisheries Support Project in Papua New Guinea. By mid-1994 Canadian funding for the WFDP was reinstated, and the Women's Fisheries Development Section created within the Coastal Fisheries Programme on the appointment of the new Women's Fisheries Development Officer in early 1995. The Post-harvest Section continues to work closely with this Section to assist with sub-project activities.

Future Activities

In-country Resource Management Projects

Other ICFMaP resource management projects to be undertaken during the second half of 1996 include the development of a bêche-de-mer fishery management plan for a selected site in Papua New Guinea; assessment of resources and community-mediated fishery management plan for Fakaofu atoll in Tokelau; and a Management plan for live fish fishery of Helen Reef in Palau.

Marine resource utilisation and marketing studies

The third study in the series on Improved Utilisation and Marketing of Marine Resources from the Pacific Region will be carried out on shell and shell meat products in the second half of 1996.

New fisheries inspection and quality assurance system for the Pacific

To meet new quality assurance (QA) requirements in a number of major trading destinations (e.g. USA) it will be necessary for Pacific Island seafood exporters to take on board these new, demanding and potentially costly QA systems. The Post-harvest Section plans to undertake a review of fisheries inspection systems in the Pacific with the objective of developing a strategy that will start the process of upgrading quality practices through out the Pacific region.

Evaluation

Bringing the Section up to its full complement of two professional officers has been an objective of the CFP since the last RTMF. Under the current funding climate it is unlikely that this objective will be met for some time. This has to a large extent limited the full range of service that could otherwise be offered to the region. The Section's sole professional officer is committed to programmed activities under ICFMaP. However, a reasonable balance has been struck so that a number of other activities, plus a technical advisory service, have been possible. Important and useful activities such as the Regional sashimi graders workshops in FSM and the production of training videos have thus been successfully undertaken.

Additional teaching and research capacity within the region through the Marine Studies Programme at USP is welcome. The recruitment of a lecturer in post-harvest fisheries will allow courses on post-harvest topics to be offered to undergraduates from 1997. Some research projects are underway and one or two ad hoc training activities already planned. With post-harvest laboratories included in the plan for the new MSP building, the goal of establishing a post-harvest centre, even in a more modest format, will be realised by the beginning of 1998.

The introduction of new quality assurance systems and requirements in major seafood importing countries (European Union, Canada, and in late 1997, the USA) will become an issue of great importance to the Pacific Region. These new quality assurance systems will have an impact on all the region's exporters of fish and seafood products. A quality assurance system based on HACCP is becoming the food industry standard all over the world for ensuring consumer safety. Seafood exporters, ranging from chilled tuna packing plants to manufacturers of processed and packaged seafood, will need to comply to these new regulations if they wish to continue trading with these countries and trading blocks. Funds are now being sought to conduct a review of the region's needs in developing an appropriate regional approach for putting in place a fisheries inspection and quality assurance system that will help meet regulations of important markets. Once the review is completed there will be a need to provide commercial seafood operators a full range of assistance. This will include staff training, helping to establish and write up management plans, etc.

ICFMaP funding will come to end in August 1997. Unless the project is extended or a new project is supported by the UK Government, the Commission will not be able to provide a service in the post-harvest fisheries area. Other avenues of funding are being pursued.

CAPTURE SECTION

General

This Section functions under the technical supervision of the Fisheries Development Adviser (FDA) and incorporates two projects, the Deep Sea Fisheries Development Project (DSFDP) and the Offshore Fisheries Development Project (OFDP). The Section's primary role is to provide practical field support, training and advisory services to Island member countries and Territories, particularly on capture fishery development and FAD technology.

The DSFDP since its inception in 1978 has been funded from the Commission's core budget, and has traditionally provided the services of Master Fishermen on a short-term basis to work closely with national fisheries department in support of capture fisheries development initiatives in Pacific Island countries.

The OFDP on the other hand is a UNDP-funded activity, and was initiated in 1992 as a result of the increasing demand from Island member countries for assistance in the development of small to medium-scale tuna fisheries, in association with programmes of FAD deployment. This emphasis extends beyond the normal scope of the DSFDP, which does not have the capacity to accommodate all the requests that were being received in these areas. Consequently, a proposal was submitted to UNDP for funding of a four-year programme of support to promoting medium-scale offshore fishery development in Pacific Island countries.

The OFDP provides for the employment of a Project Officer (designated as Fisheries Development Officer) for two years, a Project Assistant, and 6 man-months of specialised consultancy per year. The position of Fisheries Development Officer (FDO) was filled in October, 1994.

During the second quarter of 1995, UNDP was unable to continue providing funding support for the fourth year of the OFDP. However, as a result of a recommendation by Island member countries, during the Tripartite Review (TPR) of the Regional Fisheries Support and National Capacity Building Project (RFSNCBP) in Papua New Guinea, in May 1995, UNDP agreed to utilise resources under the RFSNCBP to assist SPC in implementing the fourth year of the OFDP. The OFDP will be officially concluded by August this year (1996).

The Section operated with a staff of three for most of the period since the last RTMF: Fisheries Development Adviser (FDA); Fisheries Development Officer (FDO); and Project Assistant (PA). A Master Fisherman (MF) position was filled in March 1996. This position is being supported from the Commission's core budget for three years.

Consultancy and attachment training funds which are available under the OFDP, were utilised to employ consultants to undertake a number of short-term field assignments, including attachments training for national fisheries officers to the Section's field activities, and sub-regional workshops.

National-level activities

The Capture Section, since the inception of the DSFDP and the OFDP, has completed 121 in-country assignments. Since the last RTMF, the Capture Section, without a Master Fisherman for most of the period, undertook 20 field assignments: PNG (2) including the national tuna industry seminar, Solomon Islands (1), Tonga (1), Palau (2) including the Micronesian sub-regional FAD skills workshop, American Samoa (2) including the Polynesian sub-regional FAD skills workshop, Fiji (1), New Caledonia (3) including the 1995 SPC/Nelson Practical Fishing Module, Tuvalu (3), Wallis and Futuna (1), FSM (3) including the Regional Sashimi Tuna Grading Workshop, and Kiribati (1- 1996 SPC/Nelson Practical Fishing Module).

Country, dates & staff	Project	Summary of Activities
<u>Solomon Islands</u> March, 1994 P. Wellington (MF)	Provide training in deep-bottom fishing technique.	Practical training at sea for artisanal fishermen at three sites.
<u>Tonga</u> March 1994 P. Watt (MF)	Training in vertical longlining and safety at sea.	Practical training at sea and on-shore for artisanal fishermen.
<u>Palau</u> March - April 1994 P. Watt (MF)	Conduct training in fishing techniques and safety at sea.	Practical training at sea and on-shore for artisanal fishermen.
<u>American Samoa</u> May 1994 P. Watt (MF) and J. Maiwalagi (MF)	1st Sub-regional FAD Workshop (Polynesia).	1. Practical and theoretical training in classroom and at sea for participants. 2. FAD theory, raft design, mooring design and rigging, site surveys, and FAD deployments.
<u>Fiji</u> June 1994 P. Cusack (FDA)	Advise on FAD technology.	Provide advise on FAD design, material specification, and procurement sources.
<u>Papua New Guinea</u> July 1994 P. Cusack (FDA)	Advise on FAD technology and needs assessment.	1. Assist with FAD needs assessment. 2. Provide advise on FAD design, specification, and material procurement.

Country, dates & staff	Project	Summary of Activities
<u>New Caledonia</u> September 1994 P. Watt (MF) P. Cusack (FDA)	Advise on FAD technology and needs assessment.	1. Assist with FAD needs assessment 2. Advise on FAD design, specification, and procurement sources
<u>Palau</u> October 1994 P. Watt (MF), S. Beverly (MF), and S. Fukofuka (tutor)	1. Conduct 2nd Sub-regional FAD Workshop (Micronesia). 2. Assist with Palau's national FAD programme.	1. Practical and theoretical training in classroom and at sea for participants. 2. FAD theory, raft design, mooring design and rigging, site surveys, and FAD deployments.
<u>Tuvalu</u> Jan - Feb. 1995 S. Petaia (FDO)	Assist with development of bottom fish fishery and management plan.	1. Advise on strategies for development of bottomfish fishery. 2. Assist with the review and formulation of bottomfishery management plan.
<u>A. Samoa</u> August 1995 S. Time (Consultant MF).	Assist with implementation of national FAD programme.	Supervise FAD site surveying, construction, and deployment.
<u>New Caledonia</u> July-Aug. 1995 S. Petaia (FDO)	Practical Training Module for SPC Fisheries Officers.	Practical training on fishing techniques, navigation, and fish handling.
<u>Wallis & Futuna</u> July 1995 S. Petaia (FDO) and P. Simone (Consultant MF).	Assist with implementation of national FAD programme.	1. Train counterparts on FAD construction, rigging, and deployment. 2. Construction and deployment of two FADs.
<u>Tuvalu</u> October 1995 S. Petaia (FDO)	Assist with implementation on Phase 1 of national FAD program.	Practical and theoretical training on site surveying, FAD construction, mooring rigging, and FAD deployment.
<u>FSM</u> August 1995 S. Beverly (MF).	Preliminary assessment of National Fisheries Corp. tuna longline fleet. (Phase I)	Concurrent with sashimi workshop, review and assess current situation of domestic tuna longline fleet operation.
<u>FSM</u> March-June 1996 S. Beverly (MF)	Assist with operation of national (NFC) tuna longline fleet operation. (Phase II)	1. Provide hands-on training on Lindgren-Pitman gear, vessel operations and maintenance, and tuna longline fishing strategies.

Country, dates & staff	Project	Summary of Activities
<u>PNG</u> 1995 P. Cusack (FDA)	Assist with national tuna industry seminar.	1. Assist with coordination of the seminar. 2. FDA served as a resource person.
<u>Kiribati</u> June - July 1996 S. Petaia (FDO)	Assist with the Nelson/SPC Practical Fishing Module.	Provide hands-on training for South Pacific Fisheries Officers on capture fishing techniques, navigation, & fishing gear technology.
<u>Tuvalu</u> 1996 SPC FDO: S. Petaia	Assist with Phase II of national FAD programme.	1. Site surveying of all outer Islands. 2. FAD construction & deployment.
<u>Kosrae, FSM</u> June 1996 S. Beverly (MF)	FAD needs assessment.	1. Advise on FAD material, design, specification, and procurement.
<u>New Caledonia</u> July-Aug 1996 (planned) S. Beverly (MF)	Assist NAVIMON tuna longline fleet operation.	1. Provide hands-on training on tuna longline fishing strategies, and operation of Lindgren-Pitman system.

Regional-level activities

During the last two years, the Capture Section continued to monitor and keep abreast of regional and world wide development in FAD, and capture fisheries technology, in particular the small to medium-scale commercial tuna longline fishery. This has included: exchange of technical information with FAD users in the Indian Ocean and Japan; consultation with suppliers of FAD materials and fishing gears; and acquisition of technical information on tuna longlining fishing strategies, vessels and equipment, as well as information on markets and marketing opportunities for chilled fresh tuna.

Training workshops

In addition to in-country and counterpart training undertaken by the Section's staff during country visits, the Capture Section also contributed to regional fisheries training activities, particularly those organised by the Training Section. Since the last RTMF the Section's staff participated in a number of regional training activities either as resource persons or tutors. In 1995 the Fisheries Development Officer served as a tutor/skipper during the SPC/Nelson Practical Fishing course, a Master Fisherman served as a resource person/tutor during the regional sashimi grading workshop, and the Fisheries Development Adviser as a resource person during the tuna industry seminar in PNG.

During the last eighteen months, the Capture Section organised two Sub-regional FAD Skills Workshops; one for the Polynesian sub-region held in American Samoa, and the other for the Micronesian sub-region held in Palau.

Short-term consultancies and training attachments

Technical experts were called upon to assist in short-term projects particularly in FAD programmes and, in collaboration with the Training Section, a number of training attachments for Pacific Island nationals were organised. A Fisheries Training Officer from IMR, USP, Jone Maiwalagi was attached to the first FAD Skills Sub-regional Workshop held in American Samoa; a Cook Islands fisheries officer, Siosifa Fukofuka, was attached to the second FAD Skills Sub-regional Workshop held in Palau; Philippe Simoni, Master Fisherman of the New Caledonian Marine Marchande was on attachment in Wallis and Futuna for FAD surveys, rigging, and deployment; and Savali Time, Senior Fisheries Officer Western Samoa Department of Agriculture, Forests, Fisheries, and Meteorology supervised FAD site surveys, rigging, and deployment in American Samoa. Len Isotoff, Assistant Manager Operations and Training, National Fisheries Corp (FSM) and Nicholas Yarofalchuw of Micronesian Longline Fishing Company (FSM) were enrolled in Ocean Producers International's (Hawaii) first longline fishing course held in Honolulu in February 1996.

Publications

Draft technical reports compiled by the Section as a result of field assignments have in most cases been provided immediately on completion to member countries concerned. Reports such as these provide an account of activities conducted, assess current status of national fisheries development, identify constraints to development aspirations, and make recommendations on how to alleviate these constraints.

In addition to country reports, the Section over the last two years has published and distributed a number of Manuals on FADs : Volume I Planning FAD Programmes, Volume II Rigging Deep-water FAD Moorings, and a Special Interest Group (SIG) bulletin devoted to FAD use. These publications are available in both English and French.

Other publications in the pipeline will include: a Vertical Longline Handbook; Volume III of the FAD manual (to focus on site surveying procedures, rope and buoyancy calculations, deployment techniques, and maintenance); and a Deep-bottom Fishing Handbook. Several unpublished technical reports from past Capture Section projects are awaiting final editing. These should be made available to member countries in the near future.

In addition to publication of technical reports and manuals, the Section has also been involved in the production of a series of training videos undertaken by the Coastal Fisheries Programme. The next production which is now under preparation is the training video on vertical longlining.

Advisory services

Another area of assistance that the Section has been able to offer in the past, is that of the provision of advisory services on technical fishery issues in response to member countries requests. This service has been provided mainly by the FDA, FDO, MF, and Consultant MF either from headquarters or during in-country consultative visits. Dissemination of information through technical publications, narrative reports, fisheries newsletters and bulletins is also another form of assistance that the Capture Section has been able to provide to member countries.

Evaluation

In spite of having four unfilled Master Fisherman positions for the last year-and-a-half and the uncertainty in both core and extra-budgetary funding support, the Section over the last two years has been able to cope with member country requests for assistance. The Section's ability to maintain this level of assistance is attributed to the availability of extra-budgetary funding under the UNDP-funded OFDP, which was utilised in a flexible manner to secure short-term expertise as required (Consultant Master Fishermen, for example). However, the imminent conclusion of the OFDP (August 1996), coupled with insufficient funding support from core budget, will constrain the Section's future ability to accommodate the ever increasing number of requests, particularly in the area of capture fishery development and FAD technology. The conclusion of the Offshore Fisheries Development Project (OFDP) will also witness the termination of the positions of Fisheries Development Officer (FDO) and that of the Section's Project Assistant (PA).

The lack of funding support will be a major constraint for the Capture Section and will require the immediate attention of SPC member countries if the level, range, and quality of assistance offered by the Capture Section is to be maintained as in the past years.

Future Plans

The long-term goal of providing technical assistance to member countries is to help develop national capacities for exploitation and management of marine resources while lessening the dependence on outside foreign assistance. For many member countries development of domestic fisheries will play a significant role in future economic development, but for many other member countries, development and control of their fisheries is the *only* real source of future economic independence. Capture Section will continue to have a role in helping member countries achieve this goal through technical and advisory assistance.

In addition to the aforementioned publications, Capture Section has immediate plans to assist Kosrae's (FSM) FAD programme and New Caledonia's longline fleet (Navimon) with their tuna longline fishery. It is anticipated that other member country requests will be similar to those of New Caledonia and FSM- assistance with FAD programmes and assistance with longline fishing.

Longline fishing, in particular, has become more and more important in the region as member countries develop their own fleets and shore-side operations. Capture Section will be called upon to assist in vessel and gear selection, vessel layout, fishing strategies and techniques, on-board handling of tuna, processing and packing of tuna, and transshipping and marketing of sashimi grade fish. Fishing gear continues to evolve and Capture section has made a point of keeping abreast of technological developments in the fishery. A fourth Sub-regional Workshop on tuna handling and grading is planned, possibly to be held in Cook Islands, and undoubtedly, Capture Section will participate. As a related issue, Capture Section has been monitoring recent developments in the use of live milkfish for tuna longline bait and will be a good source of technical information in this relatively new field.

Even though the sub-regional FAD workshops held in the past were very successful and have filled many gaps in technical expertise, there is still a great need for assistance to member countries with FAD programmes. Capture Section is anticipating requests for assistance in new and ongoing FAD programmes. Of particular importance, especially to member countries with FAD programmes in place, will be assistance with FAD fishing techniques, FAD monitoring and maintenance, and the application of radio buoy technology to FAD fishing.
