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Capture Section Three Year Overview

Capture Section
Marine Resources Division
Secretariat of the Pacific Community
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CAPTURE SECTION THREE YEAR OVERVIEW

General

This Section functions under the technical supervision of the Fisheries Development Adviser. The Section's primary role is to provide practical field support, hands-on training, advisory services and increasingly, studies on development options infrastructure and training needs, to member countries and territories, particularly in relation to their domestic tuna fisheries and FAD technology.

Initially, funding for the Section was entirely from the Secretariat's core budget. However, over the years an increasing proportion of funding has come from non-core sources. Table 1 provided a breakdown of funding sources by staff member for the three year period from RTMF 26 to the now Heads of Fisheries Meeting. Specific project funding has also been gained from Taiwan/Republic of China for the writing of two technical manuals in English and French plus publishing and distribution costs, and the United Nations Development Programme (UNDP) for running a Fishing Skippers Skills Workshop with in-country follow-up work conducted by the Section's Masterfishermen.

Table 1: Capture Section staff over the last three years and their current funding source.

Staff member	Position and status	Current funding source
Mr Lindsay Chapman	Fisheries Development Adviser (July 1996 to present)	SPC core
Mr Steve Beverly	Masterfisherman (March 1996 to present)	SPC core
Mr Peter Watt	Masterfisherman (January 1998 to May 1999)	AusAID
Mr William Sokimi	Masterfisherman replacing Peter Watt (to commence in September 1999)	AusAID
Ms Marie-Ange Roberts	Project Assistant (February 1989 to present)	AusAID
Mr Marsh Uele	Pacific Island Trainee Associate (July 1998 to February 1999)	AusAID (Funding ceased in mid-1999)

The work of the Capture Section continues to evolve and the following headings cover the main work areas undertaken over the last three years being; national-level technical assistance, workshops, meetings and conferences attended, advisory services and publications. A brief evaluation of the last 3-years's work is then provided, with the final section looking at future work plans and new areas for future work. This last section is provide to stimulate discussion to identify the needs and directions of member countries and territories, and will serve as a guide for future work, and future funding proposals where needed.

National-level technical assistance

The Capture Section since its inception has completed a large number of technical assistance projects, working with both the public and private sectors in member countries and territories. Since RTMF 26 (August 1996), a mix of 14 short-term (from 1 – 3 weeks duration) and long-term (1 – 4 months and longer) projects have been undertaken, one in several phases. Two of these projects have been put on hold until later in 1999, one because of the need to recruit an replacement Masterfisherman and the

other due to materials not being available to progress the work programme. Table 2 summarises the national-level technical assistance provided over the last 3 years.

Table 2: Summary of national-level technical assistance projects undertaken by the Section

Country, dates and staff	Project	Summary of activities
New Caledonia August to December 1996 Steve Beverly	Assist tuna longline company 'Navimon' to improve gear, fishing and on board processing practices.	Through assessment and assistance at sea, provide advice through hands-on demonstration on gear construction, fishing practice and correct processing and chilling practices.
Tonga October 1996 Lindsay Chapman	Undertake a study for the Fisheries Department on 'Constraints to development and expansion of a domestic tuna longline fishery in Tonga'.	Meet with all user-groups of the tuna resource, support services and Government Departments to bring together all view in one report with recommendation for moving forward.
Cook Islands January to May 1997 Steve Beverly	Assist two tuna longlining operations in the Cooks to improve their gear, fishing practices and on board handling and chilling of the catch.	Through hands-on training at sea under commercial fishing conditions, the crews of two vessels were trained in all aspects of tuna longlining, including appropriate on board handling and chilling of the catch. The crew of one vessel was also trained in FAD-associated fishing methods.
Tonga May to September 1997 Steve Beverly	Assist the Fisheries Department and local fishermen in all aspects of tuna longlining including correct handling and chilling of the catch for export.	Provided technical advice and assessed many of the local vessels as to their suitability to tuna longlining. Trained the crew of one fisheries vessel and provided advice to the Fisheries Department on policy issues.
Nauru November 1997 Peter Watt (Consultant)	Conduct training in all aspects of FAD construction, site surveys and deployment.	Three FADs were constructed using imported materials. Site surveys were undertaken and the three FADs successfully deployed. Training of local counterparts occurred throughout the project.
Nauru November 1997 Lindsay Chapman	Undertake a study on a suitable tuna longline vessel for Nauru given its unique situation.	Discussions held with different user groups and support services to assess the viable options for tuna longline vessels under different scenarios.
American Samoa March 1998 Lindsay Chapman	Undertake a study of the infrastructure needs (including port facilities) for the developing tuna longline fishery	Inspections were undertaken of port facilities as well as discussions held with different users of the resource. Suggestions were provided in a report to the Fisheries Department on ways forward.

<p>Papua New Guinea June 1998 to January 1999 Peter Watt</p>	<p>Work with the National Fisheries College in Kavieng to provide training to students on the commercial fishing methods used in PNG.</p>	<p>Through both theory classes and practical hands-on work on board the college's training vessel, train students in gear construction and its use for several of the main commercial fishing methods used in PNG, so these students could be employed on domestic vessels.</p>
<p>Solomon Islands July/August 1998 Lindsay Chapman</p>	<p>As part of a collaborative FFA/SPC/C-SPOD project, conduct a study on the development, infrastructure and training needs for the domestic tuna fishery in the country</p>	<p>As many user, interest and support groups (including FFA and the Fisheries Department staff) for the tuna fishery were interviewed as well as a wide range of literature reviewed. A report was then compiled putting a range of suggestions forward under different scenarios for consideration.</p>
<p>Kiribati September 1998 Lindsay Chapman</p>	<p>Finalise arrangements for a Masterfisherman assignment and give advice on fitting out the project vessel that was being constructed at the time.</p>	<p>Advice provided on different aspects of the project vessel including placement of longline reel, pulley arrangements, hatch combings, and possible deck layout. Dates and arrangements were also set tentatively for the commencement of a Masterfisherman assignment.</p>
<p>Kiribati December 1998 Steve Beverly</p>	<p>Phase I of a tuna longline project to set up boat and get gear made up.</p>	<p>Some installation of gear was undertaken, however, many of the parts, like tuna longline reel and hydraulics did not arrive as scheduled. Branchlines and other gear were made up ready for Phase II of this project.</p>
<p>Samoa March to May 1999 Peter Watt</p>	<p>Conduct tuna longline fishing trials experimenting with the gear to try and increase the catch of higher value species, bigeye tuna and larger yellowfin tuna.</p>	<p>Make changes to the gear and fishing layout on the Fisheries vessel, including the rebuilding of the hydraulic system, so the tuna longlining gear could be used more easily and effectively. Initial fishing trials were undertaken using time-depth-temperature monitoring equipment to try and identify characteristics where the higher value species are caught.</p>
<p>Solomon Islands March 1999 Lindsay Chapman</p>	<p>Undertake a study on the development options, vessel parameters and financing options for domestic operators in the Solomons wishing to enter the local tuna fishery.</p>	<p>Discussions were held with different groups either using or wishing to use the tuna resource. Financial institutions were approached to assess their potential for funding development and vessel parameters were suggested for a range of vessel types with very basic economic projections.</p>

Kiribati April to May 1999 Steve Beverly	Phase II of tuna longline project to fit out new vessel with equipment.	Work was progressed on the fitting out of the project vessel, however, continued delays in the arrival of equipment resulted in the work not being completed on time.
Tokelau May 1999 Lindsay Chapman	Undertake a need assessment based on the fisheries development direction as identified by the Fisheries Department and others.	Discussions were held with the Council of Elders on each of the three atolls as well as the Fisheries Department staff and others interested in the development of fisheries. A summary report was presented to Tokelau suggesting areas where SPC could assist.
Palau July 1999 Lindsay Chapman	As part of a collaborative FFA/SPC/C-SPOD project, conduct a study on the development, infrastructure and training needs for the domestic tuna fishery in the country	As many user, interest and support groups (including FFA and the Fisheries Department staff) for the tuna fishery were interviewed as well as literature reviewed. A report was then compiled putting a range of suggestions forward under different scenarios for consideration.

Workshops and follow-up activities

An important part of the section's work has involved the preparing and running of national workshops, as well as participating in other regional and national workshops organised by other Sections of the Coastal Fisheries Programme and other Regional Organisations. The Section participated in 10 workshops during the last 3 years spread over 8 countries and territories. In addition, one regional workshop had a follow-up component that involved 6 man-months of Masterfishermen's time. This follow-up occurred in 9 countries and territories and covered all 13 participants to the workshop. Table 2 summarises the Section's participation in workshops and follow-up work over the last three years.

Table 3: Summary of workshops and follow-up activities undertaken by the Section.

Country, dates and staff	Project	Summary of activities
Cook Islands April 1997 Steve Beverly and Lindsay Chapman	Conduct two, one-week workshops on FAD-associated fishing methods, one in Rarotonga and the other in Aitutaki.	Construct vertical longlines (different types) and palu-ahi gear in a classroom setting and using this gear, undertake practical fishing trials.
Tonga June 1997 Steve Beverly	Participate in Sashimi workshop organised by the Post-Harvest Section	Resource person for demonstrating correct killing, bleeding, processing and chilling of tunas to export standards.
Papua New Guinea January 1998 Steve Beverly	Participate in a tuna handling and grading workshop organised by the Fisheries Training Section.	Resource person for demonstrating killing, processing and chilling procedures for tunas to export standards.

Fiji February 1998 Steve Beverly	Workshop on FAD-associated fishing techniques.	This workshop involved a mix of theory and making up gear (vertical longlines and palu-ahi lines) in a classroom setting and practical hands-on training at sea using the gear.
Nelson, New Zealand February 1998 Steve Beverly and Peter Watt	First Fishing Skills and Electronic Aids Workshop (organised by Fisheries Training Section)	Participate and provide a Pacific perspective to fishing skill used in the region as well as helping to stimulate discussion to bring out the knowledge of the participants.
Follow-up to Fishing Skills Workshop Kiribati (March 1998) Marshalls (March 1998) Chuuk (FSM – March to April 1998) Solomons (April/May 1998) PNG (September 1998) Peter Watt	Conduct follow-up work with each of the participants to the Fishing Skills Workshop to assist them in implementing what they learnt in the classroom into their individual work situation.	The follow-up work was completed with assessments made on each participant as to their implementation of what they had learnt and their management of the crew. Allowance was made for the electronic equipment available on each vessel.
Follow-up to Fishing Skills Workshop Tonga (March to April 1998) French Polynesia (April 1998) Fiji (including participant from Cook Islands – May 1998) Steve Beverly Samoa (September 1998) Lindsay Chapman	Conduct follow-up work with each of the participants to the Fishing Skills Workshop to assist them in implementing what they learnt in the classroom into their individual work situation.	The follow-up work was completed with assessments made on each participant as to their implementation of what they had learnt and their management of the crew. Allowance was made for the electronic equipment available on each vessel.
New Caledonia June to July 1998 Steve Beverly	Participation in practical module of the Nelson PolyTech course.	Conducted tutorials and acted as fishing master on one of the training vessels used over the 5 weeks this module was run.
Niue September 1998 Steve Beverly	Workshops on FAD-associated fishing gears and techniques	Two workshops conducted using classroom time to make up vertical longlines and palu-ahi lines and then practical hands-on demonstration at sea using the gear to fish around FADs.
Christmas Is. Kiribati Oct/November 1998 Steve Beverly	Workshop on tuna handling and quality organised by the Fisheries Training Section	Resource person for demonstrating killing, processing and chilling procedures for tunas to export standards.

New Caledonia June to July 1999 Steve Beverly	Participation in practical module of the Nelson PolyTech course.	Conducted tutorials and acted as fishing master on one of the training vessels used over the 5 weeks this module was run.
Fiji July 1999 Steve Beverly	Workshop on tuna handling, grading, cutting and value adding organised by the Fisheries Training Section	Resource person for the workshop to demonstrate the handling and grading of tunas to export standards. Cutting and value adding were covered by other resource personnel.

Meetings and conferences attended

Part of the work programme for the Section is to travel to member countries and territories to meet with different user groups of marine resources to find out what is happening in-country and to find out what the needs are as they continually change. This allows staff to maintain the focus of the section on the needs of our constituents. There is also an increasing role in attending regional and international meetings and conferences to keep abreast of new ideas and changes that may assist SPC's member countries and territories. This also allows the presentation of papers by SPC staff to let people outside the region know what is happening in the central and western Pacific regarding fisheries development. Table 4 summarises the meetings and conferences attended over the last three years by staff of the Capture Section.

Table 4: Summary of meetings and conferences attended by Section staff over the last three years

Country, dates and staff	Meetings/conference	Summary of meetings
Solomon Islands September 1996 Steve Beverly	Industry Partnership Meeting arranged by the South Pacific Project Facility.	Attended meeting and presented a paper on vessel parameters for tuna longline vessels in the Pacific, as well as participating in other areas of discussion.
Vanuatu March 1997 Lindsay Chapman	Annual SPC/FFA colloquium	Discuss past and future collaborative work as well as progressing the wording for a Memorandum of Understanding between the two organisations.
Vanuatu June 1997 Lindsay Chapman	Meetings with Fisheries Department staff and other users of the tuna resource.	Discussions to find out future directions for development in Vanuatu based on the identified needs of the country.
Solomon Islands June/July 1997 Lindsay Chapman	Meetings with Fisheries Department staff and other users of the tuna resource.	Discussions to find out future directions for development so these could be considered and incorporated into future activities for the section.

Papua New Guinea July 1997 Lindsay Chapman	Meetings with Fisheries Department staff and other users of the tuna resource.	Discussions to find out future directions for development so these could be considered and incorporated into future activities for the section.
Cairns, Australia July 1997 Lindsay Chapman	First 'Asia-Pacific Conference and Exhibition for the Commercial fishing Industry'	Presentations on different commercial fisheries and the gears used in the region. Also covered fisheries management in Australia and the main issues being addressed.
Fiji August 1997 Lindsay Chapman	Meetings with Fisheries Department staff and other users of the tuna resource.	Discussed possible future technical assistance in development of small-scale tuna longlining and the possible use of live milkfish as bait. Also looked at the needs identified by the fishing industry.
Samoa March 1998 Lindsay Chapman	Meet with different sectors of the tuna longline industry to get an understanding of its success.	Discussions were held with a wide range of people involved in the tuna longline industry in Samoa. An article was published in SPC's Fisheries Newsletter highlighting the success of this fishery and possible reasons for this success.
Fiji March 1998 Lindsay Chapman	Meetings with Fisheries department staff regarding possible technical assistance, and others in the fisheries sector regarding developments in the tuna fishery.	Discussions were held with the Fisheries Department regarding a possible project on broadbill swordfishing trials and small-scale tuna longline development. Other sectors of the fishing industry were also consulted to get an update on tuna fishing in Fiji.
Samoa September 1998 Lindsay Chapman	FAO Workshop on 'Economic strengthening of fisheries industries in small island developing states in the South Pacific'.	Attended this workshop as tuna longlining was being discussed as well as subsidies and incentives being used to develop fisheries world wide. There were also some presentations on the FAO's international agreements in relation to fisheries.
New Caledonia October 1999 All Capture Section staff	Mini-Regional Technical Meeting on Fisheries (RTMF).	Meeting looked at a range of issues in fisheries and gave the Capture Section a chance to seek direction on its work programme.
Fiji January/February 1999 Steve Beverly	ACP-EU Industrial Partnership Meeting.	This meeting brought European buyers and marketers to Fiji to meet with those in the catching sector to foster trade between the different groups. The European health standards were also explained so prospective exporters were aware of them.

Fiji February 1999 Lindsay Chapman	Fourth meeting of the Association of Pacific Island Maritime Training Institutions and Maritime Authorities.	This meeting was looking at qualifications and possible training needs for people in the fishing industry at lower levels. A modular approach was suggested where countries could tailor courses at the lower levels to suit their needs.
California, USA April 1999 Lindsay Chapman	Inter-American Tropical Tuna Commission (IATTC) bycatch reduction by possible changes in gear, practices and technology.	A round-table discussion on various approaches to reducing bycatch from purse-seiners when fishing around FADs. This included hydroacoustic equipment, gear changes, selectivity panels, fish behaviour, brailing procedures etc.
Canberra, Australia June 1999 Lindsay Chapman	Meetings with AusAID on future funding of the SPC's development area.	Discussions were held with AusAID focusing on a combined funding proposal for the development area (Capture, Training, Community) for 2000 to 2002. The proposal was well received and refined based on input from AusAID.
Cairns, Australia July 1999 Lindsay Chapman	Second Asia-Pacific Conference and Exhibition for the Commercial Fishing Industry.	Attended the meeting and presented a paper covering the development work conducted by SPC's Capture Section over the last 25 years. Meeting had a strong focus on Australian fisheries management and the issues they were facing – possibly what Pacific Nations may face in 5 to 10 years time.
Fiji July 1999 Steve Beverly	Meetings with local boat builders, members of the fishing industry and the Fisheries Department.	Discussions were held with boat builders and the fishing industry to look at vessel parameters for suitable tuna longliners for Pacific fishing conditions. Meetings with the Fisheries Department were to look at future directions for tuna longline development work and where SPC could assist.

Advisory services provided by the Section

Another important component of the Section's work programme is the provision of ad hoc advice on a range of issues. Over the last three years the advice provided has mainly been in the areas of vessel parameters, where to locate suitable fishing vessels, FAD material suppliers, fishing gear suppliers (with specific gear) getting quotes for materials for FADs and gears used in association with FADs, advice on what is happening in other countries and territories in the region, post harvest activities, value adding processes for tunas and associated species etc etc. The Section needs to expand its knowledge base to try to answer the wide-ranging inquiries being received at present. This advisory service is an area the Section feels is very valuable, and we intend to continue and encourage member countries and territories to use this service.

Publications

All completed country assignments of technical assistance over the last three years have had the report finalised and presented to government for clearance. Of those cleared, all have been published and distributed or have the final text at the printers. The process of finalising reports, getting them cleared, printed and distributed takes around 6 – 8 months from the completion of the project.

The Section has also had a successful three years in getting a lot of the outstanding manuals and reports finalised, printed and distributed. External funding from Taiwan/Republic of China allowed the completion of FAD Volume III, 'Deploying and maintaining FAD systems' and a manual on 'Vertical longlining and other methods of fishing around fish aggregating devices (FADs)—a manual for fishermen'. Both manuals have been distributed in English and French. Funding support from AusAID has allowed the finalisation and distribution of a manual on 'Deep-bottom fishing techniques for the Pacific Islands—a manual for fishermen' in English. The French version of this manual is nearing completion and should be available within one to two months.

Thirty outstanding Masterfishermen Reports of work conducted in the 1980s and early 1990s have now been completed, cleared by the respective countries and territories and printed in a series of 'Unpublished Reports'. There are still around 10 – 15 of these reports to be completed, however, these are taking a very low priority at present as a lot of work is required to complete each one and there are higher priorities for the Section. These reports will be completed as and when time permits.

Funding is currently being sought to produce two new technical manuals. The first is on tuna longlining gear and techniques for small-scale and medium-scale vessels and will draw on the expertise within the Section, in particular Steve Beverly, to produce the draft text. The second manual will be on different chilling mediums, how they work and which give the best results with the common export species in the Pacific, tunas and deep-water snappers.

Evaluation

The last three years have been very busy for the Capture Section. Recruiting a second Masterfisherman for the Section allowed the work programme to be expanded. However, with the need to recruit a replacement Masterfisherman, which has left the position vacant for almost 4 months, work is starting to back up. This should be alleviated once the new Masterfisherman commences in September 1999.

Overall it has been a very successful three years for the Section. A lot of past work in the form of outstanding manuals and reports have been completed. Most country requests have been met within a timeframe acceptable to both SPC and the countries and territories concerned. New requests continue to come in for technical assistance and there are increasing enquiries for advice on vessels and gear for fishing and FAD work. In addition, the requests for studies to be done on development options and infrastructure and training needs for the fishing industry have added to the increasing diversity of work being undertaken by the Section.

Commitments and future directions for the Capture Section

The foreseeable future for the Section looks busy. There are two partially completed technical assistance projects, one in Kiribati and the other in Samoa. It is hoped that both of these assignments will be completed by the end of 1999. In addition, the Section has an official request from Pohnpei and is expecting one from Kosrae. These are for FAD construction, site survey and deployment training with Kosrae also seeking training in FAD-associated fishing methods once the FADs are in place and fish are starting to aggregate. Tokelau has also indicated their interest for a Masterfisherman to assist their tuna longlining ventures, with an official request almost settled. This work will keep the Section's Masterfishermen busy for at least the first 3 – 4 months of the year 2000.

It is anticipated that additional requests will be received for technical assistance in the areas of tuna longlining assistance, FAD construction, site surveys and deployment and the running of workshops. A study is scheduled for Vanuatu later in 1999/early 2000 on development options for domestic tuna fishing operations as part of the development of a Tuna Management Plan. Funding permitting, two new technical manuals will also be produced over the next 12 months.

There are four other areas where the Section sees potential for assisting member countries and territories, all of which will need additional funding for resources for either training of our current Masterfishermen, additional staff, or hiring consultants with the appropriate expertise.

Sportfishing and gamefishing

Sportfishing and gamefishing provides an alternative development option for marine resources for member countries and territories to consider. It is an area that the Capture Section sees great potential in the Pacific as sportfishermen prefer to fish with light gear for the thrill of catching the fish and then generally release the fish alive. Such an approach does not put pressure on inshore fish stocks.

Establishing a viable sportfishing business is not easy and it requires a different set of infrastructure to that used by the harvesting sector. As sportfishing relies on overseas fishermen or tourists coming in to charter a vessel to go fishing, there needs to be appropriate accommodation available for them to stay at. Such a fishery is being established in Palau and it is starting to expand.

Post harvest activities and value adding

There is an increasing interest in the Pacific to add value to marine products at the source of capture. This not only increases the value of the product, it generates employment and income within the country doing the value-adding. Some value-adding is being conducted on tuna and bycatch from tuna fishing operations, however, there is scope for this to be further developed.

Another post harvest activity that needs to be addressed in the region is the provision of accurate and up-to-date marketing data for marine products. FFA does this for tuna and tuna products, however, there is a shortage of accessible information on other marine products.

Catching and handling fish for live fish trade

The live fish trade is starting to be established in several countries in the region. Care is needed when developing such a fishery to ensure that non-destructive fishing techniques are used. There are also correct handling practices for the fish to ensure they survive the catching process. This is a new area to the Capture Sections work, and it is essential that our Masterfishermen be trained in these techniques so that they can then pass that information on to member countries and territories that request this type of assistance from the Section.

Pacific Island Trainee Associate position

The Capture Section had a Pacific Island Trainee Associate position for one year, however, due to funding shortages, was not able to continue with this position. The Section still believes that this is an important position to provide longer-term training in a range of areas that are difficult to find in the region. To continue this position, funding would be needed.

In concluding, it is hoped that member countries and territories will discuss their future needs from the Capture Section so that a work programme can be established and a direction set. Views are also sought on the priority areas where members see development occurring in their countries, especially new areas like those suggested above. Direction is also requested on how members would like the Capture Section to proceed with the four areas specifically mentioned above.