SECRETARIAT OF THE PACIFIC COMMUNITY

**THIRTY-FIRST MEETING OF THE
COMMITTEE OF REPRESENTATIVES OF GOVERNMENTS AND ADMINISTRATIONS**
(Nauru, 14-16 November 2001)

PROGRAMME PRESENTATION : MARINE RESOURCES DIVISION

(Paper presented by the Secretariat)

INTRODUCTION

1. The Marine Resources Division is one of the three fundamental divisions of the SPC Work Programme. It is composed of two Fisheries Programmes, Oceanic and Coastal, based in Nouméa, and has an organisational linkage to the Regional Maritime Programme, based in Suva.

2. So why does SPC place so much emphasis on its Marine Resources Division, when marine resource management is normally just a minor subset of the government work-programme in continental and metropolitan countries? The reason is that SPC island member countries themselves are involved in the sea. Reef fisheries are still the mainstay of rural food security; Pacific Islanders take only 10% of the catch in the multi-billion dollar tuna fishery operating in their region and they have realistic prospects for much greater economic involvement; whilst seafaring wages are a main source of national income in certain SPC member countries.

3. And in return, the ocean makes considerable demands on Pacific Community members. In terms of population per unit marine area to be managed, the sea is 200 times as significant to the average Pacific Islander as it is to the average global citizen. And the obligations of, for example, Tuvalu, under the International Law of the Sea are the same as the obligations of, say, the United States of America. International standards must be enforced, and information provided to global monitoring networks. Intergovernmental programmes which focus on the specific needs of small countries, and enable the regional pooling of expertise, are one mechanism that helps level the global playing field.

WORK PROGRAMME

4. The role of the constituent programmes will be explained in more detail in the presentations given to CRGA but, briefly, the intention of the Marine Resources Division is to support and guide its constituent programmes in achieving the regionally-shared vision of "*a Pacific Ocean whose resources are productively and safely used to sustain and improve the quality of life of the people living in its midst in perpetuity*"[1].

[1] *Overview of the Marine Resources Division*. Working Paper 1 of the 2nd SPC Heads of Fisheries Meeting, 23-27 July, Noumea. Also archived at http://www.spc.int/coastfish/Reports/RTMF28/E-HOF2-WP1.pdf

5. The Oceanic Fisheries Programme (OFP) is based in Nouméa and provides a scientific advisory service to SPC members on the status of highly-migratory marine species, primarily the tuna stocks that support the major offshore fisheries operating in the region. The applied scientific work of the OFP complements the regional economic, legal, tuna management planning, and MCS etc. work of the Forum Fisheries Agency to provide balanced regional support services to Pacific Islands in tuna fisheries policy planning and negotiation. The OFP also complements the small-scale tuna fisheries development work of the Coastal Fisheries Programme, as well as providing an internationally-recognised benchmark of the status of tuna fisheries and associated species of use in international processes. The SPC member government sectoral contacts for the OFP are primarily with Fisheries services.

6. The work of the Oceanic Fisheries Programme was recently reviewed by an independent team. The results of this review, along with recommendations and feedback from the recent Heads of Fisheries Meeting and the regular scientific problem-analysis by the Standing Committee on Tuna and Billfish, as well as the work of other SPC, and individual project reviews, all contribute towards defining the work programme.

7. The Coastal Fisheries Programme (CFP) is also based in Nouméa and provides a broad range of services to assist Pacific Island governments in the establishment of sustainable locally-based fishing enterprises, in understanding and planning inshore fisheries, and in promoting appropriate governance mechanisms. The CFP recently broadened with the addition of a regional aquaculture focal point but this new subsectoral theme is expected to eventually develop into a separate programme within the Division. The SPC member government sectoral contacts for the CFP are primarily with Fisheries services.

8. In SPC organisational terms, the Coastal Fisheries Programme is really a collection of different programmes, and direction is maintained at the section head level rather than having a single programme manager like the OFP. The "programme" terminology is more a result of the sectoral nature of the activity than a single conceptual direction. It would seem excessive within the context of the SPC organisation to have 6 different "programmes" all addressing aspects of the domestic fisheries sector.

9. Individual components (projects, or sections) of the CFP are subject to external review, and the overall programme direction is internally reviewed from time to time. The last such exercise occurred in 1998 and the CFP will repeat this and draft a strategic plan for the programme in the near future, with the purpose of taking into account past (and probable future) changes in the sector, and in "client" aspirations and policies, as well as changes in SPC corporate policy and the need to make the workings of the programme as visible and understandable as possible. The recent Australia-sponsored "Herr" review of SPC has been extremely valuable, and although it could not look at impacts on the fisheries sector in depth, provided insights and recommendations of relevance to the administration of the CFP, particularly suggestions for improvements in delivery of services to member countries.

10. The work of the CFP is discussed by member countries at Heads of Fisheries meetings, whose recommendations, and other feedback, form the basis for the detailed work-programme of each section within the overall corporate policy framework overseen by CRGA and Conference.

11. The Regional Maritime Programme (RMP) is based in Suva and provides legislative advice and training to help SPC members to improve national maritime and shipping standards. The SPC member sectoral contacts for the RMP are primarily with Marine departments and Maritime training institutions.

12. The RMP internally produced a strategic plan in 1999 and the focussed nature of its activities gives it highly "measurable" results in terms of legislation developed, people trained, and international standards achieved. For example, a major recent achievement for Pacific Island Countries and Territories was the achievement of "white list" status by all 10 countries who applied – the culmination of several years of effort by the Regional maritime Programme – and a major aid effort from UK (DFID) and Australia (AusAID) enabled the RMP to put nearly 300 Pacific Island deck and engineer officers through STCW 95 upgrade training this year, whilst maritime legislation was drafted for several countries.

STAFF

13. The executive management component of the Division, outside its constituent programmes, consists of two staff: a Director, and a Secretary who also provides a supplementary service to the rest of the Nouméa-based Executive. The Division as a whole, with its constituent programmes, contains 29 professional staff and 10 support staff (see Annex 1).

14. The work of these staff is managed according to the organigramme in Annex 2. It should be noted that the three constituent programmes have evolved different management systems over the years. The comparatively highly-focussed activities of the OFP sections are coordinated through a single programme manager, and the small Regional Maritime Programme is coordinated primarily by the Senior Deputy Director-General in Suva along with the Land Resources Division. The CFP is much more heterogeneous than the OFP, with each section having quite a different focus, covering practical development assistance, reef fisheries science, fisheries management advice, publishing, training courses, and social and reef ecosystem research, whilst the OFP covers oceanic fisheries science and ecosystem research. The Director of the Division coordinates the sections of the Coastal Fisheries Programme directly, in addition to taking responsibility for Divisional policy direction, international representation, major decisions on Divisional staffing and funding, and taking part of the SPC corporate executive committee, whilst CFP Section heads manage their own programme areas on a day to day basis.

FUNDING

15. As with most of SPC's member country client-oriented activities, the work of the Division is funded primarily from non-core financial sources. Member country assessed (core) contributions provide the costs of one staff member in each of the three constituent programmes, plus the executive management of the Division, and in total contribute about 7.5% of the direct funding of the Division. The Division also, of course, has access to SPC common support services in the Corporate Services Division and the Information and Communications Programme of the Social Resources Division.

16. The planned total budget of the Division in 2002 is approximately 7,200,000 CFP units, made up as follows (see Agenda Item 5 for details):

cfp units	2001 total	2002 total**	% core (2002)
Oceanic Fisheries Programme	2,300,000*	2,950,000	3.9%
Coastal Fisheries Programme	1,950,000	3,500,000	4.1%
Regional Maritime Programme	1,200,000	450,000	26.8%
Divisional Direction	250,000	250,000	70.6%
Total	5,750,000	7,150,000**	7.5%

* figures are rounded to the nearest 50,000 CFP units.

** the differences between 2001 and 2002 budgets are primarily due to the start-up of a major EU-funded fisheries scientific information project.

17. The achievements of the Marine Resources Division are regularly reported to funding clients by the individual projects that make up the work programme, and to member country clients both individually during each national sub-project and collectively during the technical meetings of each of the Division's three constituent programmes. Major achievements will be summarised in the programme presentations at CRGA.

HEADS OF FISHERIES (HOF)

18. The 2nd SPC Heads of Fisheries Meeting was held in July, in Noumea. The change of name from the "Regional Technical Meeting on Fisheries (RTMF)" reflects the increasingly senior nature of the representation and indeed the increasing importance that SPC member administrations themselves give to fisheries. At the time of the first SPC fisheries meeting, in 1952, there were no specialised fisheries services in the region at all. Although RTMF/HoF was originally the only regional meeting with fisheries as its subject, its role has become more specialised over the years. The main forum for Pacific Islands to discuss tuna fisheries management has now become the Forum Fisheries Committee, and the main forum for discussion of tuna fisheries science has become the Standing Committee on Tuna and Billfish (see later). The subject matter of RTMF/HoF is thus now concentrated on domestic and non-tuna fisheries, but also covers OFP work-programming issues, and maritime/fisheries interactions, as necessary. HoF is the only Marine Resources Division meeting to receive SPC core funding, but this is not budgeted if non-core funding is available to provide for the participation of member countries at intervals that are more frequent than triennial.

19. The purpose of the meeting is to enable Heads of Fisheries to review and discuss issues arising within the local fisheries sector for the information of each other; for the guidance of the Secretariat; and for the information of the world at large. Annex 3 contains the full list of formally agreed Outputs of the latest meeting. A full record of discussion is also published.

20. Whilst Heads of Fisheries do not send long lists of recommendations to CRGA for approval, there are usually, however, specific issues that Heads of Fisheries wish to bring to the attention of CRGA, either concerning SPC processes that are outside the competence of the Marine Resources Division management or outside the policy scope of the meeting itself. Issues which 2HoF asked specifically to be brought to the attention of, or are perhaps of note to, SPC's governing councils include outputs 8, 9, 10 and 20.

STANDING COMMITTEE ON TUNA AND BILLFISH (SCTB)

21. The Standing Committee on Tuna and Billfish is an annual meeting of fishery scientists who are working on tuna fisheries in the Pacific Community region, and its secretariat is the SPC Oceanic Fisheries Programme. Unlike HoF, participation is not funded by SPC (although ad-hoc funding has occasionally been available in previous years to support Pacific Island participants), and SCTB currently has no formal linkage to SPC governance processes[2].

22. The SCTB is valuable because it helps to internationally define the best available scientific information about tuna stocks through a consensus of coastal state and fishing nation scientists. And it helps ensure, through peer discussion, that the work of the OFP is of an internationally excellent standard. The output of SCTB has also been of seminal value in the now-concluded multilateral high-level (MHLC) discussions on the conservation and management of highly migratory fish stocks in the western and central Pacific. Under Article 11 of the MHLC resolution establishing a preparatory conference for the establishment of a Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, the SCTB may be asked by the preparatory conference (prepcon) to provide scientific advice. Whilst SCTB was not specifically tasked with anything by the first prepcon, the output of the meeting will be available to the next prepcon.

23. This 14th SCTB was notable as being the first to be attended by scientists from the People's */public of China. Whilst attendance at SCTB is purely voluntary and carries no political significance, the addition of expertise from this significant fishing nation can only assist the common effort to secure the long-term future of these broad-ranging tuna stocks, and associated species.

[2] The formal operating framework for the OFP is derived, like all SPC programmes, from the SPC governing councils: CRGA and Conference. Whilst the CFP derives member country sectoral guidance primarily from the Heads of Fisheries Meeting, and the RMP from the APIMTIMA meeting (see later), the OFP's technical direction is synthesised from a variety of sources, including Heads of Fisheries, SCTB, and the Forum Fisheries Committee (which is entirely composed of SPC member countries, and which is the main regional forum for defining the requirements for Pacific Island tuna fisheries management) and its Species Working Groups.

24. The main outputs of the 14th SCTB are summarised in Annex 4.

MEETING OF THE ASSOCIATION OF PACIFIC ISLANDS MARITIME TRAINING INSTITUTIONS & MARITIME AUTHORITIES (APIMTIMA)

25. The 6th meeting of the Association of Pacific Islands Maritime Training Institutions & Maritime Authorities (APIMTIMA) was held in Nadi from 26-27 March 2001, and has been held annually since 1996.

26. APIMTIMA is the main collective linkage between the SPC Regional Maritime Programme and its member country clients, and a summary of the outputs of the meeting are in Annex 5.

CONCLUSION

27. This paper has provided an overview of the organisation, staffing and budget of the Division, with an emphasis on the output of sectoral meetings involving member country government sectoral specialists and managers. The activities and outputs of the constituent programmes of the Division during the work-programme year 2001, and plans for 2002, will be presented at CRGA itself.

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8 October 2001

ANNEX 1

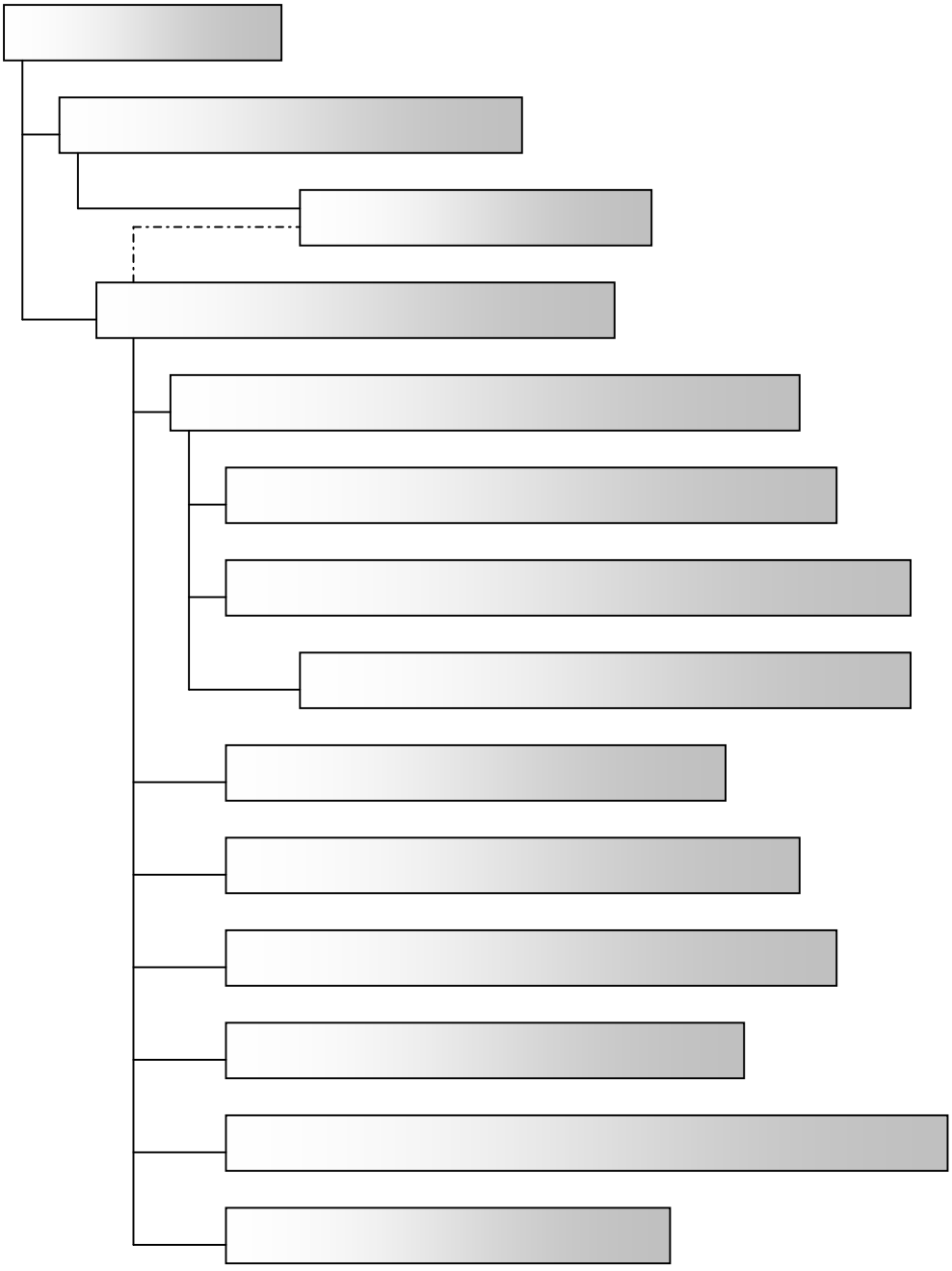
Staff of the Marine Resources Division

Title	*Name*	*Origin*	*Prog*	*Grade*	*Fund source*
PROFESSIONAL STAFF					
DIRECTOR	ADAMS, TIM	UK	EXEC	D2N	CORE
OCEANIC FISHERIES PROGRAMME CO-ORDINATOR	LEWIS, ANTONY	AUSTRALIA	OFP	D1/S3	CORE
MARITIME LEGAL ADVISER	HEATHCOTE, PETER	CANADA	RMP	S3F	CORE
MARITIME TRAINING ADVISER	HOGAN, JOHN	NEW ZEALAND	RMP	S3F	NC*
PRINCIPAL FISHERIES SCIENTIST	HAMPTON, JOHN	AUSTRALIA	OFP	S3N	NC
FISHERIES STATISTICIAN	LAWSON, TIM	CANADA	OFP	S3N	NC
FISHERIES TRAINING ADVISER	BLANC, MICHEL	FRANCE	CFP	S2N	NC
FISHERIES DEVELOPMENT ADVISER	CHAPMAN, LINDSAY	AUSTRALIA	CFP	S2N	NC
COMMUNITY FISHERIES ADVISER	FA'ASILI, UETA	SAMOA	CFP	S2N	NC
FISHERIES INFORMATION ADVISER	GAUDECHOUX, JEAN-PAUL	FRANCE	CFP	S2N	NC
SENIOR FISHERIES SCIENTIST (STOCK ASSM)	LABELLE, MARC	CANADA	OFP	S2N	NC
SNR FISH. SCIENTIST (BIOLOGY)	LEHODEY, PATRICK	FRANCE	OFP	S2N	NC
AQUACULTURE ADVISER	PONIA, BEN	COOK ISLANDS	CFP	S2N	NC
REEF FISHERIES MANAGEMENT ADVISER	LABROSSE, PIERRE	FRANCE	CFP	S2N	NC
FISHERIES DATABASE SUPERVISOR	WILLIAMS, PETER	AUSTRALIA	OFP	S2N	NC
FISHERIES RESEARCH SCIENTIST (ECOSYSTEMS)	ALLAIN, VALERIE	FRANCE	OFP	S1N	NC
FISHERIES RESEARCH SCIENTIST (NAT PROFILES)	BIGELOW, KEITH	USA	OFP	S1N	NC
FISHERIES INFORMATION SPECIALIST	DESURMONT, AYMERIC	FRANCE	CFP	S1N	NC
FISHERIES TRAINING SPECIALIST	LUCIANI, TERIIHAUROA	FR.POLYNESIA	CFP	S1N	NC
COASTAL FISHERIES COMPUTING ENGINEER	MAGRON, FRANCK	FRANCE	CFP	S1N	NC
LIVE REEF FISHERIES SPECIALIST	YEETING, BEING	KIRIBATI	CFP	S1N	NC
FISHERIES DEVELOPMENT OFFICER	BEVERLY, STEPHEN	USA	CFP	PO6N	CORE ->NC
FISHERIES DEVELOPMENT OFFICER	SOKIMI, WILLIAM	FIJI	CFP	PO6N	NC
FISHERIES MONITORING SUPERVISOR	BROGAN, DEIRDRE	EIRE	OFP	PO6N	NC
COMMUNITY FISHERIES OFFICER	LAMBETH, LYN	AUSTRALIA	CFP	PO6N	NC
PROGRAMMER/RESEARCH OFFICER	MILLAR, COLIN	AUSTRALIA	OFP	PO6N	NC
BIOLOGICAL TECHNICIAN	LEROY, BRUNO	FRANCE	OFP	PO6N	NC
RESEARCH OFFICER/ANALYST	SCHNEITER, EMMANUEL	FRANCE	OFP	PO6N	NC
FISHERIES INFORMATION & TRAINING ASSOCIATE	UAN, JAMES	KIRIBATI	CFP	PO3N	NC
SUPPORT STAFF					
SECRETARY (DIRECTOR, MARINE RESOURCES)	LECOMTE, HELENE	FRANCE	EXEC	B4N	CORE
PROJECT ADMINISTRATOR (OFP)	LEGRAS, KAY	UK	OFP	B5N	NC
PROJECT ASSISTANT (MARITIME)	RABUKAWAQA, INISE	FIJI	RMP	B3F	NC
PROJECT ASSISTANT (INFORMATION.)	AVAZERI, ERINA	FRANCE	CFP	B3N	NC
PROJECT ASSISTANT (TRAINING)	BURY, CHRISTINE	FRANCE	CFP	B3N	NC
PROJECT ASSISTANT (COMMUNITY)	BUI, MARIE-THERESE	NEW CALEDONIA	CFP	B3N	NC
DOCUMENTALIST/ PROJECT ASSISTANT (OFP)	IXEKO, HELENE	NEW CALEDONIA	OFP	B3N	NC
DATA ENTRY TECHNICIAN(OFP)	SAVEA, SONIA	FRANCE	OFP	B2N	NC
DATA ENTRY TECHNICIAN(OFP)	TAFILAGI, LILIANE	NEW CALEDONIA	OFP	B2N	NC
DATA ENTRY TECHNICIAN(OFP)	NGUYEN, CHRISTINE	FRANCE	OFP	B2N	NC

*NC=Non-core

ANNEX 2

Organigramme showing lines of responsibility for the Marine Resources Division



ANNEX 3

OUTPUTS

2ND HEADS OF FISHERIES MEETING

During the course of the 2nd head of fisheries meeting (2HoF) in Nouméa, New Caledonia, 23-28th July 2001, the following statements were discussed, and agreed by Pacific Community island member representatives to be included in the record of discussion of the meeting, for the guidance of the secretariat of the Marine Resources Division and/or the benefit of other SPC or international processes:

1. Noting the capacity of several Pacific Community members in certain specialist areas, particularly aquaculture, the meeting reminded the regional and international community that, when carrying out research within the Pacific Islands, to use expertise, capacity or facilities already present within Pacific islands themselves wherever feasible.

2. The meeting noted the recommendations of the FAO Pacific Islands Regional Workshop on Fisheries Statistics, 16-18 July 2001, and agreed that reliable quantitative information about the status of coastal fisheries was of vital importance for sound national and regional policy planning, and in management processes that required governmental intervention.

3. The meeting further noted the report of the 4th Meeting of South West Pacific Ministers of Agriculture held in Vanuatu, 23-24th July 2001, and urged FAO to coordinate its efforts with that of the SPC Marine Resources Division and other organisations which support PICTs in their efforts to strengthen capacity on statistics on coastal and subsistence fisheries and aquaculture.

4. Incorporating and carrying forward the sense of recommendations 1, 2 and 6 from 1HoF the meeting highlighted the continuing gap in support at the regional level for post-harvest aspects of fisheries: aspects which are a priority for many SPC members. Heads of Fisheries welcomed the growing capacity of the Pacific Islands Forum Secretariat to address the needs of members in trade aspects of fisheries and, noting the valuable work already undertaken with regard to tuna fisheries, urged SPC to further address post-harvest aspects of small-scale fisheries and to continue collaboration with other agencies, including FFA and USP, in a concerted effort to provide a service to member countries that would assist in maximising the value of fishery exports.

5. The meeting urged the Director of Marine Resources to continue seeking the means to improve SPC's capacity to provide a full range of practical advice, from community consultation to legislative drafting, in promoting the better management of inshore and reef fisheries. The meeting recognised that management and conservation planning for fisheries would occur at an increasingly fine scale in future, and require increasing commitment from fisheries administrations, and that the Marine Resources Division should consider regional and national capacity building in fisheries management planning to be one of its priority themes in the development of its work programme.

6. Heads of Fisheries commended the collaborative work of the Live Reef Fish Trade Initiative and encouraged SPC to continue to develop its role as a clearing house for information useful to members, and collaborative action on international and regional standards for the conduct of the trade.

7. The financial problems likely to face the SPC/Nelson fisheries training course in 2002 were noted with concern by the meeting. Pacific Island fisheries administrations had already signalled the high priority they afforded this type of comprehensive practical specialist training for their fisheries staff – the only training of its kind available – by contributing local funds towards part of the cost of running the course, and the meeting again reiterated its perception of the value of this course in the induction of new generations of fisheries officers, including the real prospects for improving the number of women professionals in fisheries management. The meeting strongly commended the value of this course to SPC's partners and urged SPC to seek means for its continuation.

8. The meeting noted with great concern the further erosion of SPC core funding devoted to fisheries work. Representatives of Pacific Community fisheries administrations requested that the SPC Governing Council direct attention towards the basis of the mechanism of SPC core funding allocation. The meeting pointed out that external funding was generally pre-programmed and did not allow SPC work-programmes to respond flexibly to rapidly-arising sectoral issues and changing priorities.

9. The meeting strongly recommended that SPC prioritise financial resources to enable SPC sectoral meetings, like HoF, to be held biennially. Noting that the standard SPC staff contract was three years long, the meeting pointed out that under a triennial meeting cycle there was a strong likelihood that SPC's sectoral programmes would not be able to form an accurate view of the regional needs of their primary clients.

10. Pacific Community fisheries administrations welcomed the information and notification about the forthcoming World Summit on Sustainable Development. The meeting agreed that any multi-sectoral regional submissions should highlight:-

a) the high level of dependence of Pacific Islands on the living resources of the ocean, both for food security in the case of inshore resources, and for environmentally sustainable economic development in the case of offshore resources;
b) the strong tradition of stewardship of living marine resources already existing in the region;
c) the record of strong and effective cooperation and collaboration between Pacific Island governments in the governance of shared fishery resources;
d) the relative vulnerability of Pacific Island fishery-based livelihoods to externalities, including land-based impacts, geographic difficulties of external trade, and dependencies on external fishing interests;
e) the sheer scale of the ocean area being managed by Pacific Island nations – an area which includes the majority of the world’s coral reefs and what is now the world’s largest tuna fishery;

f) the increasing effect of modern social structures on subsistence lifestyles and the implications for traditional fishery management mechanisms;
g) the concrete example of progress since the Rio Earth Summit embodied in the finalisation of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.

11. The meeting noted that discussion on funding priorities for the region, arranged by the Global Environment Facility under the auspices of a Country Dialogue Workshop (CDW), would be convened in Samoa in September 2001. Noting that the Oceanic Component of the Pacific Islands International Waters Programme (IWP), which the meeting felt had already provided valuable support to regional initiatives to promote the sustainable management and conservation of the Western Central Pacific pelagic large marine ecosystem, was scheduled to finish in 2003, the meeting encouraged national and regional representatives to the CDW to assign high priority to building on the outcomes of the Oceanic Component of the IWP in future funding support to the region. The meeting also hoped that due consideration would be given to the representation of the fisheries sector, and that fisheries interests would be properly represented, at the CDW

12. Pacific Community Heads of Fisheries appreciated the opportunity to review the work in progress on the Pacific Islands Regional Ocean Policy that had been directed by the Pacific Islands Forum. In addition to the comments provided in plenary on the draft, participants decided to provide additional comments, as necessary, after taking the time for considered appraisal and consultation.

13. The meeting widely acknowledged the significance of the longline bycatch issue to PICTs. Heads of Fisheries recognised the need to be pro-active in the matter of dealing with bycatch and fundamental to this was the need to determine the extent and nature of the issue. At a regional level, there was agreement that additional data collection and expansion of the current observer programme was needed, particularly on the high seas.

14. The meeting welcomed the significant progress made by SPC towards the establishment of a regional aquaculture programme since 1HoF. The recommendations of the SPC/ACIAR aquaculture workshop were endorsed by the meeting, which asked that SPC now forge ahead in providing a regional pool of advice and expertise to enable a strategic approach to the problems of aquaculture in the Pacific Community area.

15. Pacific Community Heads of Fisheries thanked the representative of the Network of Aquaculture Centers in Asia (NACA) for his comprehensive presentation, and asked SPC to investigate the costs and benefits of membership of NACA and circulate a report for consideration.

16. Several participants noted that the lack of local capacity in pearl seeding techniques had significant impact on local economic opportunities. The meeting recommended that USP and SPC, in collaboration with the Cook Islands Government, investigate ways of addressing this training need for the benefit of the region.

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18. Heads of Fisheries noted the potential synergies between aquaculture and community-based management and requested SPC to bear these potential linkages in mind during the strategic planning of both the aquaculture and the community fisheries sectors.

19. The meeting strongly endorsed the value of community-based mechanisms in the management of their fishery resources and noted the high demand by SPC members for the services of the SPC Community Fisheries Section.

20. As a regional activity, the meeting requested the Community Fisheries Section to work with member countries and territories to develop ways in which local rules by village communities may be given legal recognition, under different regulatory systems, in order to facilitate monitoring, governance and enforcement by communities.

21. Heads of Fisheries drew attention to the number of different agencies that are working with communities, and the problems both of agencies promulgating potentially conflicting mechanisms and of the burden placed on some communities by the frequency of consultation and expectations of collaboration. The meeting recognised the progress made through the Council of Regional Organisations in the Pacific (CROP) towards better inter-agency communication, but asked that regional agencies liaise particularly closely with respect to community-oriented work, particularly in the communication of fieldwork plans with each other, and also recognised the role that official contacts and national focal points could play in communicating or co-ordinating potentially overlapping activities of different intergovernmental agencies in their countries.

22. The meeting agreed that it would be timely to hold a broadly based regional consultation or workshop on community-based management of Pacific Island coastal fisheries.

23. Pacific Community Heads of Fisheries welcomed observer representation by the East Timor fisheries administration for the first time in a Pacific Islands intergovernmental fisheries meeting, and looked forward to sharing experiences in future.

(Note: the issues highlighted here are in no particular order and do not constitute a full prioritisation of the work programme of the SPC Marine Resources Division but are presented separately in this way because they are issues which required particular consensus agreement in plenary, or the attention of authorities or partners outside the scope of the meeting. A context within which to judge the prioritisation of issues is provided by the Record of Discussion of the meeting, which also provides additional guidance to the SPC Marine Resources Division work-programme).

ANNEX 4

EXECUTIVE SUMRY

14TH STANDING COMMITTEE ON TUNA AND BILLFISH

The fourteenth meeting of the Standing Committee on Tuna and Billfish (SCTB14) was held from Thursday 9th August to Thursday 16th August in Noumea, New Caledonia, at the invitation of the Chairman, and hosted by the Secretariat of the Pacific Community. SCTB 14 was attended by participants from Australia, Federated States of Micronesia, Fiji, France, French Polynesia, Guam, Kiribati, Korea, New Caledonia, New Zealand, Papua New Guinea, the Peoples Republic of China, Samoa, Solomon Islands, Taiwan, United States of America, and Vanuatu. Representatives from various regional and international organisations also attended the meeting. These included the Food and Agriculture Organisation (FAO) of the United Nations, Inter–American Tropical Tuna Commission (IATTC), and the Forum Fisheries Agency (FFA).

The meeting agenda, working papers presented at the meeting and list of participants are provided in Appendices 1, 2 and 3, respectively. The meeting convened as eight working groups – the Statistics Working Group (SWG), the Fishing Technology Working Group (FTWG), the Methods Working Group (MWG), the Skipjack Research Group (SRG), the Albacore Research Group (ARG), the Yellowfin Research Group (YRG), the Bigeye Research Group (BRG), and the Billfish and Bycatch Research Group (BBRG).

The initial overview of Western and Central Pacific Ocean (WCPO) tuna fisheries noted that the estimated total catch for 2000 for the four main tuna species was 1,852,746 mt, the second highest annual catch on record after 1998 (1,893,648 mt). The 2000 WCPO catch of skipjack (1,165,099 mt) was slightly higher than in 1999, but below the 1998 record catch (1,305,841 mt) and as usual dominated the total catch (63%). The yellowfin catch (421,533 mt) was slightly less than in 1999. South Pacific albacore catches (41,835 mt) were slightly higher than in 1999, and the bigeye catch (114,907mt) was a record high, eclipsing the previous record in 1999 (108,989 mt). National fishery reports provide further details of these catches.

Reports on relevant activities of other organisations were received from Bureau of Rural Sciences (BRS–Australia), Commonwealth Scientific & Industrial Research Organisation (CSIRO–Australia), Inter-American Tropical Tuna Commission (IATTC), the United Nation's Food and Agriculture Organisation (FAO), and the Pelagic Fisheries Research Program (PFRP) of the University of Hawaii.

The directives to the SWG made during SCTB13 were reviewed. These concerned the compilation of annual catch estimates for small-scale fisheries; the compilation of catch estimates for the South China Sea; the availability of data in Indonesia and the Philippines; a review of Japanese logsheets; an OFP project to scan logsheets in member countries to improve the timeliness of data submissions; the availability of tuna and billfish data on sex ratios and length data by gender; the compilation of factors for converting processed weights to whole weights; the compilation of information on illegal, unreported and unregulated (IUU) fishing; the level of predation of longline-caught fish by sharks and whales; a review of vessel and gear attribute data on the FFA Regional Register; the classification of purse-seine effort by school association; the sampling of yellowfin and bigeye species composition for purse seine; the estimation of bigeye catches by purse seiners using regression trees; the compilation of data covering the American Samoan longline fleet and the Canadian troll fleet; the revision of catch and effort data for the Taiwanese distant-water longline fleet; targeting of albacore by the Taiwanese distant-water longline fleet; sampling of longline-caught albacore in Samoa; the estimation of catches of billfish under mandatory release; the estimation of tagged and released catches in recreational fisheries; the revision of billfish catch estimates; the compilation of annual catch estimates for species of special interest, such as sharks, marine reptiles, marine mammals and sea birds; the availability of data that can be used to estimate catches of non-target species; and the role of SCTB in national and regional observer programmes.

The five Research Groups considered regional fishery developments, advances in research, stock assessment and research co-ordination and planning for those species or species. Summary statements on these matters are provided for each research group. The SCTB14 was presented with applications of the MULTIFAN–CL length-based assessment model to all four target tuna species in the WCPO, and to the North Pacific blue shark (*Prionace glauca*), and Pacific blue marlin (*Makaira mazara)*.

Recognising the continuing concern of the SCTB about the status of yellowfin and bigeye tuna stocks in the WCPO, and recognising the increasing catchability of juveniles of these species in surface fisheries, particularly those using FADs, SCTB 14 recommended that there be no increase in fishing mortality in surface fisheries on these species in the WCPO until uncertainty in the current assessments has been resolved.

It also strongly reinforced the value of large scale tagging experiments to provide information on movement, natural mortality and exploitation rates. As this will reduce the uncertainty in existing assessments, SCTB recommended that funding be sought to undertake such work.

The objectives of the SCTB Statistics Working Group (SWG) are to co-ordinate the collection, compilation and dissemination of tuna fisheries data. Data compiled by the OFP on behalf of the SCTB include annual catch estimates, catch and effort data, length data, and other types of data. The SWG Co-ordinator reported that progress in data compilation had been achieved, although no annual catch estimates for 2000 had been provided by Japan, and the most recent estimates covering the domestic fisheries of the Philippines are for 1997. It was reported that the level of coverage of catches in the WCPO in recent years by observer data held by the OFP is only 0.18 percent for longliners and 3.9 percent for purse seiners, so coverage must be increased to obtain reliable catch estimates for non-target species, including those of special interest, such as sharks and rays, marine reptiles, marine mammals and sea birds.

This year, two new Working Groups met in preparatory meetings, just prior to SCTB14, to review and discuss key aspects of fishing technology and analytical methods. The terms of reference and summary of presentations for each working group are given in separate sections.

The objective of the first Fishing Technology Working Group (FTWG) was to discuss the status and direction of this new working group. Ten working group papers were presented to the twenty participants covering the development of the FTWG, comparable programs, technical data holdings and accessibility, country reports, recent entrants and developments in regional fisheries, and the status of regional purse seine management measures and developing bigeye tuna management plan for the WCPO. During the preparatory meeting, the terms of reference were drafted and later approved by the plenary. These TORs and a brief report of the WG are attached to meeting report.

The objectives of the first Methods Working Group (MWG) were to review the terms of reference (drafted at SCTB13), and discuss recent developments concerning the testing of stock-assessment methods. Two papers were presented (MWG-1, YFT-4). The first of these outlined the recent changes made to MULTIFAN-CL to improve its capabilities. The second paper described the features of a new operational model of the WCPO yellowfin fishery that is used specifically to assess the accuracy and precision of MULTIFAN-CL estimates. The group recognised the need to conduct further testing of MULTIFAN-CL under various scenarios, and to compare the reliability of the estimates obtained with alternative models using simulated datasets. Recognising the value of bringing the MULITFAN-CL model into the public domain, in view of its increasing application to stock assessment, the group recommended that funding be sought to make this possible. A report of the WG is attached to the meeting report.

The Second Ocean Atlas Users Workshop was held on August 14, 2001. This workshop was chaired by Dave Foley (Univ. of Hawaii/JIMAR), and open to all SCTB participants. The aim of the workshop was to refine project goals and enhance the utilisation of the end products of this atlas, currently being developed by the NMFS Fisheries Research Laboratory in Honolulu, and the University of Hawaii Pelagic Fisheries Research Laboratory. A report of the workshop is appended to the meeting report.
The meeting was also provided with an update of the Preparatory Conference (PrepCon) process, in particular the expected requests for the provision of interim scientific advice and other information by SCTB. Procedures for providing such information were agreed, and a continuing role for a small working group in co-ordinating the provision of such advice was noted. Some concern was expressed over the reduced role of the SCTB in the provision of scientific advice in this process.

The SCTB Chairman and Working Group and Research Group Co-ordinators for SCTB14 were as follows:

SCTB Chairman : ..... Mr Bernard Thoulag
Albacore RG : ..... Dr Talbot Murray
Skipjack RG : ..... Dr Gary Sakagawa
Yellowfin RG : ..... Dr Robert Campbell
Bigeye RG : ..... Dr Chi-Lu Sun
Billfish and Bycatch RG : ..... Mr Paul Dalzell
Statistics WG : ..... Mr Tim Lawson
Methods WG : ..... Dr John Sibert
Fishing Technology WG : ..... Mr David Itano

ALBACORE RESEARCH GROUP (ARG) – SUMMARY STATEMENT

Albacore caught in the South Pacific constitute a single stock. Longline, primarily catching adults, accounts for most albacore catches (88%) in the South Pacific with trolling catching the rest (12%). The total albacore catch, estimated at 43,776 mt in 2000, was slightly more than in 1999 (4% increase). In 2000 longline catches were 38,462 mt and troll catches 5,314 mt. Longline catches of several South Pacific island States and territories, particularly Fiji, French Polynesia and Samoa, continue to increase and together contribute substantially to the total albacore catch. The combined albacore longline catch in 2000 by South Pacific Islands (12,484 mt) accounts for 33% of all albacore longline catches in the South Pacific. A substantial increase in catch to 3020 mt (49% increase) was also reported for Canadian and USA troll vessels fishing the STCZ in the 1999/00 season relative to 1998/99. Troll caught albacore in the New Zealand EEZ are also estimated to have increased by 45% over the same period to 2,832 mt.

There has been no dedicated field research on albacore since the OFP research programme in 1991/92. Biological data on albacore is regularly collected, however, in observer and port sampling programmes in the region, although some of these data have not been compiled. Length frequency data from port sampling is a critical input to the length-based age-structured stock assessment model (MULTIFAN-CL). This model has been extended to cover the period 1962-2000 and can incorporate tag recovery information. Previous results from this model were believed to have been strongly influenced by a small number of tags recovered (135 recoveries). Model runs conducted with and without tagging data give similar results for recruitment but not for biomass trends or estimates of average fishing mortality. Results of the current MULTIFAN-CL model suggest a marked decline in recruitment and biomass in the mid-late 1970s and 1980s by about 50% that is followed by an increase in the 1990s. Results also suggest that biomass is largely distributed south of 10º S and that biomass may be driven by recruitment. An alternative stock production model using Taiwanese longline catch and effort data, raised to South Pacific wide coverage, gave broadly similar results with respect to trends in biomass, but attributed the change to fluctuations in the fishery. An investigation of the assumptions made in both models would assist in resolving the apparent discrepancies.

A number of areas requiring further work prior to the next SCTB meeting were identified. These areas include: incorporate data from additional fleets; review the adequacy of observer coverage; analyse longline data to determine if retention practices have changed in some fleets; develop extensions to the MULTIFAN-CL model; develop procedures for standardising CPUE; improve estimates of effective effort; evaluate the need for further tagging; evaluate the use of reference points in assessing stock status using MULTIFAN-CL and other models; and work to agree on a standard model structure and diagnostics for evaluating models.

No information was presented to indicate a change in interpretation of stock status of South Pacific albacore. Although model results are considered uncertain, exploitation rates appear to be moderate and current catches are likely to be sustainable.

SKIPJACK RESEARCH GROUP (SRG) – SUMMARY STATEMENT

Skipjack tuna are the most important tuna resource in the WCPO, in terms of contribution by weight to the total catch. In the past decade, skipjack catches have been approximately 1 million mt per year, contributing about 65 % of the total tuna catch in the area. The 2000 catch was about 1.2 million mt, which was only slightly less than the record catch in 1998. Purse seiners provided the majority of this catch (70 %) with 24% from pole-and-line fleets.

The CPUEs for purse seine and pole and line vessels have been highly variable. Nominal CPUEs for Japanese and USA purse seiners have shown nearly identical increasing trends for FAD sets and a decreasing trend for unassociated sets. Nominal CPUEs for Taiwan purse seiners, in contrast, have shown increasing trends for both unassociated and FAD sets. Korean purse seiners continue to set mostly on unassociated schools. The interpretation of CPUE trends was not possible because their standardisation was incomplete and on going.

Skipjack are concentrated in the tropical waters, but seasonally expand to subtropical waters north and south. Their fast growth, early maturity, high fecundity, spawning year around, relatively short life span, highly variable recruitment and few age classes on which the fishery is dependent makes the species unique among the main tuna species. Ongoing fisheries oceanographic studies have been continuing to provide a better understanding of environmental influences on the availability and productivity of skipjack in WCPO. They suggest a positive impact of El Nino on skipjack recruitment, particularly when followed shortly by La Nina, as occurred in 1998.

Tag based assessments from the early 1990's suggested low to moderate exploitation at catch levels slightly lower than those in recent years. Recent results from MULTIFAN-CL , including tagging and other information from the northern part of the area, were consistent with the tag based assessments, but additionally, indicated that fishing mortality have been increasing since the early 1970s. Nevertheless, estimates of fishing mortality at age have been smaller than those of natural mortality. The impact of fishing on the total biomass of skipjack is estimated to be low, with estimates of recent recruitment and stock biomass being at historically high levels.

Future advances in the basic biology, data collection and stock assessment of skipjack should be encouraged to substantiate the knowledge required for the fisheries management of this economically and ecologically important species.

BIGEYE RESEARCH GROUP (BRG) – SUMMARY STATEMENT

Bigeye tuna account for a relatively small proportion of the total tuna catch in the Pacific Ocean, but their economic value probably exceeds US$ 1 billion annually. Bigeye may comprise a single Pacific-wide stock and this is reflected in data collection and assessment approaches. The year 2000 total Pacific catch of bigeye was an estimated 207,816 mt, an historical high, with 114,907 mt and 92,909 mt taken in the WCPO and EPO respectively. Both regions recorded increased catches over 1999. Purse seine catches of mostly larger bigeye in the EPO increased to record levels (69,745 mt); no year 2000 data were available on the EPO longline catch, which has however been declining steadily in recent years. The WCPO purse seine catch of bigeye, associated with the increasing use of FADs, remained high (28,745 mt) and combined with the largest longline catch yet recorded (68,091 mt), resulted in the highest bigeye catch on record for the WCPO. The Pacific total bigeye catch continues an upward trend since 1998.

Limited ecological and biological research has lead to improved understanding of some parameters e.g. age and growth, dynamics of aggregations etc. No new information was provided on environmental effects on catchability and stock productivity, although results of archival tagging work in progress are expected to provide useful information on the former and could be utilized in longline effort standardization.

Several nominal and standardized CPUE time series were examined by the group; the purse seine CPUE trends for the main fleets generally reflect the extent to which associated sets, especially drifting FADs (which have produced higher juvenile bigeye catches in recent years), are fished. Longline CPUEs since 1980 for the Japanese fleet, both nominal and standardized according to several habitat models, are relatively flat in the EPO but more variable in the WCPO. Over longer time periods i.e. since the beginning of the fishery, a much greater decline in these CPUEs is evident.

An elaboration of the collaborative Pacific-wide application of the integrated statistical MULTIFAN-CL model was presented, incorporating some new features and considerable additional data. Results should be regarded as preliminary, but indicate that recruitment shows considerable temporal variation, and been has declining, particularly in recent years in both the EPO and WCPO. Biomass also shows a declining trend over time and current levels (total and adult biomass) may be at around 50% of initial levels. The overall impact of fisheries on the population was considered moderate. Given however the importance of some key assumptions to model outputs e.g. standardized longline effort, it was recognized that further investigation regarding the appropriateness of these assumptions is required.

A preliminary application of the A-SCALA method to WCPO bigeye was also presented. The results were indicative of a larger impact of the fisheries on the stock than suggested by the MULTIFAN-CL analysis. The assessment indicated that the average fishing mortality has increased since 1980 due to an expansion of the purse seine fisheries. It further suggested that the decline in relative abundance was due to fishing rather than to a decline in recruitment. Analyses conducted during the meeting suggested that there is no fundamental difference in the MULTIFAN-CL and A-SCALA approaches. The differences in the results appear to be due largely to different assumptions and data used in the analyses. In particular, (i) the tagging data used in the MULTIFAN-CL analysis implies lower estimates of fishing mortality than those obtained in the A-SCALA analysis, which does not use the tagging data; and (ii) the levels of natural mortality assumed in the A-SCALA analysis are lower than those estimated in the MULTIFAN-CL analysis, which causes further divergence in the two sets of results. Further research is required to identify the most appropriate set of assumptions to use in future assessments. In this respect, additional tagging data accompanied by high tag-reporting rates for all fisheries would provide valuable information on bigeye tuna stock dynamics and exploitation.

Given the continuing increase in Pacific bigeye catches in both surface and longline fisheries, indications of recent low recruitment and declining biomass, and possible significant fishery impacts on the stock, the Group reiterated its concern that the condition of the stock be closely monitored and that efforts to develop reliable assessments at Pacific-wide and regional level be regarded as a priority task. It was noted that concerns about bigeye stocks driven by similar factors are common to tuna fisheries in all areas and have already resulted in management interventions in most cases.

Recognising the continuing concern of the SCTB about the status of bigeye tuna stocks in the WCPO, and recognising the increasing catchability of juveniles of this species in surface fisheries, particularly those using FADs, SCTB 14 recommended that there be no increase in fishing mortality in surface fisheries on bigeye in the WCPO until uncertainties in the current assessments have been resolved.

The group recommended that the following research leading to improved stock assessment be continued in the following areas: (i) acquisition of more detailed catch / effort and size composition data from the fisheries of Indonesia and the Philippines (ii) improved/refined estimates of bigeye catches from WCPO purse seine fisheries (iii) improvement to effort standardization utilizing data from archival tagging and other studies providing information on habitat preferences (iv) investigations of key assumptions to stock assessment models and continued elaboration of the MULTIFAN-CL and other models (v) characterization of effective effort on juvenile bigeye taken mostly in association with FADs and (vi) large scale tagging to provide information on key parameters and to assist in discriminating between alternative hypotheses and model assumptions.

YELLOWFIN RESEARCH GROUP (YRG) – SUMMARY STATEMENT

Catches of yellowfin tuna represent the second largest component (23%) of the total catch of the four main target species in the WCPO. Yellowfin tuna are also believed to constitute a single stock in the WCPO.

The catch of yellowfin tuna in the WCPO first exceeded 200,000 mt in 1980. With the expansion of the purse seine fishery during the 1980s catches almost doubled to reach around 380,000 mt by 1990. Since this time yellowfin catches in the WCPO have varied between 320,000 and 480,000 mt with the catches during the last four years being at historical high levels, exceeding 420,000 mt during each year. Purse seine vessels harvest the majority of the yellowfin catch (47% by weight during 2000), while longline and pole-and-line fisheries caught 15% and 3% respectively and various other gears accounted for 35 % (mostly eastern Indonesia and the Philippines).

Nominal catch rates of yellowfin for purse seine fleets are characterised by strong inter-annual variability but indicate no clear trend in the available time series of data. While it is suspected that variability in yellowfin catch rates may be associated with variation in environmental conditions associated with the El Nino Southern Oscillation cycle, catch rates for some fleets since the mid-1990s may have may benefited from efficiencies associated with the increased use of drifting FADs.

Nominal catch rates of yellowfin for the Japanese longline fleet show a steady decline during the 1980s while catch rates for the Korean longline fleet displayed high inter-annual variability but no overall trend. However, nominal catch rates for both fleets reached historical lows in 1999 but recovered somewhat during 2000. After accounting for the increased targeting on bigeye tunas since the mid-1970s, standardised catch rates for the major longline fleets in most regions of the WCPO display large inter-annual variability but no overall long-term trend.

Biological research undertaken in recent years has lead to an improved understanding of age and growth and reproductive dynamics. However, further work is required to understand habitat preferences, trophic dynamics and the influences of recent increases in fishing efficiencies (e.g. the increased use of FADs) to help improve the standardisation of catch rates.

Tag-based assessments from the early 1990s found exploitation levels of yellowfin tuna to be low to moderate at catch levels at that time about 10-20 percent below those in recent years. However, more recent assessments of the yellowfin stock using the MULTIFAN-CL model indicate that fishing mortality may have increased significantly since this time, largely as a result of catchability increases in the purse seine fisheries. While the overall estimates of fishing mortality-at-age remain considerably smaller than the corresponding estimates of natural mortality-at-age, the analyses indicate that recent recruitment may have declined significantly. This in turn has produced a significant decline of around 35% in overall stock biomass since 1997. Biomass levels in 2000 are estimated to be the lowest since the mid-1970s. The decline in biomass is most evident in the main catch regions of the western equatorial Pacific where current biomass is estimated to have declined by over 50 percent since the mid-1990s. For the WCPO in total, the current biomass is estimated to be around 30% less than that which would have occurred in the absence of fishing.

Attempts to estimate an MSY for yellowfin are currently hampered by uncertainty in the stock-recruit relationship and the age-specific exploitation patterns as well as other uncertainties in the stock assessment models. Depending on the assumptions used, estimates of MSY vary between 40% above to 40% below current catch levels.

The reasons for the large declines estimated to have occurred in recruitment in recent years remain unknown, though the possibility that the estimated declines in both recruitment and biomass in recent years may be associated with a shift to a lower productivity regime was discussed. Such a shift in productivity may have occurred in the past, as the significant increases in average annual recruitment and biomass estimated to occur after the mid-1970s might have been associated with a regime shift in oceanographic conditions in the Pacific around this time. Although there has been a dominance of La Nina conditions in recent years, it remains unknown at this time whether this is associated with a shift to new regime and whether or not the estimated recent declines in recruitment and biomass may be associated. However, if a shift to a lower productivity regime has occurred, it is possible that present catches may not be able to be maintained.

Due to the short time-series on which they are based, estimates of stock parameters and stock conditions in the most recent years are the most poorly determined. As a result, additional research will be needed to determine the significance of the present results, especially in terms of future stock productivity. Until the uncertainties associated with present stock assessments are resolved, the Group recommends a precautionary approach, and that there be no further increases in fishing mortality (particularly on juvenile yellowfin) in the WCPO, and that the condition of the stock be closely monitored over the next few years.

The Group also recommends that current research on yellowfin stock assessments be continued as a matter of priority. This research will include (i) the acquisition of data required as input into the stock assessment models (particularly from the Philippines and Indonesia); (ii) a greater understanding of the trophic and ecosystem dynamics of yellowfin (particularly in relation to aggregating devices); (iii) a greater understanding of the habitat preferences of yellowfin; (iv) refinement of the methods used to standardise CPUE; and (v) further development of stock assessment models, particularly MULTIFAN-CL. In addition to this work, the Group also saw the need for additional large-scale tagging to provide information on yellowfin movement, natural mortality and exploitation rates to support future stock assessment analyses.

BILLFISH AND BYCATCH RESEARCH GROUP (BBRG) – SUMMARY STATEMENT

The Billfish and Bycatch Research Group (BBRG) has a more varied perspective than the single species research groups. Issues include non-targeted catches in pelagic fisheries, protected species interactions and the catch estimation and stock assessment of billfish. The potential for bycatch issues to have major impacts on pelagic fisheries was noted, citing the closure of the swordfish-targeting sector of the Hawaii longline fishery in 2000/2001. The BBRG reviewed progress on statistical issues since SCTB 13 and during the 14th SCTB dealt with three non-target catches in WCPO pelagic fisheries namely sharks, turtle and "other species".

Shark bycatch in WCPO pelagic fisheries

The OFP provided an overview of shark catches in WCPO longline fisheries based on observer data collected from the Marshall Islands, PNG and New Caledonia. There was some targeting of sharks for retention of trunks, but the majority of retained sharks were finned. Species composition of longline shark catches depends on latitude. As in the Hawaii longline fishery (HLL) shark catches are greatest in shallow longline sets. Member country participants commented on planned or ongoing data collection and research programs for shark bycatch in domestic and distant water pelagic fisheries.

A collaborative stock assessment of blue shark in the North Pacific, based on a MULTIFAN-CL analysis of US, Taiwan, Korean and Japanese data was presented to the BBRG. The stock assessment suggested that North Pacific blue shark landings are moderate compared to the production potential of the population. There was discussion of the data requirements for the MULTIFAN-CL and the properties of the model. Other simpler approaches such as surplus production models were suggested, but the more complex MULTIFAN-CL model permitted incorporation of operational changes in the fisheries catching blue shark.

Turtle bycatch in WCPO pelagic fisheries

An overview of the status of marine turtle populations in the Pacific noted that populations of leatherbacks, eastern Pacific black and loggerhead turtle populations were in a serious state of decline. Olive Ridley and Hawaiian green turtles were in much better shape and had growing populations. The decline in turtle populations was due to a combination of factors, including harvest of adults and eggs on nesting beaches, loss of nesting habitat, fishery bycatch and marine debris. Some recent population modeling by the NMFS Honolulu Laboratory had noted the importance of protecting nesting females and eggs for leatherback turtle recovery.

The results of a qualitative review of OFP data conducted on behalf of SPREP were presented. There was little information on the nature of fishery interactions with longliners, e.g. tangling or hooking. In general, interactions were more frequent in tropical areas and adjacent to nesting sites. Depth was another major factor in interactions, with shallow set longlines set at night catching an order of magnitude more turtles than deep sets made in the day. Purse seine turtle catches were an order of magnitude lower than those of longliners. Purse seine crews made every effort to release turtles before encountering the power-block. Olive Ridley and green turtles were the most frequently encountered turtles. The review listed recommendations on a variety of improvements including fishery observer coverage, species identification, collection of turtle biometrics, interaction descriptions, crew education and awareness.

Member country participants commented on planned or ongoing data collection and research programs for turtle bycatch in domestic and distant water pelagic fisheries

The BBRG was presented with an account of the recent litigation involving the US federal government and environmental groups through which swordfish fishing by the Hawaii-based longline fishery was banned, north of the equator, and tuna longlining constrained in April and May each year. The BBRG also heard how the NMFS Honolulu Laboratory was coordinating a wide variety of research activities to rehabilitate swordfish longlining and to generally reduce turtle longline interactions. This included gear research, potential new longline methods to catch swordfish during the day and behavioral and physiological research on turtles and target species.

The expansion of longline fishing off the Australian East Coast had likely increased fisher interactions with turtles. The BBRG heard how Australian fishery managers are seeking solutions to the problem and actively involving the fishing industry in finding these solutions. Examples were given of similar work in the Australian northern prawn trawl fishery that successfully used industry volunteers to tag and collect information on captured turtles.

Other species bycatch in WCPO pelagic fisheries

The BBRG discussed a preliminary MULTIFAN-CL stock assessment on Pacific blue marlin. The results of the stock assessment were greatly influenced by whether selectivity in the various fisheries data was constrained or not. Unconstrained selectivity produced an improbably large stock size. Yield estimates with constrained selectivity would suggest that the stock was fully exploited, which is consistent with previous assessment results presented in other fora. Discussion focused on the effects of data quality and assumptions used in the model

A new OFP project generated through Global Environmental Fund (GEF) funding was aimed at collecting data required for ecosystem based fishery management. The project used fishery observers to collect target catch, bycatch, stomach contents and muscle samples from longline, purse seine and pole and line fisheries in the WCPO. These data will be used to provide inputs for ecosystem models such as ECOPATH, ECOSIM and SEPODYM.

A review of the US fisheries catching blue and striped marlins in the WCPO was presented to the BBRG. The review noted that there were several decades of data covering longline and small scale pelagic fisheries over wide area of the WCPO. The data collected also included weight frequencies, which together with catch could be included in Pacific-wide MULTIFAN-CL analyses of blue and striped marlins.

Recommendations

The BBRG recommends that a strong focus should continue to be maintained on regional billfish catches, both in commercial pelagic fisheries and from recreational fisheries. The reduction in domestic swordfish landings in the USA may represent export opportunities for Pacific Island countries developing their longline industries. However, the BBRG also notes potential competition from expanding longline fishing in East and Southeast Asia, recognizing the need to obtain more in formation on swordfish production from these fisheries. The BBRG recommends that efforts be made to improve the overall level and quality of observer coverage in WCPO pelagic fisheries in order to obtain more reliable statistics on catches. Member countries might begin by initially improving data collection on pelagic sharks caught in domestic and distant pelagic fisheries, using the FAO IPOA framework as a guideline.

The BBRG also recommends that risk analysis be conducted on non-target species to identify those species which may be the most vulnerable, and guide future BBRG priorities.

The BBRG recommends that member countries should also strengthen data collection on turtle interactions in pelagic fisheries in order to refine estimates of the interaction problem, due to concerns regarding the population status of turtles. The BBRG recommends that member countries should also liaise with the appropriate government and regional agencies to compile an inventory on turtle nesting sites, domestic harvests of turtles, habitat destruction and other impacts (e.g. feral pigs).

The BBRG recommends that a watching brief be maintained on other bycatch issues as they arise, e.g. FAO IPOA on seabird-fishery interactions, or a future IPOA on turtle-fishery interactions. The BBRG notes that powerful US environmental legislation may be used to influence seafood exporters to the US to conform with various bycatch mitigation measures.

ANNEX 5

SIXTH MEETING OF THE ASSOCIATION OF PACIFIC ISLANDS MARITIME TRAINING INSTITUTIONS AND MARITIME AUTHORITIES
Nadi, Fiji Islands, 26-27 March 2001

SUMMARY OF PROCEEDINGS

The Sixth Meeting of the Association of Pacific Islands Maritime Training Institutions and Maritime Authorities (APIMTIMA) was held in Nadi from 26 to 27 March 2001. The following Pacific Island countries and territories (PICTs) were represented: Cook Islands, Federated States of Micronesia (FSM), Fiji Islands, Kiribati, Marshall Islands, New Caledonia, Niue, Palau, Papua New Guinea (PNG), Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and Wallis & Futuna. Representatives of the Fisheries Training Section of the Secretariat of the Pacific Community HQ in Noumea also attended. Representatives from the New Zealand Maritime Safety Authority, the New Zealand School of Fisheries, and the New Zealand Maritime School attended as observers.

AGENDA ITEM 1: WELCOME BY OUTGOING CHAIRMAN

The outgoing Chairman, Mr Fatu Lafoai from Samoa, welcomed the delegates and observers.

AGENDA ITEM 2: ELECTION OF CHAIRPERSON, DEPUTY CHAIRPERSON, SECRETARY, TREASURER AND DRAFTING COMMITTEE AND APPROVAL OF AGENDA

Mr David Harrod of Papua New Guinea was elected as Chairman and Mr Ned Howard of the Cook Islands was elected as Deputy Chairman. Captain Larry Muller of the Marshall Islands was elected as Secretary and Mr Muni Gounder of the Fiji Islands was elected as Treasurer. The new Chairman welcomed the new office bearers and thanked the former office bearers for their efforts over the past year. A drafting committee (comprising representatives from Vanuatu, Tuvalu, Kiribati) was established to record a summary of proceedings.

The Agenda and Working Procedures were adopted.

AGENDA ITEM 3: WELCOME TO NEW MEMBERS

There were no new members.

AGENDA ITEM 4: INCOMING AND OUTGOING CORRESPONDENCE

No incoming or outgoing correspondence was tabled.

AGENDA ITEM 5: TREASURER'S REPORT

The Treasurer presented his report and the status of country payments was examined.

There were some discussions on the advisability of continuing to present the accounts and fees in Fiji dollars with some suggestions that this should be changed to US dollars.

The meeting agreed that the Secretariat of the Pacific Community (SPC), in conjunction with the treasurer, would look at the long-term investment of funds and report on this at the next meeting.

After some discussion the report was adopted (Proposed by Cook Islands and seconded by Tonga) and a copy is attached as Annex 2.

AGENDA ITEM 6: ACTIONS TAKEN ON THE RESOLUTIONS PASSED AT THE FIFTH MEETING

The Regional Maritime Training Adviser (RMTA) explained the actions taken to address the nine resolutions passed at the last 5th meeting of APIMTIMA.

With reference to Resolution 9, it was suggested that the cost of joining the Tokyo Memorandum of Understanding on Port State Control is too expensive for small Pacific Island countries and it might be possible for them to join on reduced subscriptions. It was further suggested that Papua New Guinea and Fiji Islands, who are members of the MOU, might be able to share data with other countries***. It was suggested that a sliding scale for fees may be in operation and the Regional Maritime Programme (RMP) of SPC was asked to approach the Tokyo MOU to seek clarification on fees.***

AGENDA ITEM 7: REPORT OF THE REGIONAL MARITIME TRAINING ADVISER.

The RMTA then presented a paper on the activities of the RMP over the last year and explained the current issues. This included:

- The frequency of APIMTIMA meetings and the escalating cost of attendance?
  The meeting agreed that the APIMTIMA meeting will be held annually and the RMP should attempt to secure funding.

- The attendance of a Pacific Island country representative at the AMETIAP Conference.
  The meeting agreed that the RMP attend this Conference and report back to the next APIMTIMA. *(Should no funding be available for the RMP to attend then whatever other Pacific Island country, which is attending, should report back in their place.)*

- Port State Control inspectors secondment
  The meeting agreed this should continue.

- Three-year project plan for NZODA.

- Accident investigation and prosecution workshop.

- Tutor training programme.
  The meeting agreed this training should continue with an emphasis on it being done in country.

- Trial audits.

- DFID Pacific Seafarer's training project.
  Tevita Robanakadavu, a Marine Training Consultant with SPC, reported on this training project. In discussion it was noted an upgrade certificate would only be valid if re-certified by the original issuing authority.

AGENDA ITEM 8: PRESENTATION OF COUNTRY PAPERS.

Each country reported on the current situation within the country with particular reference to:

a. Present status of legislation and regulation.
b. Neptune data base and data on seafarers
c. Problems achieving White List status.
d. Maritime Schools, ability to offer STCW 95 training courses.
e. GMDSS and SAR status.
f. ISM implementation status.

Issues raised in the country papers included: Recognition of other country's certificates.

Copies of country papers are attached as Annex 3.

AGENDA ITEM 9: GAINING AND MAINTAINING WHITE LIST STATUS.

- The RMTA presented Working Paper 1 outlining the on-going responsibilities of training providers and maritime authorities after White List status has been obtained.

- The Regional Maritime Legal Adviser (RMLA) presented an explanation of the legal implications of the 1995 Amendments of STCW, including the progress of Pacific Island countries towards White List status, also the problems and solutions relevant to maintaining White List status and Port State Control.

- Mr David Harrod, Principal Papua New Guinea Maritime College, presented a paper outlining the costs associated with implementing and maintaining White List status and proposed a four-stage system to simplify systems and reduce costs within the region.

- Captain Tony Date, of the New Zealand Maritime Safety Authority, addressed a paper on New Zealand's experience and progress with gaining IMO White List status. Captain Date answered questions on his address.

- Captain Tim Wilson, Director, New Zealand Maritime School, gave a briefing on the recent APEC symposium in Sydney.

The Chairman summarised the previous papers indicating that one significant aspect was the lack of Pacific Islands input to the various international meetings and convention.

The Tongan delegate requested for SPC to prepare a paper on the contents of the APEC meeting and RMLA indicated this information would be circulated.

- Ken Barnett, CEO, Vanuatu Maritime College presented a paper on "Assessment of Competency".

A debate on the various aspects of this paper took place.

AGENDA ITEM 10: DISCUSSION ON REGIONAL ISSUES

The meeting divided into two groups to discuss those aspects of Agenda Item 9 "Gaining and Maintaining White list Status" that was of most concern to their country. This was followed by general debate and the following resolutions were accepted:

1. **That** the Government of States whose Maritime Administrations are members of APIMTIMA and that have been included on the IMO *White List* prior to 1 February 2002, CONSIDER RECOGNIZING certificates issued by APIMTIMA States that have not been included, until such time as these States have attained *White List* status. Providing that the State issuing the certificate has wholly and completely complied with the provisions of STCW-95 to the extent that those provisions are applicable.

2. **That** the Regional Maritime Programme of SPC establish a mechanism for the reciprocal recognition of certificates issued by States within the Region that are Parties to STCW-95 and have been included on the IMO White List, in accordance with MSC Circ 950 *Guidance on Arrangements Between Parties to Allow for Recognition of Certificates under STCW Regulation I/10.*

3. **That**, recognising the success of the DFID Seafarer's Training Project, SPC co-ordinate Maritime Training within the Region, with particular regard to facilitating in-country or intra-regional (where this is not available within the home country) training, by providing resources or sourcing funds to achieve this.

4. APIMTIMA, through SPC, should encourage its members to:

- seek to become members of IMO and other organizations;
- seek ways to raise the profile of these organisations in the community and;
- encourage members to actively participate in their affairs by;
    (a) forwarding appropriate materials to members;
    (b) assisting members to develop a national position on issues;
    (c) assisting PICTs develop a regional position on important issues;
    (d) co-ordinating appropriate representation at each international or regional meeting.

5. The Regional Maritime Programme:

- continue to assist PICTs that are not yet on the *White List* to *achieve White List* status;
- co-ordinate efforts to assist PICTs to develop a regional independent audit system (regional audit organisation) and;
- facilitate the updating and use of the SPC database of regional training providers and courses.

6. APIMTIMA members attending meetings of the International Maritime Organization (IMO), Asia-Pacific Economic Co-operation (APEC) and Association of Maritime Education and Training Institutions of the Asia Pacific (AMETIAP) should provide a written report to the following APIMTIMA meeting.

6. The Regional Maritime Programme should co-ordinate efforts to encourage APIMTIMA members:

- to share resources;
- develop regional plans to best utilise regional resources and;
- develop means of mutual recognition of training.

8. The Regional Maritime Programme should include competency-based training and educational assessment in future tutor training programs and to develop regional assessment guidelines.

AGENDA ITEM 11 : OTHER BUSINESS

Regional Training Vessel

A discussion paper “Japan Transport Co-operation Agency (JTCA) Project, Regional Training Vessel” was tabled and the Tongan delegate gave a brief background on the concept of a vessel being made available by the Japanese Government through the JTCA to train Pacific Island seafarers to STCW standards, possibly up to Class 2.

Talks with the private sector in Samoa, Fiji Islands and Tonga showed they did not favour the ideas of training onboard their own vessels. The owners had concern over trainees leaving after being trained, taking the place of fee-paying passengers, and the overall costs of such training. The owners also had an impression that getting training in New Zealand and Australia is difficult due to a variety of reasons.

In view of this and the on-going need for training, Tonga suggested that the meeting support a bilateral program between Fiji Islands and Japan on the operation of this vessel. It was suggested that other PICs would contribute financially as they have use of the vessel and SPC would co-ordinate the use of the vessel for other countries.

General discussion followed, with the meeting splitting into two groups to discuss the pros and cons of such an arrangement. These pros and cons is attached as Annex 4.

The meeting agreed that before giving an opinion, either for or against the concept, that it would wait until Fiji Islands has negotiated a contract with Japan and could better advise APIMTIMA of the implications for the region as a whole.

Tonga again raised the prospect of this meeting giving support to this project and through vote it was not brought to the floor. Their objection is noted.

AGENDA ITEM 12 : DATE OF NEXT MEETING

The next Association meeting will be held in Fiji Islands in March 2002, funds permitting, the precise date and venue to be announced later in the year. The Chairman adjourned the meeting, thanking all participants for their valuable inputs.
