

FAME – 2011 WORKPLANS OBJECTIVES

DIVISIONAL OBJECTIVES AND OUTPUTS

Results	
Objective 1: To develop and sustain effective relationships between the division and its stakeholders	
<p>1.1 Programme plans and activities that respond to the needs and priorities of members</p>	<ul style="list-style-type: none"> • Full Heads of Fisheries meeting is held in Noumea in March, with discussion of work programmes, EU project steering committees, and special session on climate change. • 2011 work programmes completed by March, with >80% implementation of activities during the year • Effective participation by FAME in 4 JCS missions; JCS reports used as basis for activity planning in 2011. • Regular visits to member Fisheries Departments for consultations; meet with all heads of fisheries on fringes of regional meetings; regular email communications. • Support development of Institutional Strengthening projects in at least 2 countries (in conjunction with FFA and AusAID). • Future of Fisheries video translated in 10 languages and distributed. • Contribute to development of Oceanscape initiative. • FAME annual report completed by March. • Other Divisional reporting requirements – to CRGA, donors and others – are met.
<p>1.2 Effective working relationships maintained with other regional agencies and development partners</p>	<ul style="list-style-type: none"> • FFA/SPC technical meeting and colloquium successfully completed, with follow-up actions undertaken. • Joint activities with SPREP developed following discussions. • MSWG meets twice during the year and develops submissions to CROP Heads and/or Forum. • New AusAID food security project approved by end of year. • NZAid Observer project and subsidiary agreement with FFA both signed before end of April. • Division participation in workshops to develop work plan for GIZ climate change programme. • Effective contribution by FAME to efforts to secure NZ programme funding in 2011. • Case developed for more programmatic approach to EU funding under EDF11.

Results	
	<ul style="list-style-type: none"> • Fisheries issues continue to be addressed in Food Secure Pacific strategy implementation. • Appropriate funding mechanisms are developed/approved to continue key activities of CRISP project • New SPC document management and management information systems are successfully rolled out in FAME.
Objective 2: To promote informed policy decisions and public awareness of marine resource issues in the Pacific	
<p>2.1 Policy-makers and the general public are better informed of marine resource issues, the importance of fisheries and the need for management action</p>	<ul style="list-style-type: none"> • New coastal resource management information materials for NGO workers developed and distributed. • At least one new SPC ‘policy brief’ on a key fisheries issue written and distributed. • Awareness materials or policy-related documents are designed and produced for at least three countries or territories. • All new FAME-produced documents are made available to the general public on SPC website • FAME and CFP websites are continually updated and improved. • Regional media are regularly informed of regional marine resource issues, and FAME activities and outputs, through the provision of press releases, radio interviews and articles for newspapers/magazines. • Part-time consultancy arrangement developed mid-year for more effective communication of fisheries issues.
<p>2.2 Stakeholders in PICTs are fully informed of the results of SPC activities, and shared experience and knowledge across the region</p>	<ul style="list-style-type: none"> • 3 issues of the <i>SPC Fisheries Newsletter</i> are published in English and French in colour. • 6 issues of SPC’s Special Interest Group Information Bulletins, related to important marine resource issues, are published in French and English • An updated version of SPC Fisheries Address Book, which gives access to more than 1700 regional fishery-related contacts, is produced and distributed • An updated fully searchable digital library with all FAME publications available in digital format is produced on a DVD, which is distributed throughout the region, and on SPC’s website. • Results of SPC activities are documented in various media, such as the SPC website and the SPC Fisheries Newsletter • Major distribution effort is undertaken to circulate materials currently held in storage to member countries, including for vocational training. • Project initiated to develop materials to introduce fisheries into schools curriculum.

COASTAL FISHERIES PROGRAMME OBJECTIVES AND OUTPUTS

Results	2011 Activities
<p>Objective 1: To assist governments and administrations in the development of scientifically informed and socially achievable coastal fisheries management policies and systems in line with guiding principles of the Apia Policy</p>	
<p>1.1 Assessment of the status of national coastal living marine resource user groups, impact on resource, existing impact management systems, and the current status of the resources themselves, in order to inform management</p>	<ol style="list-style-type: none"> 1. Training provided in appropriate methodologies and assistance in assessment of aquarium fisheries provided to 2 countries 2. Training provided in coastal fisheries data analysis for 4 countries 3. Regional data repository maintained and national data provided for backup from at least 3 countries/fisheries 4. Monitoring and data needs identified, national workshops/trainings and assessments completed for finfish fisheries in 2 countries 5. Invertebrate resource assessment and national workshops/training provided for at least 3 countries 6. At least 3 attachment trainings are undertaken in Noumea for data entry and analysis for developing management arrangements. 7. Develop database modules for market/creel surveys 8. At least 1 subregional workshop covering monitoring protocols, data collection and analysis 9. Underwater visual census methodology manual produced and disseminated to member countries 10. Invertebrate methodology manual produced and disseminated to member countries 11. Develop regional database module for export data and trial in 3 countries with national databases established. 12. Develop draft survey manuals for market and/or creel surveys and supporting database, and test these in at least 2 countries to assess methodology. 13. Progress reports available to countries within 1 month of providing technical assistance 14. Finalise remaining 4 sites for climate change monitoring 15. Conduct baseline surveys (fish, invert, habitat) for at least 3 project sites including the deployment of temperature loggers 16. Develop database for climate change work 17. Develop database for CEA FM work
<p>1.2 Assistance to members, in partnership with other stakeholders, in developing an appropriate mix of community-based approaches and national management arrangements, incorporation of ecosystem-based principles, and the review of coastal fisheries legislation</p>	<ol style="list-style-type: none"> 1. Marine aquarium fisheries policy/management framework completed in at least 2 countries 2. Progress aquarium fishery management arrangements in 2 countries where drafts exist. 3. At least 5 countries receive capacity building and provided with assistance in reviewing/developing CBFM plans or models incorporating EAF principles 4. Assistance provided to at least 4 countries with scientific advice that is used to develop species specific management plans or resources profiles 5. Assistance provided to at least 3 countries for the coastal component of legislation reviews/development 6. National legislation ready for endorsement in 1 country (this is a multi-year process) 7. Under coastal component of SciCoFish, assess monitoring, assessment and management needs in 5 Pacific ACP countries 8. Establish stronger collaborative working partnerships with NGOs working towards similar goals/objectives

Results	2011 Activities
1.3 Practical assistance to members in the designing and targeting of appropriate awareness raising and educational information	<ol style="list-style-type: none"> 1. Training provided to at least 2 countries to develop and disseminate fisheries information 2. Fisheries website development training provided for at least 1 country 3. Coastal fisheries posters revise/developed for at least 2 countries 4. Develop regional policy brief for trochus
Objective 2: To provide a regional framework for sustainable aquaculture, in the areas of planning, research, development and trade, for Pacific Island governments, private enterprises and other stakeholders	
2.1 Improved regional and national capacity for strategic policy, planning and administration to establish clear priorities and enable the aquaculture sector to meet current and future needs, with the guidance of the SPC aquaculture action plan 2007	<ol style="list-style-type: none"> 1. Aquaculture Planning Workshop in 2 countries 2. Participate in 2 JCS, programme missions 3. Aquaculture commodity development plans published for 2 countries 4. Independent consultant economist to review aquaculture/mariculture 5. PNG program mission food security 6. Assist and review PNG fish pond farmer census 7. Regional review of aquaculture statistics published 8. Aquaculture Portal updated with statistics and market notices, meeting's presentation, articles etc. 9. Participate in Giant Prawn Conference in India 10. Participate in AQUARAMA conference 2011, Singapore 11. Organise SPC/ACIAR Regional Sea cucumber symposium for Pacific Is parties to attend. 12. Participate in the Heads of Fisheries Meeting 13. Aquaculture Legislative support provided to at least 2 PICTs 14. Develop funding proposal for a regional project on sea cucumber aquaculture 15. Produce post-Tahiti Aquaculture Proceedings in both English and French
2.2 Increased skills and knowledge base in the SPC region and its member countries and territories, so as to maximise the return on investments in aquaculture through innovative, profitable and sustainable approaches	<ol style="list-style-type: none"> 1. Launch the final 6 mini-projects under phase II of the project. 2. Programming mission to Cook Islands pearl industry and freshwater hatchery development 3. Proceedings of tilapia expert consultation published 4. Assist Samoa Fisheries with tilapia broodstock introduction and post-tsunami recovery 5. Assist lobster and scallop culture trials, New Caledonia 6. Planned assistance for lobster pueruli collection in FSM 7. Support to all current mini-projects (12) including those being supervised by JCU and USP directly 8. Support or supervision by section staff of ACIAR Mini-Project related MSc students and PhD 9. Finalise EDF 10 trade diversification project and implement the aquaculture component. 10. Submit joint project (IFREMER – French Research Institute for Exploitation of the Sea) for aquaculture feeds from tuna fish meal in Fiji Islands and PNG 11. Review status of freshwater fisheries and opportunities for culture based fisheries 12. Support invertebrate (sea cucumber) restocking initiatives 13. Implement satellite Farmer Group Project on freshwater aquaculture in Fiji under AusAID 14. Assist RMI in developing a capture based aquaculture project involving rabbit fish and or mullet 15. Assist Vanuatu with Freshwater hatchery and Bio-security facility setup.

Results	2011 Activities
<p>2.3 Competent authorities established and/or supported, using science-based approaches to manage aquatic biosecurity risks and to facilitate trade</p>	<ol style="list-style-type: none"> 1. Provide desktop advise on introductions as needed 2. Assistance to undertake a risk assessment for a possible introduction of the GIFT tilapia through a consultancy in the Solomon Islands 3. Assist key PICTs on OIE reporting of live aquatics to EU 4. Aquaculture portal is updated with trade statistics (official and provisional) 5. Prepare a concept note for a regional biosecurity framework 6. Assist French Polynesia with Training on diagnosis and management of health problems in cage aquaculture
<p>Objective 3: To develop sustainable nearshore fisheries in PICTs to provide food security, livelihoods and economic growth</p>	
<p>3.1 Subsistence, artisanal, sport and industrial fishing activities within the sustainable production level of the available fisheries resources</p>	<ol style="list-style-type: none"> 1. Assistance to at least 5 fishing associations provided under the DevFish-2 project. 2. An HRD plan for the fisheries sector is produced/updated in at least 1 country 3. A Tuna Fisheries Development Plan is produced/updated in collaboration with FFA, in at least 1 country 4. Economic assessment of fisheries and/or aquaculture projects conducted in at least 5 PICTs 5. A feasibility study for sport-fishing development is conducted in at least 1 PICT 6. A giant trevally tagging project is ongoing in New Caledonia and data is analysed 7. A small-scale pole-and-line fishing project is started in collaboration with FFA, with technical and training inputs from the Nearshore Fisheries Development Section (NFDS) including an assessment of community-based bait fishing to supply fishing operations 8. At least one exploratory fishing project conducted in New Caledonia, pending availability of funding 9. International FAD conference organized with IFREMER and French Polynesia fisheries administration 10. NFDS web portal is updated on an ongoing basis
<p>3.2 Resource materials, advice and training in appropriate fishing techniques and technologies</p>	<ol style="list-style-type: none"> 1. FAD projects are implemented with extensive capacity-building in at least 3 PICTs and advice/technical assistance is provided to a minimum of 5 other PICTs 2. FAD fishing workshops are conducted with parallel training of counterparts in at least 2 PICTs 3. NFDS remains active on the bycatch mitigation front with ongoing awareness-raising in PICTs and inputs to regional initiatives 4. Small boat safety training is conducted with parallel counterpart training in at least 3 PICTs 5. Collaboration on sea safety issues with FAO and other regional/international organisations is ongoing 6. At least 1 regional fisheries course or workshop is organised and implemented 7. Purse-seine crew training introduced in Kiribati pending funding assistance from NZAid 8. Technical assistance and/or training in the area of small fishing/aquaculture business management is provided to at least 5 PICTs 9. Vernacular version of the SPC small boat safety checklists is produced in at least 1 PICT 10. One Sea Safety information bulletin is produced in both English and French

Results	2011 Activities
<i>(Objective 3.2 continued)</i>	11. Guidelines for the safe handling and release of coastal sport-fishing fish species is produced (third species group) 12. French version of manual on small-scale bait fishing methods is produced. 13. One DVD on best practices in coastal sport fishing is produced
3.3 Optimum benefits from the resource through improved seafood quality standards and value-adding	1. Training in onboard catch handling is provided to local fishers in at least 2 PICTs 2. At least one tuna grading workshop is organised and conducted (national, sub-regional or regional) 3. Technical assistance and/or training in the area of Competent Authorities and seafood safety standards is provided to at least 5 PICTs 4. Technical assistance and/or advice on the utilisation of fish offal to produce fish silage is provided to at least 2 PICTs

OCEANIC FISHERIES PROGRAMME OBJECTIVES AND OUTPUTS

Results	2011 Activities
<p>Objective 1: To provide high-quality scientific information and advice for regional and national fisheries management authorities on the status of, and fishery impacts on, stocks targeted or otherwise impacted by regional oceanic fisheries.</p>	
<p>1.1 Regional oceanic fisheries management policy and decision-making by WCPFC are informed by the best science-based stock assessment and advice</p>	<p>Regional stock assessments</p> <ul style="list-style-type: none"> • Conduct stock assessments for skipjack, yellowfin, bigeye and South Pacific albacore tuna and related management analyses • Conduct a Preparatory Stock Assessment Workshop at SPC Headquarters • Undertake an analysis to investigate the use of alternative reference points for the management of WCPO tuna fisheries • Communicate information on tuna stock status and related issues in appropriate forms • In conjunction with WCPFC, develop the 2011 service agreement and report on the implementation of services to WCPFC8 <p>Stock assessment research and development</p> <ul style="list-style-type: none"> • Release version 1 and a later updated version of TUMAS, the TUna MAnagement Simulator • Conduct analyses of catch per unit effort (CPUE), size and tagging data in support of regional tuna stock assessment • Conduct analyses to determine appropriate biological parameters for use in regional tuna stock assessments • Continue development, testing and documentation on the MULTIFAN-CL stock assessment software, with updated software and documentation posted on www.multifan-cl.org <p>Implementation of the shark research plan</p> <ul style="list-style-type: none"> • Develop preliminary indicators of stock status of key shark species • Develop data sources and methods for assessment of silky shark • Complete development of the shark tagging meta-database • Communicate information on shark stock status and research
<p>1.2 FFA's oceanic fisheries management initiatives are supported by the best science-based stock assessments and advice</p>	<p>FFA support</p> <ul style="list-style-type: none"> • Provide scientific support to the bioeconomic evaluation of management options • Provide scientific support to the evaluation of potential management options • Provide scientific support to US Tuna Treaty consultations and negotiations • Communicate the information on management-related scientific work conducted for FFA <p>PNA support</p> <ul style="list-style-type: none"> • Provide scientific information and analyses in support of the development of the longline vessel days scheme • Provide scientific information and analyses in support of the implementation of the purse seine vessel days scheme • Provide scientific information and analyses to inform MSC assessment of purse seine fisheries <p>Support to the Sub-Committee on South Pacific Tuna and Billfish Fisheries</p> <ul style="list-style-type: none"> • Conduct research to improve understanding of the albacore fishery • Provide scientific information and analyses to support the development of a southern longline management system

Results	2011 Activities
<i>(Objective 1.2 continued)</i>	<ul style="list-style-type: none"> Conduct characterizations of fisheries catching albacore, swordfish and striped marlin <p>Support for Te Vaka Moana</p> <ul style="list-style-type: none"> Develop a work plan for future support of TVM initiatives
<p>1.3 National tuna oceanic fisheries policy and decision-making are informed by the best science-based stock assessments and advice</p>	<p>National Tuna Fisheries Status Reports</p> <ul style="list-style-type: none"> Develop and maintain secure national web pages containing updatable National Tuna Fisheries Status Report (NTFSR) components Finalize NTFSRs for Marshall Islands, Kiribati, Samoa and Tokelau Complete NTFSRs in the new format for at least three of Cook Islands, Tuvalu, Solomon Islands, Fiji, CNMI and American Samoa Complete at least two Issue-Specific National Reports on issues of broad regional and sub-regional interest Communicate in appropriate forms the work conducted in support of national tuna fisheries management <p>Support for development of National Tuna Management plans and associated instruments (with FFA)</p> <ul style="list-style-type: none"> Provide technical support to national tuna management plan development in Cook Islands, Tuvalu, Solomon Islands, Fiji, CNMI, and American Samoa (if required) Respond to <i>ad hoc</i> requests for scientific information and analyses in support of national tuna management
<p>1.4 Enhanced capacity of SPC members to interpret stock assessment information and advice</p>	<p>Stock assessment training workshops (SAWs)</p> <ul style="list-style-type: none"> Develop updated workshop materials that address current issues of importance Develop funding proposals to support participation in the SAWs Deliver two (preliminary, advanced) SAWs Conduct <i>ad hoc</i> training in stock assessment where possible <p>Attachments</p> <ul style="list-style-type: none"> Complete attachments of fishery officers for at least three of Cook Islands, Tuvalu, Solomon Islands, Fiji, CNMI and American Samoa <p>Support of member participation at regional meetings</p> <ul style="list-style-type: none"> Contribute to briefing material and talking points for WCPFC SC7 and WCPFC8 (led by FFA)
<p>Objective 2: To collect and analyse accurate and comprehensive scientific data for regional and national fisheries authorities on fisheries targeting the region's resources of tuna, billfish and other oceanic species.</p>	
<p>2.1 WCPFC is provided with efficient and cost-effective data management services to support regional oceanic fisheries</p>	<p>Compile and manage WCPFC databases</p> <ul style="list-style-type: none"> Compile, quality check and manage the WCPFC databases (Annual catch estimates, Aggregated catch and effort data, Operational (logsheet) data, Aggregate Size composition data) Review Chinese data and liaise with China to address problems relating to catch attribution Incorporate shark species data into WCPFC databases Process, quality check and manage WCPFC Regional Observer Programme data <p>Routine Papers for WCPFC meetings</p> <ul style="list-style-type: none"> Scientific data provided to the Commission Annual catch estimates for the WCPFC Area Overview of WCPFC tuna fisheries. Including economic conditions Recent changes in scientific data provided for stock assessments

Results	2011 Activities
<p><i>(Objective 2.1 continued)</i></p>	<p>Estimation of catches</p> <ul style="list-style-type: none"> • Update the estimation of selectivity bias based on paired spill and grab samples collected by observers on purse seiners, pending availability of new data • Adjust purse-seine length data based on grab samples corrected for selectivity bias • Estimate catches of key shark species based on observer data • Estimate catches of other non-target species based on observer data <p>Data dissemination</p> <ul style="list-style-type: none"> • Produce and publish on the commission’s website the Tuna Fishery Yearbook, containing annual catch estimates by gear type, flag and species • Maintain relevant web pages on the WCPFC website – BMIS, data provision tables, ROP data provisions • Disseminate data to members and others according to the WCPFC rules and procedures • Prepare and publish public domain data on the WCPFC website <p>Technical support to the WCPFC Secretariat</p> <ul style="list-style-type: none"> • Provide advice on data-related procedures of the commission, e.g. rules and procedures for the protection, access to and dissemination of non-public domain data and information compiled by the commission; and ‘Scientific Data to be Provided to the Commission’ • Prepare data summaries for the evaluation of conservation and management measures (CMMs) • Prepare catch data summaries to determine WCPFC member budget contributions • Provide quarterly updates of tuna fishery database systems • Provide training to Secretariat staff in CES and Observer Trip Viewer <p>Technical support to the Western Pacific East Asia Oceanic Fisheries Management Project</p> <ul style="list-style-type: none"> • Convene national annual catch estimates and data review workshops in Indonesia, Philippines and Vietnam • Install data management software and provide training in Philippines and Vietnam • Review databases and conduct data collection and management system audits in Indonesia, Vietnam and Philippines • Import WPEA data into WCPFC databases for use in 2011 stock assessments
<p>2.2 FFA’s oceanic fisheries management initiatives are supported by the best science-based stock assessments and advice</p>	<p>Provision and receipt of data and database systems</p> <ul style="list-style-type: none"> • Provide quarterly updates of the CES data system incorporating logsheet data, catch by EEZ and public domain data to the FFA Secretariat and PNA Office • Improve estimates in the EEZ database, including monthly time stratification, stratification by set type for purse seine, inclusion of longline effort, improve estimates of raising factors using recent VMS data • Provide CES training to FFA staff • Provide CES training to PNA Office staff • Receive and import US Treaty and FSM Arrangement observer data • Process the PS-4 forms and import into observer database • Receive, enter and import US Treaty and FSMA logsheet data • Receive and import VMS data • Receive and import FFA vessel register data • Receive and import regional licensing data • Review data exchange protocols for SPC/FFA Colloquium

Results	2011 Activities
<i>(Objective 2.2 continued)</i>	<p>Provision of reports and data summaries</p> <ul style="list-style-type: none"> • Provide routine papers for US Treaty Annual Consultation • Provide data summaries and reports for the PNA purse seine vessel days scheme • Provide data summaries and reports for the PNA longline vessel days scheme • Provide data summaries for FFA in advance of WCPFC sessions, as required <p>Joint database initiatives</p> <ul style="list-style-type: none"> • Review status of FFA using the TUBS (Observer database system) • Review status of TOAD (observer administration database system) with FFA • Participate at Regional Licensing Officers Workshop to present TUFMAN MCS capabilities
2.3 Enhanced national oceanic fishery monitoring and data management by SPC members to meet national and international obligations	<p>Data processing services</p> <ul style="list-style-type: none"> • Register, enter and verify logsheet, observer and port sampling data provided by SPC members • Import data provided by SPC members in electronic form • Conduct and evaluate a trial of observer-based data entry at sea (FSM) • Provide technical support for data scanning in SPC member countries <p>Provision of database systems</p> <ul style="list-style-type: none"> • Install updated TUFMAN systems in fisheries offices – FSM, Samoa, Fiji, Solomon Islands • Continue ongoing development of the TUFMAN system <ul style="list-style-type: none"> – Review and upgrade of reporting system – Implement entry of vessel sightings (GEN-1) forms – Entry of important fields from PS-2 and PS-3 forms – Incorporate VMS ‘trip’ data to allow logsheet coverage computation – Develop data registry system – Investigate and implement alternative GIS to MAPINFO – Consider a new FLEET database and how to cater for charter vessels – Develop a new MCS component • Distribute and install TUFMAN remotely • Distribute CES quarterly • Distribute the Observer Trip Viewer System quarterly National installations of TUBS (observer database system) in FSM and Marshall Islands • Continuing development of CES, TUBS and Observer Trip Viewer Systems • Improve MCS capabilities to identify IUU fishing using database systems • Support of the TUFMAN Artisanal Fisheries Database (TUFART), as required and where possible • Develop, maintain and disseminate a detailed member country resources profile • Develop, maintain and disseminate an in-country hardware/software minimum standards document <p>Improving data quality and coverage</p> <ul style="list-style-type: none"> • Conduct in-country national data audits in FSM, Fiji, Marshall Islands and Cook Islands • Conduct in-country review of the Samoa fisheries data collection system • Conduct port sampling data quality screening at SPC using PORT Admin system • Commence development of a data quality control module post-entry logsheet checking system at SPC • Develop tools to check the coverage of logsheet data • Develop workbooks, standards and general documentation for data quality control and auditing • Identify data gaps and follow up with countries regarding submission of missing data

Results	2011 Activities
(Objective 2.3 continued)	<p>Regional coordination of national fishery monitoring and data management systems</p> <ul style="list-style-type: none"> • Develop and update MOUs with members for the provision of technical support and funding of sampling programmes and related positions • Review national oceanic fishery monitoring in Samoa • Review national oceanic fishery monitoring following National Tuna Data Workshops as required • Finalise the report of the 8th Data Collection Committee (DCC) and hold DCC9 if required • Prepare and publish the 9th edition of the <i>Fork Length</i> newsletter • Provide data collection forms on request • Facilitate the provision of national tuna data to SPC for processing <p>Develop or enhance national observer programmes</p> <ul style="list-style-type: none"> • Coordinate the development of and technical support provided to PIRFO programmes by observer trainers, technical advisors and field technicians as required • Further develop and document (on the PIRFO website) the PIRFO Competency Based Training (CBT) and other regional standards in collaboration with FFA, WCPFC and members • Implement the paired grab-spill sampling trials on purse seiners, including the use of motion-compensated scales • Participate in the ISSF purse seine bycatch mitigation project • Provide support for the PNG observer programme and development of data collection protocols <p>Develop or enhance national port sampling programmes</p> <ul style="list-style-type: none"> • Review port sampling data quality • Restart port sampling of purse seine landing categories at Noro, Solomon Islands <p>Auditing of national tuna fishery monitoring</p> <ul style="list-style-type: none"> • Develop procedures for reviewing data collection systems as part of auditing of national tuna fishery monitoring • Participate in WCPFC audits of observer programmes as requested by the WCPFC Secretariat <p>Artisanal fishery monitoring</p> <ul style="list-style-type: none"> • Develop resource materials for artisanal tuna fishery monitoring
2.4 Enhanced capacity of SPC members in fisheries monitoring, data management and data use	<p>Support for National Tuna Data Coordinators</p> <ul style="list-style-type: none"> • Conduct national tuna data workshops in Fiji, Marshall Islands, Samoa and Tonga • Conduct a regional artisanal fisheries data workshop and/or national workshops • Hold the annual Tuna Data Workshop (17–22 April 2011) • Assist countries prepare Part 1 National Reports for WCPFC SC • Train national tuna fishery data management staff in the use of TUFMAN and other database and sampling programme management software • Develop training resources for TUFMAN and TUFART • Host training attachments in fisheries monitoring and statistics for fisheries officers from Kiribati, Samoa, Solomon Islands, FSM, Palau, Marshall Islands • Assist countries improve national capacity through funded data entry positions in FSM and Solomon Islands • Assist countries improve their fisheries IT infrastructure – provision of a new scanner and monitor in Marshall Islands, a server in Tonga and a server in FSM

Results	2011 Activities
<p>(Objective 2.4 continued)</p>	<ul style="list-style-type: none"> • Provision of <i>ad hoc</i> national support through provision of data summaries and advice during WCPFC meetings <p>Observer training</p> <ul style="list-style-type: none"> • Sub-Regional Observer Training Course for Cook Is, French Polynesia and Samoa in Apia • National observer upgrade training for cadets in FSM • Sub-Regional Observer Training Course for FSM & Palau in Pohnpei • Sub-Regional Observer Training Course for Fiji and Tonga in Suva • Assist with Sub-Regional Observer Training Course for PNG and Tuvalu in Kavieng and develop auditing procedures for observer training courses and institutions • National Observer Training Course for Solomon Islands in Honiara • Sub-Regional Observer Training Course for Niue, Tokelau, Tuvalu and Vanuatu in Port Vila • Assist with Sub-Regional Observer Training Course for PNG and Palau in Kavieng and develop auditing procedures for observer training courses and institutions • National Observer Training Course for Kiribati in Tarawa • Assist with Sub-Regional Observer Training Course for PNG and Palau in Kavieng and develop auditing procedures for observer training courses and institutions • National Observer Training Course for Marshall islands in Majuro • Sub-Regional Observer Training Course for Fiji, Nauru, Tuvalu and Vanuatu in Port Vila <p>Other observer programme support</p> <ul style="list-style-type: none"> • Conduct an Observer Trainers Workshop and Observer Trainer Certification • Conduct an observer debriefing workshop • Provide debriefer training during in-country visits or in workshops • Hold the Regional Observer Coordinators Workshop
<p>Objective 3: To improve understanding of pelagic ecosystems in the western and central Pacific Ocean.</p>	
<p>3.1 Enhanced data on the biological characteristics of oceanic species and their environment are available to support stock assessment and ecosystem-based fisheries management</p>	<p>Tuna tagging</p> <ul style="list-style-type: none"> • Conduct tuna tagging campaigns in the western and central Pacific for the provision of data for stock assessment – in 2011, one three-month cruise in PNG, two 4-6 week cruises in the central Pacific, one South Pacific PSAT cruise in New Caledonia • Complete preliminary analyses of horizontal and vertical movements • Complete preliminary analyses of temporal changes in exploitation and FAD impacts • Implement tag recovery programme, including new Tag Recovery Officers in 7 transshipment locations • Implement 50 tag seeding experiments on purse seiners • Conduct training of observers in tag recovery during regular observer training workshops • Continue the validation of tag return data <p>Tuna biological research</p> <ul style="list-style-type: none"> • Continue sample collection, conduct preliminary analyses of bigeye age, growth and reproductive biology • Complete analyses of albacore age, growth and reproductive biology

Results	2011 Activities
<i>(Objective 3.1 continued)</i>	<p>Trophic dynamics</p> <ul style="list-style-type: none"> • Stomach and muscle samples and fatmeter measurements collected during tagging cruises and observer trips • Albacore sampling and fatmeter observations for New Caledonia completed • Participate in two scientific cruises to collect information on mid-trophic ecosystem component • Analyses of the impacts of FADs on trophic ecology submitted for publication • Analyses of albacore diet submitted for publication • Convene expert workshop to evaluate the suitability of applying trophic-based indicators for detecting pelagic ecosystem change
3.2 Appropriate ecosystem models and analyses are available to inform ecosystem-based fisheries management	<ul style="list-style-type: none"> • Analyses of the effectiveness of MPA's as a management measure for tuna fisheries at the regional scale completed and published in the peer-reviewed literature • SEAPODYM reference fits for yellowfin tuna and South Pacific albacore completed and submitted for publication • One report on impact of environmental variability on tuna distribution at the regional level
3.3 Improved knowledge of the impacts of climate change on oceanic ecosystems to inform adaptation	<ul style="list-style-type: none"> • Two manuscript accepted on the impacts of climate change on (1) tuna distribution and (2) changes to the oceanic food web of the WCPO • Begin experiments on the impacts of ocean acidification on tuna larval survival and growth • 'Phase 1' modelling of climate change impacts on tuna stocks completed • Analysis examining the potential of predator diet and tuna movement to monitor climate change completed • Conduct ECOPATH simulations to assess potential impacts of climate change on key bycatch species
3.4 Regional oceanic fisheries policy and decision-making by WCPFC is informed by science-based information and advice on ecosystem issues	<p>Ecological Risk Assessment (ERA)</p> <ul style="list-style-type: none"> • ERA data incorporated into Bycatch Mitigation Information System (BMIS) • BMIS fully populated and accessible online
3.5 FFA's ecosystem-based fisheries management initiatives are supported by the best scientific information and advice	<ul style="list-style-type: none"> • Support for FFA EAFM initiatives and regional plans of action provided on request
3.6 Ecosystem-based management of oceanic fisheries by SPC members is supported by the best scientific information and advice	<ul style="list-style-type: none"> • ERAs undertaken as required for National Tuna Fishery Status Reports and online materials • An assessment of bycatch in the New Caledonian longline fishery completed • Ecosystems workshop conducted in conjunction with annual Stock Assessment Workshop • Sub-regional summaries of trophic structure completed and incorporated into NTFSRs and/or ISNRs • Information on seamounts included in NTFSRs and online materials • Five national-level 'tuna resource profiles' produced using SEAPODYM modelling results • National-level tuna tagging information released online