



European Union



Secretariat of the Pacific Community

**EU EDF 9 B Scientific Support for Oceanic Fisheries Management in the Western and Central Pacific Ocean (SCIFISH)**

**9.ACP.RPA.013 & 9.PTO.REG.008**

**SIX-MONTHLY REPORT**

**1 JANUARY – 30 JUNE 2009**

**Implemented by: Secretariat of the Pacific Community (SPC)**

**Funded by: 9<sup>th</sup> European Development Fund B Envelope**

## **1. Introduction**

SCIFISH comprises a programme of fishery monitoring and scientific research over a four-year period that will provide essential information for evaluating the status of stocks and the ecosystem, and for assessing the effectiveness of potential management options. In short, the outputs of this project will provide much of the scientific basis for future management decision making concerning tuna and related stocks in the WCPFC Convention Area. Given the current precarious status of two important stocks (yellowfin and bigeye tuna), long-term economic returns from the fishery may well rely on such management decisions, and the quality of scientific information underpinning them, taken over the next 5–10 years.

The overall objective is the conservation and sustainable use of oceanic fish resources of the western and central Pacific Ocean.

The expected results of the project, which will achieve the project purpose, are enhanced oceanic fishery monitoring in Pacific ACPs, and OCTs and in the Commission Convention Area generally; enhanced assessments of the status of oceanic fish stocks and the impacts of fishing upon them; and enhanced understanding of the pelagic ecosystem that supports oceanic fish stocks, including the ecosystem impacts of fishing.

This report summarizes the activities, achievements and progress towards stated objectives during the first six-month period of the first year of the project (1 March – 31 August 2008).

## **2. Specific Outputs/Results Achieved (as per Year 2 Work Plan):**

Specific ACP and OCT outputs and results achieved under the project against the project logframe.

Verifiable indicator	Activities	Verification	ACP Indicator	OCT Indicator
1. Enhanced oceanic fisheries monitoring				
1.1 Improvement in the observer and port sampling coverage and quality of data to meet the required regional standards	Training programmes for scientific observers and port samplers - Observer/port sampling training workshops - Operational support for observer/port sampling programmes - Training attachments	National observer training courses	PNG, Kiribati, FSM, Marshall Islands completed	
		Sub-regional observer training courses	Scheduled for 2 <sup>nd</sup> half 2009	
		Regional Observer Coordinator's Workshop	Scheduled for 2 <sup>nd</sup> half 2009	
		Review/development of fishery monitoring support MOUs with ACPs	Cook Islands, Samoa	
		Provision of operational support as per MOUs.	Kiribati	
		Fishery monitoring attachments to SPC	2 (Vanuatu and Cook Islands)	
		Observer and port sampling activities in New Caledonia and French Polynesia		<u>French Polynesia</u> 3 observers trained in May 2009, and one former observer has been refreshed. In July 2009, 6 observers, 2 port sampler and 1 coordinator belong to SCIFISH Programme.  Since commencement, 31 observer trips (18 in 2009) have been conducted on board domestic longliners (554 days at sea and 375 sets observed). 752 port sampling operations have been conducted during fish unloading (242 in 2009). Sampling coverage was 76%. All observers data and port sampling data have been sent to SPC to be entered to the observer database.

				<p><u>New Caledonia</u>  2 observers conducted 14 trips on 11 different domestic longliners (163 days at sea, 108 set and 198494 hooks observed). Observer trips represent coverage of 8% and our objective was 5%. 43 port sampling operations have been conducted during fish unloading. Sampling coverage is 20% and our objective was 10%. 1 more sampler recruited, totalling 2 in Noumea and 2 in Koumac now. Reports have been produced for each trip and given to fishers and ship owners. An estimate of sharks catch (sold for fins) by the Caledonian fleet and equally an estimate of non commercial species catch and rejected at sea.</p>
	Provide quality control for scientific and port sampling data	Development of Competency-Based Observer Training (CBT) documentation	Scheduled for 2 <sup>nd</sup> half 2009	
		Observer debriefing and debriefing training conducted	Scheduled for 2 <sup>nd</sup> half 2009	
1.2 Improved regional coordination of national databases to track and monitor fisheries data for compliance with management requirements	Develop and trial new technologies for enhancing quality of data and timeliness of data collection	Progress with the development of TUFMAN and implementation in member country officers	Developed from version 4.45 to 4.46 with beta testing on version 5.0	
	Develop harmonized fisheries monitoring systems and data sharing protocols		Implementation in Cook Islands Fiji, FSM, Kiribati, Marshalls Palau, PNG, Solomon Islands, Tonga, Tuvalu, Vanuatu	

1.3 More comprehensive IUU compliance assessments undertaken	Undertake compliance audits and IUU risk assessments	Assessments undertaken for 8 ACPs	Resources have been provided to FFA as per SCIFISH contractual arrangements and tasks are expected to be completed by February 2009	
1.4 Improved detection of IUU fishing through strengthening existing technologies and trial of new technologies	Develop and implement methodologies to verify fisheries data	Development of TUFMAN computer package to generate exception reports by comparing logsheet, VMS and unloading data  TUFMAN software documentation	Developed from version 4.45 to 4.46 with beta testing on version 5.0.	
	Develop and trial new technologies including satellite based technologies for detection of IUU fishing activities	Pilot study prepared and contracting completed.		CLS Contracted.
		Acquisition, interpretation of satellite images.		Scheduled for 2 <sup>nd</sup> half 2009
		Analysis of targets against VMS and other reports.		Scheduled for 2 <sup>nd</sup> half 2009
		Written report documenting pilot results		Scheduled for 2 <sup>nd</sup> half 2009
2. Enhanced stock assessment				
2.1 Tagging of tropical tunas using conventional and electronic archival tags	Conduct large scale conventional and electronic tagging and associated biological studies of tuna	Regional Tagging Cruise WP 2 completed. A total of 51,078 tuna tagged in EEZ of South East PNG, East FSM, Marshalls, Kiribati (Gilberts), Tuvalu and South East Solomon. A total of 176 tuna tagged with archival tags. .	See Leroy et al 2009 WCPFC-SC5 GN-IP	
		Regional Tagging Cruise CP 2 completed. A total of 2699 tuna tagged on the TAO bouy along 155W and 140W longitude. A total of 90 tuna tagged with	See Schaefer 2009 WCPFC-SC5 GN-IP	

		archival tags.		
		Specific visits to promote and facilitate tag recovery have been undertaken in the Korea, Federated States of Micronesia, Solomon Islands, Palau, Marshall Islands, Indonesia, Philippines and Papua New Guinea, American Samoa.	See Duty Travel Reports Kumasi (13/5/09) Nicol (29/5/09) Williams (2/6/09) Nicol (10/7/09)	
		The first albacore tagging cruise completed. Overall, a total of 2766 albacore were tagged and released with 1457 of these fish also receiving an injection of oxytetracycline (OTC) for the age validation experiments.		Williams et al 2009 WCPFC-SC5 GN-IP
		Collection of otoliths & gonad from albacore proceeding. A total of 202 albacore sampled. Procedures for analysis and collaboration established with CSIRO in Australia		Farley et al 2009 WCPFC-SC5 BI-WP
2.2 Improved assessment on status of tuna stocks by developing more accurate stock assessment model	Conduct analyses of tagging, biological and fishery oceanographic data to better understand population dynamics, behaviour and biology of tuna	Standardized CPUE for distant-water fleets targeting south Pacific albacore		Bigelow et al 2009. WPPFC-SC5 SA-WP
		Biological parameters and spawning biomass calculations for yellowfin tuna in the WCPO have been adjusted	Hoyle et al 2009 . WPPFC-SC5 BI-WP	
		Analysis of vertical movement	Leroy et al 2009. ICES proceeding	
		Summary of PTPP Phase 2 reviewed.	Leroy et al 2009. WCPFC-SC5 GN-IP.	
		Analysis of horizontal movement	Royer et al 2009. Preliminary report to SPC	
	Develop models to assess status	Preliminary stock models for	Langley et al 2009 WCPFC-	

	of targeted tuna stocks and impacts of fishing	south pacific albacore, yellowfin and bigeye drafted for 2009.	SC5-SA-WP Harley et al 2009 WCPFC-SC5-SA-WP Hoyle & Davies 2009 WCPFC-SC5-SA-WP	
3. Enhanced understanding of the pelagic ecosystem				
3.1 Produce better management policies through further development and application of the Spatial Ecosystem and Population Dynamics Model (SEAPODYM)	Provide scientific advice on ecosystem aspects of fishery management including: i) impacts of environmental variability on oceanic fish stocks and fisheries ii) the effects of fishing on the pelagic ecosystem; and iii) potential benefits and effectiveness of specific ecosystem management measures such as marine protected areas	Applications of Seapodym to south pacific albacore, yellowfin and climate change forecasting	Lehodey et al 2009 WCPFC-SC5-EB-WP	
3.2 More accurate estimates and assessment of impacts of exploitation in EEZs.	Develop and enhance models of the pelagic ecosystem supporting targeted oceanic fish stocks	Application of SEAPODYM to South Pacific albacore in the New Caledonia EEZ		Briand et al 2009 WCPFC-SC5-EB-WP

### **3. Expenditure of Funds**

#### **3.1 ACP Component**

Details of expenditure for Year 2 to 30<sup>th</sup> June 2009 are provided in Attachment 1. For the ACP component, Euros 638 932 or 50.69% of the advance for Year 2 and 40.55% of the total Year 2 budget has been expended during the first 6 months of the year.

#### **3.2 OCT Component**

For the OCT Component, as of the end of Year 1 (31 Dec 08) Euros 344 277 or 60.57% of the advance for Year 1 had been expended, it was therefore not possible to request a further advance. As of 30<sup>th</sup> June 2009, a total of Euros 324 392 or 42.37 % of an 80% advance for the Year 2 budget has been expended. Therefore total expenditure for Year 1 and Year 2 to 30 June 2009 is Euros 668 669 which is more than the 80% advance received for Year 1 of Euros 568 400. We now will be requesting the balance of Year 1 funds and the 80% advance for Year 2. The low rates of expenditure in Year 1 were due to (i) the delays in recruitment of TA positions for this component; and (ii) lower rates of fishery monitoring coverage (in particular observer activities) than expected in New Caledonia (NC) and French Polynesia (FP).

### **4. Challenges/Issues Encountered**

### **5. Report Prepared By:**

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