



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: 9th 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 nd half 2009	
		Regional Observer Coordinator's Workshop	Scheduled for 2 nd 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		French Polynesia 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 nd half 2009	
		Observer debriefing and debriefing training conducted	Scheduled for 2 nd 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 nd half 2009
		Analysis of targets against VMS and other reports.		Scheduled for 2 nd half 2009
		Written report documenting pilot results		Scheduled for 2 nd 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 PTTP 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 to 30th June 2009 are provided in Attachment 1. For the ACP component, 76.05% of the advance for Year 1 and 60.84% of the total Year 1 budget has been expended during the first 6 months of the year. It is forecast that there will be considerable over-expenditure on the Year 1 budget by 28 February 2009, while the remainder of the Year 1 advance will be expended well before that time. The reason for this situation is that the Year 1 budget as given in the Financing Agreement foresaw 6 months of expenditure on TA and the work programme generally due to the usual delays in recruitment and project start-up. However, advertisements for all TA positions were launched in the 4th quarter of 2007 and most positions were recruited at the commencement of the project or soon thereafter. Therefore, all project activities were able to be launched sooner than expected. This is a very good outcome for the project, but it creates a difficulty with budgeting and cash-flow for Year 1. Two possible solutions are proposed:

- a. Since 76.05% of the Year 1 advance has now been expended, it is proposed that, as provided under Article 15.1 (Option 2) of the Contribution Agreement General Conditions Applicable to European Community Contribution Agreements with International Organisations, that the remainder of Year 1 funding and a 80% pre-financing for Year 2 be provided within 45 days of approval of this report. This action should ensure that cash flow is maintained for the project.
- b. It may also be desirable that some restructuring of the budget be undertaken to better reflect the rapid implementation of activities in Year 1. This could be accomplished by bringing forward some of the budget allocated for Year 4, which like Year 1 was anticipated to be a partial year in terms of project expenditure. The earlier than anticipated start of the project in Year1 means that some of these resources will not be required in year 4, as all TA positions were awarded 3 year contracts. Years 2 and 3 would remain unchanged. It is proposed that this budget realignment be made at the end of Year 1 when the actual Year 1 expenditure is known.

3.2 OCT Component

For the OCT Component, 19.59% of the advance for Year 1 and 15.67% of the Year 1 budget has been expended during the first 6 months of the year. The low rates of expenditure to date are because of (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

The following challenges/issues have been encountered:

- a. The budget issue identified in section 3 for the ACP component.
- b. Lower rates of observer coverage than expected in NC and FP, due in part to a lack of legal basis in NC and FP for the Governments to impose sampling regimes on their fleets.

5. Solutions Applied (to address issues and challenges)

Solutions for the above challenges/issues proposed are as follows:

- a. Solutions for the ACP budget issue are outlined in paragraphs 3a and 3b, above.

- b. Consultations with the fisheries administrations in NC and FP will continue on the issue of observer coverage. The situation will be reviewed at the end of Year 1 and revised coverage targets specified as necessary. If targets are revised, recommendations for re-deployment of funds will be made as appropriate.

Comment [s1]: to be updated by Kay and John

6. Report Prepared By:

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SCIFISH YEAR 1 - FINANCIAL SUMMARY OF EXPENDITURE BY ACTIVITIES

For period 01 March 2008 to 31 August 2009

ACTIVITIES	YEAR 1	T6	Advance	Expenditure	Balance of	% of initial	Balance of Year 1	% of year 1
	BUDGET	Code	for year 1	for year 1	advance	advance	Budget remaining	Budget
	EUROS		EUROS	EUROS	EUROS	spent	EUROS	spent
ACP COMPONENT								
Technical Assistance								
1.1 Port sampling & observer coordination	50,000	SFA011	40,000	45,091	(5,091)	112.73%	4,909	90.18%
1.2 Port sampling & observer trainer	42,500	SFA012	34,000	37,010	(3,010)	108.85%	5,490	87.08%
1.3 Tagging Technician	37,500	SFA013	30,000	30,464	(464)	101.55%	7,036	81.24%
1.4 Ecosystem Modeller	50,000	SFA014	40,000	0	40,000	0.00%	50,000	0.00%
1.5 Ecosystem Modelling Services	60,000	SFA015	48,000	50,010	(2,010)	104.19%	9,990	83.35%
MCS Activities								
2.1 Harmonised MCS data sharing protocols	0	SFA021	0	0				
2.2 Compliance audits, IUU risk assessments	35,000	SFA022	28,000	28,038	(38)	100.14%	6,962	80.11%
2.3 Data verification methodologies	0	SFA023	0	0				
2.4 Satellite detection of IUU fishing pilot	175,000	SFA024	140,000	140,000	(0)	100.00%	35,000	80.00%
Travel								
3.1 Port Sampling & Observer	12,000	SFA031	9,600	4,675	4,925	48.70%	7,325	38.96%
3.2 Tagging	12,000	SFA032	9,600	6,584	3,016	68.58%	5,416	54.87%
3.3 Ecosystem Modelling	5,000	SFA033	4,000	0	4,000	0.00%	5,000	0.00%
Equipment								
4.1 Port Sampling & Observer	10,000	SFA041	8,000	0	8,000	0.00%	10,000	0.00%
4.2 Tagging / biological	25,000	SFA042	20,000	7,123	12,877	35.61%	17,877	28.49%
4.3 Computer	10,000	SFA043	8,000	0	8,000	0.00%	10,000	0.00%
Tagging operations								
5.1 Vessel charter / operations	440,000	SFA051	352,000	393,099	(41,099)	111.68%	46,901	89.34%
5.2 Tag rewards, publicity, etc	35,000	SFA052	28,000	0	28,000	0.00%	35,000	0.00%
Training								
6.1 Port Sampling & Observer	10,000	SFA061	8,000	9,899	(1,899)	123.74%	101	98.99%
6.2 Stock Assessment	5,000	SFA062	4,000	0	4,000	0.00%	5,000	0.00%
Observer & Port sampling operations								
7.1 National observer programmes	20,000	SFA071	16,000	2,004	13,996	12.53%	17,996	10.02%

7.2 National port sampling programmes	10,000	SFA072	8,000	0	8,000	0.00%	10,000	0.00%
Data Processing and IT support								
8.1 Scientific programming support	85,000	SFA081	68,000	0	68,000	0.00%	85,000	0.00%
8.2 Data processing support	25,000	SFA082	20,000	7,890	12,110	39.45%	17,110	31.56%
Administrative Support / Evaluation	42,000	SFA090	33,600	22,977	10,623	68.38%	19,023	54.71%
SPC Overhead @ 7% of Direct costs	84,000	SFA100	67,200	0	67,200	0.00%	84,000	0.00%
CONTINGENCIES	10,000	SFA110	8,000	0	8,000	0.00%	10,000	0.00%
EVALUATION	0	SFA120	0	0	0			
SubTotal ACP Component	1,290,000		1,032,000	784,864	247,136	76.05%	505,136	60.84%
OCT COMPONENT								
Technical Assistance								
1.1 National Coordinator FP	38,000	SFO011	30,400	20,014	10,386	65.84%	17,986	52.67%
1.2 National Coordinator NC	38,000	SFO012	30,400	6,980	23,420	22.96%	31,020	18.37%
1.3 Albacore Biologist	42,500	SFO013	34,000	20,178	13,822	59.35%	22,322	47.48%
1.4 Fisheries Oceanographer	45,000	SFO014	36,000	28,693	7,307	79.70%	16,307	63.76%
1.5 Ecosystem Modelling Services	50,000	SFO015	40,000	0	40,000	0.00%	50,000	0.00%
MCS Activities (contracted work)								
2.1 Satellite detection of IUU fishing pilot (NC)	60,000	SFO021	48,000	0	48,000	0.00%	60,000	0.00%
Travel								
3.1 FP	4,000	SFO031	3,200	4,144	(944)	129.49%	(144)	103.59%
3.2 NC	4,000	SFO032	3,200	211	2,989	6.60%	3,789	5.28%
3.3 WF	4,000	SFO033	3,200	2,030	1,170	63.43%	1,970	50.75%
3.4 Regional	6,000	SFO034	4,800	3,414	1,386	71.13%	2,586	56.91%
3.5 Contractor travel	20,000	SFO035	16,000	0	16,000	0.00%	20,000	0.00%
Equipment								
4.1 Fishery monitoring FP	32,500	SFO041	26,000	0	26,000	0.00%	32,500	0.00%
4.2 Fishery monitoring NC	16,500	SFO042	13,200	0	13,200	0.00%	16,500	0.00%
4.3 Fishery monitoring WF	3,000	SFO043	2,400	0	2,400	0.00%	3,000	0.00%
4.4 Tagging / biological	0	SFO044	0	0	0			
4.5 Computer	12,000	SFO045	9,600	3,495	6,105	36.40%	8,505	29.12%
Tagging operations								

5.1 Vessel charter	0	SFO051	0	0				
5.2 Tag rewards, publicity	0	SFO052	0	0				
5.3 Contract personnel	0	SFO053	0	0				
Training								
6.1 FP	5,000	SFO061	4,000	0	4,000	0.00%	5,000	0.00%
6.2 WF	3,000	SFO062	2,400	0	2,400	0.00%	3,000	0.00%
Observer & Port sampling operations								
7.1 FP Observers	106,000	SFO071	84,800	7,598	77,202	8.96%	98,402	7.17%
7.2 NC Observers	35,000	SFO072	28,000	3,609	24,391	12.89%	31,391	10.31%
7.3 WF Observers	9,000	SFO073	7,200	0	7,200	0.00%	9,000	0.00%
7.4 Port sampling FP	44,000	SFO074	35,200	7,557	27,643	21.47%	36,443	17.17%
7.5 Port sampling NC	44,000	SFO075	35,200	3,346	31,854	9.51%	40,654	7.61%
				0				
Data Processing and IT Support	20,000	SFO080	16,000	0	16,000	0.00%	20,000	0.00%
Administrative Support	10,000	SFO090	8,000	98	7,902	1.23%	9,902	0.98%
SPC Overhead @ 7% of Direct costs	46,000	SFO100	36,800	0	36,800	0.00%	46,000	0.00%
CONTINGENCIES	10,000	SFO110	8,000	0	8,000	0.00%	10,000	0.00%
AUDIT	3,000	SFO120	2,400	0	2,400	0.00%	3,000	0.00%
EVALUATION	0	SFO130	0	0				
SubTotal OCT Component	710,500		568,400	111,366	457,034	19.59%	599,134	15.67%
TOTAL	2,000,500		1,600,400	896,230	704,170	56.00%	1,104,270	44.80%