



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)

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SIX-MONTHLY REPORT

1 MARCH – 31 AUGUST 2008

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 1 Work Plan):

Specific ACP and OCT outputs and results achieved under the project against the approved yearly work plan are reported in the following Tables.

ACP PROJECT ACTIVITY	OUTPUT
Result 1: Enhanced Oceanic Fishery Monitoring	
1.1 Observer/port sampling workshops	
- National observer training courses conducted in PNG (3) and Solomon Islands.	Two national observer training courses for PNG in the month of February and June completed with 22 trainees trained. Observer training course for Solomon Islands carried out during the month of April. 15 trainees were trained. Fiji Observer Refresher Course carried out in August. 9 current observers were trained.
- Sub-regional observer training courses conducted for Micronesia and Polynesia.	Sub-regional course for Micronesia (Federated States of Micronesia and Palau) carried out in July/August. 3 trainees from FSM and 6 from Palau were trained.
- Regional Observer Coordinator's Workshop conducted.	8th Regional Observer Coordinator's workshop held in Palau during the month of July.
1.2 Training attachments	
- 4 fishery monitoring attachments to SPC.	2 week attachment by Solomon Islands completed. Cook Islands, Vanuatu and Samoa planned before the 31 Dec 2008.
1.3 Operational support for observer/port sampling programmes	
- Review/development of fishery monitoring support MOUs with ACPs.	Renewed and extended MOU for Samoa and Tonga (observer and port sampling support).
- Provision of operational support as per MOUs.	Funds were allocated and transferred as agreed both MOUs. Observer and data collection forms/equipment provided to

	countries.
1.4 Quality control of observer/port sampling data	
- Development of Competency-Based Observer Training (CBT) documentation.	Endorsement of the Pacific Island Regional Fisheries Observer Programme (PIRFO) standards (CBT) by FFC 67. These standards are currently being trialed in the recent observer training courses.
- Observer debriefing and debriefing training conducted.	No debriefing training planned for 2008.
1.5 Develop and trial new technologies for enhancing quality of data and timeliness of data collection	
- No activities planned.	
1.6 Develop harmonised fisheries monitoring / data sharing protocols	
- No activities planned.	
1.7 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.
1.8 Develop and implement methodologies to verify fisheries data	
- No activities planned.	
1.9 Develop and trial new technologies, including satellite based technologies for the detection of IUU fishing activities	
- Pilot study prepared and contracting completed.	Resources have been provided to FFA as per SCIFISH contractual arrangements and tasks are expected to be completed by February 2009.
- Acquisition, interpretation of satellite images.	
- Analysis of targets against VMS and other reports.	
- Written report documenting pilot results.	
Result 2: Enhanced Stock Assessments	
2.1 Large-scale conventional and electronic tagging / biological studies	
- Preliminary tagging cruise Solomon Islands completed.	4 week cruise in Solomon Islands EEZ completed. 17,037 fish tagged with conventional external dart tags (6,207 skipjack, 36.4%; 10,431 yellowfin, 61.3%; and 387 bigeye, 2.3%). Archival tagging comprised 11 yellowfin 63-81cm with MK9 tags, and one bigeye (60cm) with the single LTD 2310 tag. A second 2 weeks cruise was also conducted in the Solomon Islands EEZ to trial a new larger vessel, the Soltai 105, to assess its suitability for the Phase 2 activities of the Pacific Tuna Tagging Programme (PTTP) (SCIFISH activities) throughout the wider western and central Pacific. The trial of the vessel proved highly successful. An additional 12,944 fish were conventionally tagged during this trial.
- Operational plan for regional tag-release programme in 2008 established.	Operational plan drafted and endorsed by SCIFISH Project Steering Committee and PTTP Steering Committee. See http://www.wcpfc.int/sc4/pdf/SC4-GN-IP4%20[PTTP%20Operational%20Plan].pdf
- Regional tagging preparation – vessel charter, equipment purchase, fishing	All logistics planned, approvals obtained and vessel charter and staffing agreements finalized.

approvals, short-term staff contracting completed.	
- Regional tagging cruise #1 completed.	Regional Tagging Cruise 1 has commenced (June 2008). Planned cruise includes, Federated States of Micronesia, Palau, Philippines, Indonesia, Papua New Guinea and Solomon Islands over a 5 month period.
- Tag recovery procedures implemented.	Tag recovery officer appointed (Mr Brian Kumasi). Pacific-wide recovery procedures implemented. Highlights include tag lotteries in association with Infish Tuna2008 conference in Bangkok and visits to Solomon Islands, Palau, Marshall Islands, Indonesia, Philippines and Papua New Guinea to promote tag recovery and implement procedures.
- Data processing conducted.	Activities commenced. Recovery issues documented in http://www.wcpfc.int/sc4/pdf/SC4-GN-IP5%20[PTTP%20Tag%20Recovery%20issues].pdf and the results of PTTP Phase 1 reviewed in http://www.wcpfc.int/sc4/pdf/SC4-GN-IP3%20[Review%20PTTP%20Phase%201].pdf . Preliminary analysis on electronic tagging completed and accepted for publication (Leroy et al. 2008) in <i>Reviews: Methods and Technologies in Fish Biology and Fisheries</i> .
2.2 Analysis of tagging, biological and fishery oceanographic data	
- No activities planned.	
2.3 Incorporate data / analytical results into stock assessment models	
- No activities planned.	
Result 3: Enhanced Understanding of the Pelagic Ecosystem	
3.1 Ecosystem model development and enhancement	
- Modelling services provider contracted.	Contract finalized with Collecte Localisation Satellite (CLS), based in Toulouse, France. Ecosystem modeler position at SPC advertised.
- SEAPODYM model development documented.	Technical documentation of revised SEAPODYM Model completed. Optimisation documented in Senina et al. in press, <i>Progress in Oceanography</i> , and general developments documented in Lehodey et al. 2008 WCPFC Scientific Committee EB-WP-10 - http://www.wcpfc.int/sc4/pdf/SC4-EB-WP10%20[SEAPODYM-V2].pdf
- Parameterised SEAPODYM models completed for skipjack, yellowfin and bigeye tuna.	Parameterisation and initial simulations completed for skipjack (Senina et al. in press, <i>Progress in Oceanography</i>) and bigeye Lehodey et al. in press, <i>Progress in Oceanography</i> .
3.2 Use of models for research / management applications	
- No activities planned.	

OCT PROJECT ACTIVITY	OUTPUT
Result 1: Enhanced Oceanic Fishery Monitoring	
1.1 Observer/port sampling workshops	
- National observer training courses in New Caledonia (NC) and French Polynesia (FP).	Scheduled for October 2008

1.2 Training attachments	
- Wallis & Futuna (WF) training attachment to SPC.	Attachment put on hold until WF establishes oceanic fishery.
1.3 Operational support for observer/port sampling programmes	
- Port sampling & observer support NC and FP.	<p><u>French Polynesia:</u> Scifish Observer Programme in French Polynesia began in April 2008 with 2 observers, 2 port samplers and 1 coordinator. Since commencement, 5 observer trips have been conducted on board domestic longliners (92 days at sea, 63 sets and more than 158,000 hooks observed). Over the same period, the longline fleet in French Polynesia undertook a total 3,561 sets (more than 8,000,000 hooks). Observer trips represent coverage of 1.8% (percentage of fishing days). The target observer coverage is 10%. 176 port sampling operations have been conducted during fish unloading. Sampling coverage was 75%. This coverage is lower than 2005 but the data are considered better as the boats are completely sampled. All observers' data have been sent to SPC to be entered to the observer database.</p> <p>Since Observer coverage remains low, French Polynesia plans to recruit 3 more observers to achieve the 5-10% target coverage. Pre-selection tests were organized for the end of July. Eight candidates sat for pre-selection and 4 were successful. These candidates will be trained as part of item 1.1 in October. The French Polynesia Observer/Port Sampling Programme will also participate in the tagging activities and albacore sampling activities for SCIFISH (see 2.1).</p> <p><u>New Caledonia:</u> Activities commenced in June 2008 with the appointment of an observer coordinator in New Caledonia. Since commencement, 3 observer trips have been conducted on board domestic longliners (37 days at sea, 24 sets and more than 45,000 hooks observed). Over the same period, the longline fleet in New Caledonia was at sea for 651 days. Observer trips represent coverage of 6%. The target observer coverage is 10%. Forty-two port sampling operations have also been conducted during fish unloading. Sampling coverage is 42% which is well above our objective of 10% for this year. All observer and port sampler data have been entered into the database. In addition, a mini report has been produced for each trip and given to fishers and ship owners.</p> <p>New Caledonia would like to recruit 1 more observer and port sampler before the end of the year. The coordinator will also undergo observer training and participate in observer trips.</p>
1.4 Quality control of observer/port sampling data	
- Development of French version of CBT documentation.	Activity planned for second 6 months of work plan
- Observer debriefing and debriefing training conducted.	Activity planned for early 2009.
1.5 Develop and trial new technologies for enhancing quality of data and timeliness of data collection	
- No activities planned.	

1.6 Develop harmonised fisheries monitoring / data sharing protocols	
- No activities planned.	
1.7 Undertake compliance audits and IUU risk assessments	
- No activities planned.	
1.8 Develop and implement methodologies to verify fisheries data	
- No activities planned.	
1.9 Develop and trial new technologies, including satellite based technologies for the detection of IUU fishing activities	
- Pilot study prepared and contracting completed.	A call for Expressions of Interest by contractors to undertake this work in New Caledonia has been prepared and will be advertised in September. Contractual arrangements and tasks are expected to be completed by February 2009.
- Acquisition and interpretation of satellite images.	
- Analysis of targets against VMS and other reports.	
- Written report documenting pilot results.	
Result 2: Enhanced Stock Assessments	
2.1 Large-scale conventional and electronic tagging / biological studies	
- Feasibility desk study and operational plan for albacore tagging completed.	Albacore biologist appointed and commenced in May 2008. Feasibility study and operational plan drafted and presented to SCIFISH Steering Committee meeting. Documents expected to be finalized by December 2008
- Possible trial albacore tagging in PNG pump boat fishery.	Contingent upon outcomes from feasibility study.
- Planning and preparation for sub-tropical albacore tagging (NZ, eastern subtropical convergence zone) completed.	Planning commenced and expected to be finalized by December 2008
- Sampling design established for age/growth, reproductive biology and vertical habitat utilization studies.	Planning commenced and expected to be finalized by December 2008
- Sampling programmes, data processing commenced	Sampling programmes to commence in second half 2008. Preliminary analysis of albacore otoliths microchemistry undertaken to assess feasibility of further more extensive trial to assess large-scale movement dynamics.
2.2 Analysis of tagging, biological and fishery oceanographic data	
- No activities planned.	
2.3 Incorporate data / analytical results into stock assessment models	
- No activities planned.	
Result 3: Enhanced Understanding of the Pelagic Ecosystem	
3.1 Ecosystem model development and enhancement	
- Parameterised SEAPODYM model completed for South Pacific albacore	Fisheries Oceanographer appointed. Initial albacore model parameterized. CPUE and length frequency data currently being recompiled for final parameterization. Expect to complete by December 2008.
3.2 Use of models for research / management applications	

- No activities planned.	
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3. Expenditure of Funds

3.1 ACP Component

Details of expenditure to 31 August 2008 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.

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%