



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)

6 Monthly Report Year 4

July 2011

Implemented by: Secretariat of the Pacific Community (SPC)
Funded by: 9th European Development Fund B Envelope

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1 Background

The SCIFISH project, “Scientific Support for Oceanic Fisheries Management”, implemented through the Contribution Agreements between the Secretariat of the Pacific Community (SPC) the Pacific Islands Forum Secretariat (ACP component) and between SPC and the government of New Caledonia (OCT component), commenced in February 2008 and is scheduled for completion on 31 December 2011. The total budget for the project is 6,605,000 Euros.

The project purpose is to provide a scientific basis for regional and national oceanic fisheries management decision-making by the Western and Central Pacific Fisheries Commission (WCPFC) and by Pacific ACP and OCT Governments.

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

This report summarizes the activities, achievements and progress towards stated objectives during 2011 and specifies activities completed during the 6th six-month period of the project (1 January – 31 July).

2 Project progress

2.1 Project Administration

SCIFISH has been implemented as per the submitted Year 4 work plan. The work plan requested access to contingencies and approval is still pending.

2.2 Difficulties and Changes

The following challenges/issues have been encountered:

- i. Some administrative errors by SPC has delayed the approval of the work plan and cost estimate for Year 4. In addition, clarification on audit requirements for the balance of year 3 budget was required before payment could proceed. These delays have impacted the cash flow for the project.

2.3 Review of Progress and Performance

The logical framework that guides implementation of SCIFISH is outlined in Figure 2.1. Substantial progress has been made towards achieving the purpose and objectives of the project, with a strong contribution of the project towards the development of WCPFC conservation and management measures, national tuna management plans and regional tuna stock assessments.

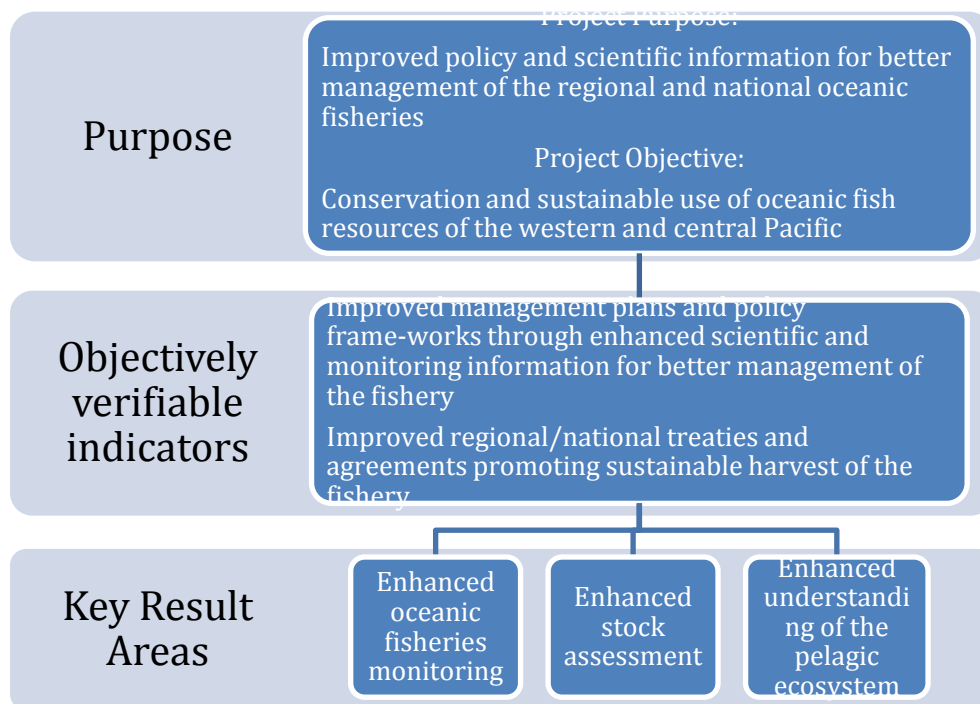


Figure 2.1. Logical Framework for SCIFISH

Activities conducted so far during 2011 contributing to the achievement of the Key Result Areas are summarised in section 2.4. It is worth noting the following achievements in the first 6 months of 2011:

- i. Provision of Observer Training to French Polynesia has provided the necessary capacity for the Observer activities in this OCT to continue beyond the completion of the SCIFISH project.
- ii. The qualification of 9 Observer Trainers with capabilities to provide biological sampling and tag recovery training within PIRFO Training Courses. This should provide the PIRFO and ROP the capacity for continued training of observers in these important areas beyond the completion of the SCIFISH project
- iii. The finalisation of Competency Based Training documentation and PIRFO standards for biological sampling and tuna tag recovery.
- iv. Cross validation of 90% of tag returns to maximize data quality for regional stock assessment has been completed.
- v. Country specific access added to tagging webpage with information derived from tuna tagging to ensure easy access to latest information by ACP and OCT fisheries departments.
- vi. Analyses completed on inter- annual and seasonal variation in oceanography and the dynamics of south Pacific Albacore.
- vii. Completion of a comprehensive assessment of the vulnerability of tuna fisheries in ACP and OCT in the Pacific Ocean to climate change.

2.4 Description of Progress Towards Results and Achievements for 2011

2.4.1 ACP Component

PROJECT ACTIVITY				
Result 1: Enhanced Oceanic Fishery Monitoring				
Performance and success indicators	Activity as per Contribution Agreement	Activities 2011	Results to be delivered – quantity, quality and time	2011 Achievements
<ul style="list-style-type: none"> Observer capacity and institutional infrastructure established so that P-ACPs can achieve all of national and regional observer and port sampling coverage and data collection requirements and standards. 100% of P-ACPs provided with capacity and tools for implementing continuous data auditing to maximise data quality for scientific decision making 100% of P-ACPs provided with 	1.1 Observer/port sampling workshops	<ul style="list-style-type: none"> Assessment of future training needs for Observer/Port Sampling Programs. Organisation of Observer Coordinators workshop Develop syllabus for tag seeding, biological sampling and spill sampling training included in observer training courses. 	<ul style="list-style-type: none"> Report via FFC the future training needs for Observer/Port Sampling Programs. 1 Observer Coordinators workshop. Tag seeding, biological sampling and spill sampling training included in 50% of PIRFO training courses 	<ul style="list-style-type: none"> Report on training needs provided to FFC Observer Co-ordinators workshop held in Honiara, June 2011 Biological sampling, tag recovery and seeding and spill sampling included in all PIRFO approved trainings
	1.2 Training Attachments	No activities planned for Year 4	<ul style="list-style-type: none"> Four P-ACP trainers certified. 	<ul style="list-style-type: none"> Nine P-ACP trainers certified
	1.3 Operational Support for observer/port sampling programs	<ul style="list-style-type: none"> MOUs to facilitate tag recovery 	<ul style="list-style-type: none"> MOUs established with SB,MI, FSM to facilitate tag recovery 	<ul style="list-style-type: none"> MOUs established with FSM, RMI. SB and KI
	1.4 Quality control of observer/port sampling data	<ul style="list-style-type: none"> No activities planned for Year 4 		
	1.5 Develop and trial new technologies for enhancing quality of data and timeliness of data collection	<ul style="list-style-type: none"> Implement spill sampling trials in collaboration with WCPFC 	<ul style="list-style-type: none"> Results of spill sampling trials reported to WCPFC SC7 	<ul style="list-style-type: none"> Reporting due December 2011

capacity, tools and access to information for detecting and managing IUU fishing activities.	1.6 Develop harmonised fisheries monitoring / data sharing protocols (FFA)	<ul style="list-style-type: none"> Develop harmonised regional database templates for the dissemination of MCS information, harmonized Vessel of Interests List, and rating index system to indicate surveillance priority of vessels 	<ul style="list-style-type: none"> Software demonstrated to FFA MCS Working Group 	<ul style="list-style-type: none"> Reporting due December 2011
	1.7 Undertake compliance audits and IUU risk assessments (FFA)	<ul style="list-style-type: none"> No activities planned for Year 4 		
	1.8 Develop and implement methodologies to verify fisheries data (SPC-FFA)	<ul style="list-style-type: none"> No activities planned for Year 4 		
	1.9 Develop and trial new technologies, including satellite based technologies for the detection of IUU fishing activities	<ul style="list-style-type: none"> No activities planned for Year 4 		
Result 2: Enhanced Stock Assessment				
<ul style="list-style-type: none"> Establish the most comprehensive tagging dataset for tropical tunas in the WCPO for inclusion in regional stock assessments and analyses of population 	2.1 Large-scale conventional and electronic tagging / biological studies	<ul style="list-style-type: none"> Implement tagging cruises Implement tag seeding program. Conduct data processing. Implemented tag recovery procedures including the establishment of sub- 	<ul style="list-style-type: none"> 1 PNG tagging cruise completed. 1 central Pacific cruise completed. Tag reporting rate estimated. Database 100% up to date processing conducted. 6 sub-regional tag 	<ul style="list-style-type: none"> PNG tagging cruise completed Reporting due December 2011 Reporting due December 2011 Reporting due December 2011 Recovery officers established

dynamics.		regional tag recovery officers.	recovery officers established.	
	2.2 Analysis of tagging, biological and fishery oceanographic data	<ul style="list-style-type: none"> • Descriptive analyses of tagging data • Statistical analyses of conventional and electronic tags for yellowfin, skipjack and bigeye 	<ul style="list-style-type: none"> • 3 Sub regional reports documenting tagging activities provided to ACP countries via web-based access • 1 Report documenting analysis of population dynamics of yellowfin, skipjack and bigeye from conventional and electronic tags provided to WCPFC. 	<ul style="list-style-type: none"> • Reporting due December 2011 • Reporting due December 2011
	2.3 Incorporate data / analytical results into stock assessment models	<ul style="list-style-type: none"> • Prepare tagging data for inclusion in 2011 stock assessments provided to WCPFC 	<ul style="list-style-type: none"> • Tagging data included in 2011 stock assessment as appropriate 	<ul style="list-style-type: none"> • Reporting due December 2011
Result 2: Enhanced Understanding of the Pelagic Ecosystem				
<ul style="list-style-type: none"> • Provide ACPs with infrastructure to evaluate tuna management policies in the context of current and future environmental variability at both the regional and EEZ scales. 	3.1 Ecosystem model development and enhancement	<ul style="list-style-type: none"> • No activities planned for Year 4 	<ul style="list-style-type: none"> • No activities planned for Year 4 	
	3.2 Use of models for research / management applications	<ul style="list-style-type: none"> • Report writing 	<ul style="list-style-type: none"> • 1 report evaluating time-area closures for tropical tuna management • 2 reports documenting EEZ scale oceanographic effects for KI and PNG. 	<ul style="list-style-type: none"> • Deferred to December 2011 for reporting

2.4.2 OCT Component

Over the course of 2011 the focus will be on the following:

PROJECT ACTIVITY				
Result 1: Enhanced Oceanic Fishery Monitoring				
Performance and success indicators	Activity as per Contribution Agreement	Activities 2011	Results to be delivered – quantity, quality and time	2011 Achievements
<ul style="list-style-type: none"> Observer capacity and institutional infrastructure established so that P-OCTs can achieve 100% of national and regional observer and port sampling coverage and data collection requirements and standards. OCTs provided with an evaluation of the feasibility of applying existing satellite technologies for detecting IUU fishing activities. 	1.1 Observer/port sampling workshops	<ul style="list-style-type: none"> LL observer training course provided to FP. FP coordinator trained in biological sampling coordination and specimen handling. Attend Observer Coordinators Workshop Assessment of improvements in fishery monitoring information due to increased observer and port sampling coverage 	<ul style="list-style-type: none"> 1 LL observer training course provided to FP 100% capacity for biological sampling coordination by National coordinators Participation in Observer Coordinators workshop by FP and NC Report documenting the improvements in fishery monitoring information due to increased observer and port sampling coverage in NC and FP. 	<ul style="list-style-type: none"> 6 FP observers certified for LL National coordinator trained in biological sampling Observer coordinators workshop held in June 2011 in Honiara Reporting deferred until December 2011
	1.2 Training Attachments	No activities planned for Year 4		
	1.3 Operational Support for observer/port sampling programs	<ul style="list-style-type: none"> Observer and port sampling support for NC and FP 	<ul style="list-style-type: none"> Minimum of 5% LL observer coverage in FP and NC Minimum of 10% port sampling coverage in NC and FP 	<ul style="list-style-type: none"> Reporting deferred until December 2011
	1.4 Quality control of	<ul style="list-style-type: none"> No activities planned 		

	observer/port sampling data	for Year 4		
	1.9 Develop and trial new technologies, including satellite based technologies for the detection of IUU fishing activities	<ul style="list-style-type: none"> No activities planned for Year 4 		
Result 2: Enhanced Stock Assessment				
<ul style="list-style-type: none"> Establish the most comprehensive tagging and biological parameter dataset for south Pacific albacore for inclusion in regional stock assessments and analyses of population dynamics. 	2.1 Large-scale conventional and electronic tagging / biological studies	<ul style="list-style-type: none"> Implement albacore tagging. Process data Implement tag recovery -Target sampling on LL vessels completed to fill gaps in gonad and otoliths spatial distribution. Undertake otoliths microchemistry analyses to estimate movement. Analyse muscle/organ isotope and diet to estimate movement. 	<ul style="list-style-type: none"> 1 Albacore tagging cruise completed. Gonad and otoliths sampling completed 30 otoliths analysed for microchemistry content 100 stomachs analysed for diet content and 100 muscle samples analysed for isotope composition. 	<ul style="list-style-type: none"> Sampling completed.
	2.2 Analysis of tagging, biological and fishery oceanographic data	<ul style="list-style-type: none"> Analysis of reproductive & growth biology of albacore Assess the feasibility of otolith microchemistry as to indirectly measure movement rates. Assess the feasibility of isotope diet mismatch method for estimating 	<ul style="list-style-type: none"> 1 report documenting the reproductive & growth biology of albacore provided to WCPFC. 1 report on vertical movement. Proof of concept for otolith microchemistry as to indirectly measure movement 	<ul style="list-style-type: none"> Reporting due December 2011

		movement.	rates provided to WCPFC. <ul style="list-style-type: none"> • Proof of concept for isotope diet mismatch method for estimating movement provided to WCPFC. 	
	2.3 Incorporate data / analytical results into stock assessment models	<ul style="list-style-type: none"> • Provide reproductive ogive and growth curves estimated for inclusion in 2011 stock assessments provided to WCPFC 	<ul style="list-style-type: none"> • Albacore reproductive ogive and growth curves included in 2011 stock assessment as appropriate. 	<ul style="list-style-type: none"> • Reporting due December 2011
Result 3: Enhanced Understanding of the Pelagic Ecosystem				
Provide 100% P-OCTs with infrastructure to evaluate tuna management policies in the context of current and future environmental variability at both the regional and EEZ scales.	3.1 Ecosystem model development and enhancement	<ul style="list-style-type: none"> • No activities planned for Year 4 	<ul style="list-style-type: none"> • No activities planned for Year 4 	

2.5 Aquittal of Expenditure in Year 4 for the 6 month period 1 January to 30 June 2011

SCIFISH YEAR 3 - FINANCIAL SUMMARY OF EXPENDITURE BY ACTIVITIES				
For period 01 January 2011 to 30 June 2011				
ACTIVITIES	YEAR 4 BUDGET		Expenditure for year 4	
	in CFP	in EUROS	in FCFP	in EUROS
ACP COMPONENT				
Technical Assistance				
1.1 Port sampling & observer coordination	0	0	0	0
1.2 Port sampling & observer trainer	1676730	14051	1676782	14051
1.3a Tagging Technician	8353222	70000	3935626	32980
1.3b Tagging Technician (2)	1759069	14741	0	0
1.4a Ecosystem Modeller	1071957	8983	5883261	49301
1.4b Ecosystem Modeller (2)	5150596	43162	0	0
1.5 Ecosystem Modelling Services	0	0	0	0
MCS Activities				
2.1 Harmonised MCS data sharing protocols	37226969	311962	0	0
2.2 Compliance audits, IUU risk assessments	0		0	0
2.3 Data verification methodologies	0		0	0
2.4 Satellite detection of IUU fishing pilot	0		0	0
Travel				
3.1 Port Sampling & Observer	1344868.7	11270	517265	4334
3.2 Tagging	1080787.6	9057	0	0
3.3 Ecosystem Modelling	0	0	0	0
Equipment				
4.1 Port Sampling & Observer	0	0	0	0
4.2 Tagging / biological	4716706	39526	4297532	36013
4.3 Computer	483293	4050	505819	4238
Tagging operations				
5.1 Vessel charter / operations	10162411	85161	0	0
5.2 Tag rewards, publicity, etc	1879236	15748	0	0
Training				
6.1 Port Sampling & Observer	572792	4800	0	0
6.2 Stock Assessment	0	0	0	0
Observer & Port sampling operations				
7.1 National observer programmes	0	0	2171	18
7.2 National port sampling programmes	0	0	85804	719
Data Processing and IT support				
8.1 Scientific programming support	814439	6825	4945035	41439
8.2 Data processing support	3909665	32763	6000	50
Administrative Support / Evaluation				
	1883651	15785	2951322	24732.
SPC Overhead @ 7% of Direct costs				
	5316229	44550	3675	30
SubTotal ACP Component	87402625	732434	24810292	207910

SCIFISH YEAR 3 - FINANCIAL SUMMARY OF EXPENDITURE BY ACTIVITIES				
For period 01 January 2011 to 30 June 2011				
ACTIVITIES	YEAR 4 BUDGET		Expenditure for year 4	
	in CFP	in EUROS	in FCFP	in EUROS
PTOM COMPONENT				
Technical Assistance				
1.1 National Coordinator FP	5232935	43852	0	0
1.2 National Coordinator NC	5232935	43852	2653396	22235
1.3a Albacore Biologist	0	0	2653396	22235
1.3b Albacore Biologist (2)	3724105	31208	2653396	22235
1.4 Fisheries Oceanographer	5871599	49204	4627103	38775
1.5 Ecosystem Modelling Services	0	0	0	0
MCS Activities (contracted work)				
2.1 Satellite detection of IUU fishing pilot (NC)	0	0	0	0
Travel				
3.1 FP	477326	4000	1681960	14094
3.2 NC	477326	4000	0	0
3.3 WF	0	0	0	0
3.4 Regional	1815751	15216	77881	652
3.5 Contractor travel	477326	4000	0	0
Equipment				
4.1 Fishery monitoring FP	0	0	0	0
4.2 Fishery monitoring NC	0	0	0	0
4.3 Fishery monitoring WF	0	0	0	0
4.4 Tagging / biological	2664677	22330	2178831	18258
4.5 Computer	56563	474	70750	592
Tagging operations				
5.1 Vessel charter	3818615	32000	1886765	15811
5.2 Tag rewards, publicity	59665	500	0	0
5.3 Contract personnel	4420286	37042	2422695	20302
Training				
6.1 FP	2275179	19066	2021588	16940
6.2 WF	0	0	0	0
Observer & Port sampling operations				
7.1 FP Observers	9504773	79650	2842603	23821
7.2 NC Observers	3579952	30000	1390774	11654
7.3 WF Observers	0	0	0	0
7.4 Port sampling FP	7482577	62704	4176744	35001
7.5 Port sampling NC	4773269	40000	1053023	8824
Data Processing and IT Support	0	0	1925426	16135
Administrative Support	2627685	22020	6300	52
SPC Overhead @ 7% of Direct costs	3153222	26424	0	0
SubTotal PTOM Component	67725776	567542	34326306	287654

3 Project Implementation

The implementation of the Project will be undertaken by the Oceanic Fisheries Programme (OFP) of the SPC. The OFP has provided overall project support through the OFP Manager and the respective OFP section heads (Statistics & Monitoring, Stock

Assessment & Modelling and Ecosystem Assessment & Monitoring Sections). Project activities will be integrated into annual OFP work plans.

The Project Steering Committee (PSC) met during the 2011 SPC Heads of Fisheries (February 2011). The European Commission and the RAOs were invited to attend. SPC acted as the Secretariat for the PSC.

4 Report Prepared By:

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