Pacific Fisheries for Food Security Program

Final Evaluation Report

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Executive Summary

The Pacific Fisheries for Food Security Program (PFFSP) was initiated in November 2010 to support the Pacific Community (SPC) to deliver priority food security projects across the Pacific Islands region, through its Division of Fisheries Aquaculture and Marine Ecosystems (FAME). The Program content was developed by SPC – FAME, initially in two Parts comprising four and three Components respectively. An additional Component was added under Part 3 in 2014. Funding was budgeted over a four year period as summarised below.

Table i: PFFSP – Funding by Component				
	Program Components	Funding		
Part 1	1.1 Scientific advice for the development of oceanic	AUD 1,027,500		
	fisheries management measures			
	1.2 Management and development of export fisheries for	AUD 1,082,500		
	aquarium fish			
	1.3 Development of mariculture opportunities	AUD 1,167,500		
	AUD 1,227,500			
	products			
Part 2	2.1 Tuna data management and artisanal tuna data	AUD 2,036,500		
	2.2 Inland aquaculture	AUD 1,217,500		
	2.3 Deepwater snapper	AUD 1,192,500		
Part 3	3.1 Community based fisheries management workshop	AUD 300,000		

The Final review was carried out in November 2015. The review broadly followed the structure of the Mid-Term Review (MTR), in the sense that Program impact was evaluated across a set of standard criteria, and ratings provided for selected criteria using a standard scale. The impact ratings are summarised below.

Table ii: Evaluation Ratings				
Evaluation Criteria	Rating (1-6)	Explanation		
Relevance	6	The Program is well aligned with the SPC/DFAT partnership and funding agreements and current SPC FAME Division and sector strategies		
Effectiveness	5	The Program has been implemented as it was designed and has been effective in assisting Pacific Island Countries and Territories		
Efficiency	5	The Program is well managed, and responsive.		
Sustainability	5	The Program is supporting member countries/territories, against a background where sustainability without external support is not a realistic expectation. The move to core funding allows for SPC sustain an equivalent level of support at Program conclusion.		
Gender equality	4	There are systems in place but a need to raise awareness about SPC and FAME commitments and implementation on this issue.		
Monitoring and Evaluation	5	SPC FAME has committed resources to appoint a Monitoring, Evaluation and Learning Advisor within the Division.		
Analysis and Learning	4	Understanding lessons learned appears to be an informal process that would benefit from being strengthened.		

The Review's overall conclusions in relation to the Program are:

- All PFFSP Components, apart from C 2.1 (artisanal data) had concluded at the time of the review
- All Components have been effective in contributing towards development/food security objectives of the Program and SPC-FAME.
- The recommendations of the MTR have been implemented in part. Some have been accommodated as part of the move towards core funding and the attendant shift in focus of the M&E system. Others have been fully addressed; while some issues remain e.g. with respect to gender equity.
- There is an ongoing transition of the Program Component activities towards a core funding model. The Program has benefited from integration into the FAME core program, particularly through synergies available through use of other FAME resources and co-funding arrangements between different donors and agencies.
- FAME has shown its commitment to improving its monitoring and reporting performance through the appointment of a dedicated MEL Advisor within the Division.
- There are some areas suggested for improvement:
 - Gender equity FAME has a positive approach to this area in terms of generic policies, and inclusion of gender aspects in project design, however this issue did not feature in Component reports or discussions with Component staff.
 - Learning Procedures for analysis and learning arising from Component activities appear to be largely informal, and learning is held as individual experience rather than through a systematic approach designed to improve delivery of outcomes.

Recommendations

Final Review Recommendation 1: That SPC FAME makes use of the new (2015) SPC-wide process to support gender analysis to highlight the importance of gender considerations in project planning and implementation, focussing on shared benefits between women and men.

Final Review - Recommendation 2: That SPC formalise its approach to post-project/event review of its activities to identify lessons-learned and promote their incorporation into future work and project/activity design.

Final Review - Recommendation 3: That SPC implement specific monitoring approaches specified in the PFFSP Design documents (Phase 1 and Phase 2) including/in particular:

- Tracer studies (or longitudinal studies) of participants in capacity-building activities (e.g. training, sponsored study)
- Maintaining a status record of national sector/sub-sector plans and policies/strategies, potentially using a 'Policy Bank' model.

Background

The Pacific Fisheries for Food Security Program (PFFSP) was initiated in November 2010 to support the Pacific Community (SPC) to deliver priority food security projects across the Pacific Islands region, through its Division of Fisheries Aquaculture and Marine Ecosystems (FAME). The Program was developed as one element of a fisheries component within the Government of Australia's Food Security through Rural Development Initiative. The fisheries component (Pacific Fisheries through Rural Development) was designed to lift fisheries productivity, improve rural livelihoods and build community resilience.

The Program content was developed between the Australian Department of Foreign Affairs and Trade (DFAT) and SPC- FAME. The Program was formalised in a Funding Agreement in 2010 that provided for the four components of Part 1¹. Second and third Parts were added subsequently. Funding was budgeted over a four year period for each Component of Parts 1 and 2, and for a one-off activity under Part 3.

Changes to the Program were implemented by means of formal amendments to the funding [grant]
agreement between SPC-FAME and the Government of Australia, as summarised in Table 1.

Table 1: PFFSP – Program amendments						
Amendment Date		Summary of amendment	Change in	Adjusted		
number:			financial limit	financial limit		
1	November	Extension of agreement (Part 2).	Increase of	9,578,105		
	2011		4,757,755			
2	April 2013	Changed payment date of tranche 5.	Nil	9,578,105		
3	February Redistribution of Tranche Payments 5		Nil	9,578,105		
	2014	and 6; change to payment dates.				
4 August 2014 Community based ecosystem approach		Increase of	9,878,105			
		to fisheries management four day	300,000			
		workshop (Part 3).				
5	October	No cost extension to 31 May 2016 to	Nil	9,878,106		
	2015	complete Component 2.1 activities.				

Table 2 shows the funding allocated to the Program Components as set out in the Program Concept descriptions agreed between SPC and the Government of Australia. The full concept notes for Parts 1, 2 and 3 are attached as Annexes A, B, and C respectively.

¹ In the Mid-Term Review these were referred to as 'phases' to reflect their different starting dates; the current document uses the term 'Parts' to align with the wording of the Funding Agreement and its amendments.

Table 2: Funding Allocation – as agreed during program design				
PFFSP: Pr	ogram Components	Funding		
Part 1	1.1 Scientific advice for the development of oceanic fisheriesAUD 1,027management measuresAUD 1,027			
	1.2 Management and development of export fisheries for aquarium fish	AUD 1,082,500		
	1.3 Development of mariculture opportunities	AUD 1,167,500		
	1.4 Assistance to meet export requirements for marine products	AUD 1,227,500		
Part 2	2.1 Tuna data management and artisanal tuna data	AUD 2,036,500		
	2.2 Inland aquaculture	AUD 1,217,500		
	2.3 Deepwater snapper	AUD 1,192,500		
Part 3	3.1 Community based fisheries management workshop	AUD 300,000		

The Program design incorporated provision for a mid-term review and an 'end of project evaluation' at the end of year four. The Mid-term review (MTR) was conducted in late 2013. At the time of the MTR the Program represented approximately 15% of the SPC-FAME annual Divisional budget; in its final year (2015) this proportion had reduced to approximately 9%.

The current Report presents the Final Evaluation of the Program, carried out in November 2015.

Evaluation purpose and context

The 2011 Concept note for Part 2 noted that the key purpose of the Monitoring and Evaluation framework is to:

- a. provide accountability to donors and other key stakeholders on programme outputs and outcomes, including meeting AusAID reporting and evaluation requirements, and
- b. identify what has worked well and what has not, lessons for improvement and future direction for the project.

The Concept note also described the character of the mid-term and final evaluation [reviews] as envisaged at the time of project preparation:

Mid-Term Review:

- assess project operation- how well is it going, whether on track to meeting objectives, and outputs; and
- get feedback from key partner agencies and clients (SPC members) on satisfaction with quality of project outputs and delivery

Final Evaluation:

to assess achievement of project outcomes and impact based on the indicators listed in Tables 1 to 4 as well as any additional indicators developed in Year 1.

- data gathered to assess the indicators will include objective quantitative data (e.g. statistics on income and employment) as well as qualitative feedback (e.g. surveys and interviews) from participating PICTs and key partner agencies.

In practice the MTR was a reasonably substantial exercise involving a two person team (plus DFAT representative) meeting with SPC staff and conducting in-country consultations in New Caledonia, PNG, Kiribati, Fiji and Samoa.

The final review was limited to desk-based assessment along discussion with SPC staff; no input was sought from participating countries.

Specifically, the Terms of Reference for the Final Review (Annex D) set out the following content for the Final Review Report:

- a. Executive summary covering the main findings
- b. Background and methods
- c. Evaluation of the purpose, scope and implementation (process evaluation). Process evaluation to also include assessment of the uptake of recommendations from the mid-term evaluation
- d. Evaluation of the relevance, effectiveness, efficiency and sustainability (impact evaluation). Impact evaluation to also examine gender equity and any other crosscutting issues relevant to the project
- e. Evaluation of the expenditure, with SPC providing the financial statement for the project
- f. Conclusions and recommendations, including key results and learnings
- g. Appendices as required.

Evaluation Process

The Lead Reviewer from the MTR was contracted to carry out the final review. This allowed for direct continuity between the MTR and the Final Report. The current Report, while drafted as a stand-alone report, also builds directly on MTR. In practice this means that the current report refers to, but does not repeat the full descriptive content or analysis (e.g. component summaries) of, the MTR.

The review process involved:

- i. Review of documentation provided by SPC-FAME. This included program/component reports, SPC corporate documents; grant agreements; and staff reports as listed in Annex E.
- Staff interviews: The Reviewer interviewed staff on site at SPC office in Noumea over the period 2 13 November, and conducted consultation/ interviews via phone/skype/email with SPC staff, Australian Government representatives, and (in one case) Forum Fisheries Agency (FFA) staff contributing to joint activities. A list of people spoken to/contacted during the review is attached as Annex F.
- iii. Analysis and report writing. A draft report was provided in early December 2015 and comments from SPC reflected in the Final Report submitted in January 2016.

The report is set out in accordance with the terms of reference, with some further elements agreed with SPC-FAME in the course of the review:

- The 'Process' aspect of the review focuses largely on the agency responses to the recommendations of the MTR
- For the 'Impact' evaluation, the material from DFAT on evaluation criteria and ratings that guided the MTR were used as a point of reference for the current review. In particular, the DFAT five point scale is used in the current review to provide continuity between the midterm and final reviews/evaluations.
- In identifying 'cross-cutting issues relevant to the project' the Review drew in the Terms of Reference for the MTR and accordingly focussed on 'Monitoring and Evaluation' and 'Analysis and Learning' in addition to Gender Equity.
- As in the MTR, the assessment and ratings for each of the evaluation criteria are based on a combination of Program and Component considerations.

Evaluation Findings

Process Evaluation

The purpose and scope of the Program remain unchanged since the Program's inception. The only significant change in content has been the addition of a Part 3 in 2014, focussing on a community-based fisheries management workshop.

Summary of SPC response to Recommendations of the Mid-Term Review

Soon after the acceptance of the MTR, each agency (DFAT and SPC) documented a management response to the MTR recommendations. These formal management responses are summarised in Annex G.

The eight recommendations are discussed in turn below; they are presented in an order that illustrates the links between the implementation of the different recommendations.

MTR Recommendation 7: That DFAT considers future support in the form of core funding to support SPC FAME core services, subject to appropriate in-house project management and Monitoring and Evaluation systems.

<u>Context for the Recommendation</u>: The MTR found that most of the project components aligned with FAME core services, and therefore supported the shift from fixed project-related funding (such as PFFSP) to ongoing budget support to FAME core services.

<u>Action /Response</u>: Both SPC and DFAT supported the Recommendation in principle. During the term of the Program (2014) DFAT and SPC adopted an agency-wide *Partnership for Pacific Regionalism and Enhanced Economic Development 2014 – 2023*. The intent of this partnership is implemented through a multi-year funding agreement² which indicates funding of AUD2,400,000 for each year over four years (2015 – 18) as 'tagged funding to support SPC's FAME Strategic Plan 2013-2016'.

² "Regional Contribution to Core Services and Programs (Pacific) between Department of Foreign Affairs and Trade (DFAT) and Secretariat of the Pacific Community (SPC)" DFAT Agreement number: 69294/1 (amendment 1).

As the Program components have come to completion, SPC FAME has considered its future work program in light of prevailing priorities and country needs. In several cases PFFSP activities have been continued after the conclusion of the PFFSP program. In other cases, the activities have been cut back, or refocused on other areas. In effect a transition has already been occurring between Program funding and core funding of activities from the FAME Budget (including DFAT funding).

Table 3: Summary of post-PFFSP transition for Program Components				
Program Component	Short description	Transition		
1.1 Scientific advice for the	One position funded to provide	Position continued under alternate funding		
development of oceanic	tailored advice to PICs on the	post-PFFSP.		
fisheries management	implications of scientific advice, as well			
measures	as liaise with the Forum Fisheries			
	Agency (FFA). Previously this role had			
	been sponsored by DFAT for one year			
1.2 Management and	One position funded to focus on	No dedicated position; response to specific		
development of export	aquarium fish exports, in line with SPC	country requests provided by other staff as		
fisheries for aquarium fish	member needs.	available.		
1.3 Development of	One position funded to continue	Position continued under alternate funding		
mariculture opportunities	mariculture work when previous	post-PFFSP.		
	project funding came to an end.			
1.4 Assistance to meet	One position funded to focus on	Intention to appoint one position focussing		
export requirements for	export facilitation, as recommended	on post-harvest handling in small scale		
marine products	by an Independent External Review of	fisheries. FFA has taken the lead on		
	SPC.	industrial processing.		
2.1 Artisanal tuna data	Two positions funded to support the	Component still running; both positions are		
and tuna data	continuation of work on improved	to continue beyond the PFFSP term under		
management	data management, including a specific	alternative funding (Australian core funding		
	focus on artisanal tuna fisheries.	to FAME).		
2.2 Inland aquaculture	One position funded to continue	Position continued under alternate funding		
	ongoing work with a focus on inland	post-PFFSP, with some expanded staff		
	aquaculture, particularly in Melanesia	responsibilities.		
2.3 Deepwater snapper	One position funded in response to	No dedicated position; response to specific		
	repeated requests from particular	country requests provided by other staff as		
	member countries for information to	available.		
	support sustainable utilisation of			
	deepwater snapper stocks.			
3.1 Community based	Additional component agreed 2014:	Stand-alone process resulted in adoption of		
fisheries management	Workshop on community-based	"A new song for coastal fisheries –		
	ecosystem approach to fisheries	pathways to change: The Noumea		
	management.	Strategy". Note that the team associated		
		with this work was a recipient of a 2015 SPC		
		Director-General's Awards for staff		
		excellence.		

In the course of the current review DFAT also stated "our clear intention would be to roll this into future core support to FAME, accompanied of course by annual discussions about FAMEs priorities and where we would agree that the focus of our support can centre. We would want to ensure that between the mix of general Core Support to SPC and dedicated Core support to FAME, we end up with an agreed mix that continues to support both the offshore stock assessments and the key inshore fisheries, "New Song" priorities in a mutually acceptable manner. This would not preclude

additional 'one-off' funding of special activities that might arise, pending funding availability in the sector."

MTR Recommendation 3: That FAME reviews the budget allocations and projections for the term of the Program and discusses with DFAT changes that may be appropriate to improve delivery or reflect changing priorities.

<u>Context for the Recommendation</u>: At the time of the MTR there was an imbalance in spending across the Program Components due to delayed recruitment in some cases and high initial expenditure in others. This led to consideration of transfers between components.

<u>Action/Response</u>: this issue was effectively addressed through amendments to the payment tranche schedule and the natural rebalancing of expenditure as work proceeded under the various Components.

MTR Recommendation 2: That FAME reviews the M&E framework to ensure that it is useful as a management tool through:

- a) Reviewing Component outcome statements and performance measures to ensure that they are relevant (in light of progress to date and increased flexibility under the Australian Government funding envelope) and follow a consistent approach;
- *b) Reviewing data relating to performance indicators as part of the annual work planning process;*
- c) Develop[ing] a revised version of the M&E matrix that focuses on outcomes and indicators at Program and Component level.

<u>Context for the Recommendation</u>: The MTR reviewed the monitoring and evaluation (M&E) framework and matrix in some detail and observed that there were inherent difficulties in determining a causal link between PFFSP activities and the high-level Program goals. The MTR further noted that the matrix was complex and of limited usefulness for management.

<u>Action/Response</u>: Both SPC and DFAT acknowledged the need to strengthen the area of monitoring and evaluation. SPC noted in its management response that revising the M&E matrix 'could be a big task' that may need additional in-house attention/support.

The agreement in principle to move to core funding appears to have been associated with a shift in mindset towards long-term SPC strategic priorities rather than the details of the PFFSP program M&E Framework. In that context, it appears that the idea of reviewing the Framework, indicators and matrix was set aside, although some staff continued to use the matrix for component reporting.

Instead, SPC-FAME took perhaps a more fundamental step and committed resources to create a dedicated position of Monitoring, Evaluation and Learning Advisor within the Division. An appointment was made to this role in 2015, and the appointee has begun the task of bringing a systematic, Division-wide approach to M&E, reporting, learning, and linking these with project design. The role also includes aligning FAME's work on monitoring, learning and evaluation, as well as planning, with SPC's organisation-wide approach to these processes.

MTR Recommendation 1: That FAME should ensure that there is an explicit focus on Program/Component objectives and outcomes in the FAME annual planning process.

<u>Context for the Recommendation</u>: The MTR noted 'a tendency for activities to be drawn away from the Component objectives and outcomes', and therefore recommended greater focus on these.

<u>Action/Response</u>: SPC-FAME, in its management response, highlighted the role of in-house planning and monitoring systems (including the IRIS system) in addressing this. DFAT noted that PFFSP funding 'is relatively seamless with SPC FAME's core business, which is a positive'. The review confirms both of these views and finds that this issue, as raised in the MTR, is no longer a matter of note or concern. It appears that as the Program has progressed towards core funding, the focus has been more on SPC FAME strategic objectives and less on the details of the PFFSP Program specifications. This underlines the 'seamless' link with core business identified by DFAT. During the current review, DFAT representatives reiterated that DFAT is very keen to focus effort on SPC's core work with a view to the 'big picture', rather than focusing on issues of detail.

MTR Recommendation 6: That FAME regularly reviews gender disaggregated data on participation of women in its activities and takes appropriate steps to increase the participation of women.

<u>Context for the Recommendation</u>: The MTR noted room for improvement with respect to data and participation of women in SPC activities.

<u>Action/Response</u>: SPC FAME collects gender disaggregated data on participation of women in SPCrun activities such as workshops and training. This, and the incorporation of gender aspects into FAME's work, is discussed under Gender Equity.

Recommendation 8: That DFAT and FAME take note of the thematic areas raised by SPC members through the review process.

<u>Context for the Recommendation</u>: The MTR was required to report on 'Developing future directions to inform the development of [DFAT's] four year Pacific Fisheries Delivery Strategy and future support for SPC FAME'.

<u>Action/Response</u>: Interviews with DFAT staff indicated that the information in the MTR recording issues raised during country consultations had 'gone into the mix' of issues considered in DFAT planning.

MTR Recommendation 4: That FAME places increased emphasis on economic and social viability of development activities, in addition to technical considerations.

<u>Context for the Recommendation</u>: The MTR noted that those Components promoting viable enterprises (e.g. mariculture/aquaculture; aquarium exports; deep water snapper) were doing so 'against a background of limited success, and, at times, failure of previous ventures'.

<u>Action/Response</u>: The current review did not go into this issue in detail, but the issues of economic and social/environmental sustainability remain valid, as it is evident that FAME staff are continually faced with making judgements on the merits of different proposals and the viability of ventures proposed by member SPC members. Aspects of this issue are discussed further under Analysis and Learning.

MTR Recommendation 5: That FAME places specific emphasis on compatibility and accessibility across databases, and on data aspects of coastal / artisanal fisheries.

<u>Context for the Recommendation</u>: The MTR reported that country consultations 'revealed a degree of uncertainty about the relationship between different initiatives relating to data; their coverage, role and purpose, capacity for sharing data and compatibility', and accordingly encouraged more emphasis on these areas.

<u>Action/Response</u>: At the time of the MTR the review team heard of emerging initiatives to address some of these issues. However this is an area where technology moves fast; the current review heard one such initiative, (the 'l2 Fish Portal' which was presented to the Mid-Term Review Team as having much potential) had not proceeded, as staff changed and other technologies /approaches came on stream.

The Review was advised that much progress has been made on rewriting elements of the database using advances in web-based techniques, in order to improve efficiency (especially ease of data and avoiding duplication). Progress was also reported on the crossover with coastal databases and management needs. The Review was surprised that only one formal analysis had been carried out on catch around inshore FADs³, so more work may be needed in this area.

Conclusion of Process Evaluation

The implementation of MTR Recommendation 7 above, relating to the shift to core funding, has influenced the adoption of several of the other recommendations. In particular – the focus has shifted away from addressing the detail of the Program M&E framework/matrix (i.e. project-specific activities) towards strategic priorities adopted by FAME and alignment with SPC's priorities.

Taken overall, the recommendations of the MTR have been implemented in part. Some became absorbed (or less relevant) with the move towards core funding and the attendant shift in focus of the M&E system. Others have been fully addressed, while some issues remain e.g. with respect to gender equity.

³ (especially since Number of PICTs with sustainable fish aggregating devise programmes established to enhance food security and *livelihoods[sic]* is cited as a key indicator of better management of coastal fisheries in the DFAT-SPC ten year partnership agreement)

Impact Evaluation

This section provides an assessment against each of the criteria set out in the Terms of Reference. The content is guided by the questions included in the Terms of Reference of theMTR. Ratings are provided for nominated criteria using the standard scale below.

Table 4: Evaluation Rating Scale				
Satisfactory Less than satisfactory				
6	Very high quality	3 Less than adequate quality		
5	Good quality	2	Poor quality	
4	Adequate quality	1	Very poor quality	

The MTR provided a comprehensive discussion of the criteria under review. This full description is not repeated here, but is taken as a baseline for the current review. That is, aspects that differ between the MTR and the current review are highlighted. Similarly, the MTR ratings are taken as a baseline, and changed only if there are departures from previous practice/situation that justify a change in the rating.

Relevance

Australian Government and SPC priorities

The MTR considered relevance in the context of the array priorities at the time Program was designed, focusing on those of the Australian Government and SPC FAME.

The strategic documents of both the Government of Australia and SPC FAME have changed since the Program was initiated. The current review has not undertaken a comprehensive review of all Australian government documents relating to fisheries, but has taken the content of the funding agreements between DFAT and SPC as its point of reference. The current review finds that Program is consistent with the fisheries content of the ten year partnership agreement between DFAT and SPC FAME.

As noted earlier, the four year agreement between the agencies on tagged funding for FAME explicitly refers to the SPC FAME Strategic Plan 2013-2016. The newly adopted Noumea Strategy ('a new song for coastal fisheries') provides additional strategic context for the Program; this strategy was developed with input from a broad range of representatives from Pacific island governments and non-governmental organizations (NGOs) as well as DFAT. Further, the new "Regional Roadmap for Sustainable Pacific Fisheries", which was agreed to by Leaders in later 2015, further supports this strategic context, with an annual "report card" to be provided to Leaders to show progress made for both coastal and oceanic fisheries.

Harmonization with other agencies

The Review heard multiple instances of collaboration with other programs and agencies in the course of Program delivery. Some examples are:

- Co-funding with CRISP [French Funding Agency] under Component 1.2 (aquarium fish trade)
- Collaboration with FFA (DEVFISH II) under Component 1.3 (export assistance)
- Joint work with the Australian Centre for International Agricultural Research (ACIAR) under component 2.2 (inland aquaculture)

Overall, the Review finds that the Program has been highly relevant to the strategies cited, and the needs of Pacific Island Countries and Territories.

Rating: 6

Effectiveness

The MTR was directed to assess effectiveness in terms of achievement of the objectives and outputs in the Program's Monitoring and Evaluation matrix. The current review looked to the following sources for evidence of achievement under this criterion:

- Annual Program reports from SPC: the review was provided with copies of annual reports for years 1 and 2, and a draft report for year four. These reports are in the form of a general narrative on progress, and do not refer to the M&E matrix.
- Staff workplans and annual updates on progress: The review was provided with workplans
 relating to each component under parts 1 and 2 of the Program. These are in the form of an
 excel spreadsheet derived from the IRIS system, and include detailed specification of
 outputs and activities that are consistent with, though not identical to, those in the M&E
 matrix. The workplans include updates on progress towards achieving the outputs.
- Staff duty travel reports: The review was provided with reports from staff employed under the Program during its four-year term.
- Interviews with SPC staff: Program staff were interviewed, as listed in Appendix F.
- Staff end-of-contract reports: These reports had been prepared by some Component staff departing the organisation.

Bearing in mind the move to core funding and the stated preference (DFAT) to move away from the detail and look at longer term goals, the review took a more general approach to this assessment, looking at the cumulative evidence of activity and progress across the range of reports/evidence available.

The content of the various reports (comprehensiveness, analysis etc) varied according to the target audience and approach of the staff involved. Their usefulness from an evaluation perspective varied similarly. However, taken overall, the review is satisfied that the Program has been effective in supporting fisheries and food security amongst SPC members.

Rating: 5.

Efficiency

The implementation of the Program is very much the same as it was at the time of the MTR in terms of efficiency criteria. While there have been personnel changes to SPC and FAME senior leadership team since MTR, on the evidence available to the review SPC remains a well-managed organisation that retains the confidence of its membership and donor partners.

The MTR noted Initial delays with recruitment, but since that time the Program has been fully staffed throughout, with a small level of turnover and recruitment of replacement staff.

The overall Program delivery and has remained as anticipated; the only exception being extension of the project through to early 2016 to allow for full use of funding under Component 2.1 (Tuna data management).

Rating: 5

Sustainability

This criterion primarily focuses to the likelihood of in-country activities being self sustaining once the DFAT funding Program is concluded. The MTR made a point of highlighting the ongoing need amongst SPC members for technical support and advice in the fisheries sector. This was acknowledged by DFAT and SPC in accepting the MTR, and supports the move to core funding.

Accepting the need for ongoing support, it follows that the Program is not expected to be self sustaining after it has concluded. At the same time the move to core funding means that SPC has the capacity to sustain an equivalent level of effort through the revised funding modality. The decisions taken by SPC to continue support for some Components, while reducing activity in others (as summarised in table 3) shows that SPC has revised the relative priorities under the core funding mechanism (though this Review did not investigate the process for this). For these reasons the current review assigns an explicit rating rather than the descriptor 'satisfactory' in the MTR.

Rating: 5

Gender Equity and Cross Cutting Issues

During the course of the review, discussions were held with specialist SPC staff (Gender Advisor and MEL Advisor-FAME) on SPC's approach to gender equity. These staff described SPC's approach to gender including:

- Gender stocktakes being conducted for each member country
- The intention to develop sector-based gender stocktakes based on the information in the country stocktakes
- The role of specialist gender advisors working with other divisions (it was noted that the FAME Division has a relatively high level of collaboration works with SPC specialist gender advisors); including identifying ways to integrate gender into sector work.

• Looking beyond numbers (e.g. participation in training) towards outcomes that involve shared benefit between women and men, and applying learning and investment to support women and gender equity

FAME staff routinely seek specialist gender advice in project design, and have included specific allocation of funds within project proposals to support specialist gender advice. The Review was also advised that in 2015 SPC began implementing a new organisation wide programming process to assist with gender analysis and programme design to respond to relevant gender issues. The process is supported by a multidisciplinary programme appraisal committee with membership from each Division to review the design of new projects and programmes.

FAME has processes in place to collect gender disaggregated data on participation in training. This is carried out through:

- 1. Logging gender of participants through the IRIS travel system when booking travel for participants.
- 2. Collating gender data from Duty Travel Reports for in-country training (i.e. where no participant travel booking is involved).

The Review was advised that this data is collected mainly for reporting purposes, but there is a proposal for funding in preparation to (in part) improve monitoring systems for training / capacity building participants (including outcomes), along with target for women's participation. Data provided from the IRIS system is provided in Table 5 for the period 2012-15.

Table 5: FAME training by gender 2012 – 2015 (IRIS Output)				
	Total trained	% Female	% Male	
2015	224	21%	79%	
2014	182	27%	73%	
2013	139	18%	82%	
2012*	72	18%	82%	
*pilot year				

Key strategic documents, including the SPC/DFAT 10 partnership agreement, FAME Strategic Plan 2013-2016 and Noumea Strategy ('New Song for Coastal Fisheries') all highlight gender equity (and in some cases youth engagement).

With respect to Program staff interviews, the current review did not ask specific questions on gender. This was a deliberate tactic designed to observe whether Program staff raised gender issues in describing their work unprompted. As it turned out, none of the staff employed under the Program proffered any comment on gender-related aspects of their work. The review does not attempt to read too much into this, though it does show that gender issues are not always 'top of mind' for Program staff. It also suggests that more effort is needed to highlight the importance of gender, particularly in light of SPC and FAME's clear commitments in this area. The new organisation-wide process mentioned above provides a vehicle for addressing these issues.

Rating: 4

Monitoring and Evaluation

As noted previously the shift to core funding has occurred in partnership with a revised approach to monitoring and evaluation. The agreed focus on achieving priorities set out in the SPC-FAME Strategic Plan 2013-16, places much more responsibility in FAME's in-house procedures to monitor and report progress.

FAME has made a strong commitment to enhancing its in-house capacity in this area by reallocating existing resources to appoint to appoint a Monitoring, Evaluation and Learning (MEL) Advisor in the Division. The MEL Advisor's role is wide-ranging and includes:

- Monitoring, Evaluation, Learning and reporting (i) Develop results-focussed M&E frameworks (ii) Support Programme Managers in assessing progress of FAME projects, ensuring objectives are met (iii) Strengthen and support evaluation and learning processes for all division programmes (iv) Support for Corporate reports and evaluations; review annual work plans and progress reports.
- Programme/Project development and design (i) support programme/project design and funding proposal development to ensure evidence-based and results-focussed planning is incorporated (ii) strengthen MEL components in annual work plans before data is entered into the integrated reporting system.
- Contribution to division strategic direction (i) Review existing Strategic Plan, identifying achievements, challenges and lessons learnt (ii) Ensure recommendations from MEL activities are shared with FAME management and form part of the strategic discussions and planning (iii) Develop the new Divisional Business Plan in consultation with stakeholders and ensure alignment with SPC Corporate Strategic Plan.
- Data quality control and training (i) Be a focal point for all FAME MEL databases including IRIS (ii) Facilitate statistical analysis based on FAME databases and IRIS-stored data for project reporting purposes (iii) Provide training to FAME staff to enhance understanding of MEL and the use of IRIS as a tool for planning and reporting.

The review did not attempt to assess the effectiveness of this role, however it was clear during the review that the MEL Advisor's role has been the catalyst for a more structured approach to Monitoring, Evaluation and Reporting.

Reporting

Reporting takes place at different levels if the organisation for different audiences; some examples are summarised in Table 6, and aspects discussed further below.

Table 6: SPC and FAME Reporting				
Source	Report	Audience		
Staff	Planning / performance reports	FAME		
	Duty Travel Reports (DTR)	FAME		
	End of Contract reports	FAME		
FAME	Project/Programme reports	Donors		
	Biennial workplan report	Heads of Fisheries		
SPC	Annual financial Report	Governing Body (CRGA), SPC		
		members, Donors, general public.		
	Programme Results Report	CRGA, SPC members, Donors,		
		general public		
	Country reports (SPC activities by	CRGA, SPC members, Donors,		
	country)	general public		

Duty Travel Reports: These were described by one staff member as being the most comprehensive and informative type of records produced by staff. Over 80 Duty Travel Reports were provided to the Review. While it is beyond the scope of the Review to analyse these Reports in detail, the summary table below shows the extent of duty travel; being almost continuous for some components.

Table 7: Duty travel by Component (number of duty travel reports per year) ⁴					
Component	2011	2012	2013	2014	2015
C 1.1 Scientific advice for oceanic fisheries	11	7	5	2	2
C 1.2 Aquarium fish	1	8	3	2	2
C 1.3 Development of mariculture	3	15	14	14	
C 1.4 Assistance for export requirements	5	7	7	6	2
C 2.1* Tuna data management	5	8	9	7	9
C 2.2 Inland aquaculture	2	3	4	1	
C2.3 Deepwater snapper	2	6	5	3	

*multiple component staff

End of Contract Reports: These are potentially useful for identifying lessons learned during the course of staff contracts. However the Review found that there are differing approaches to these reports across FAME. In some cases an end of contract report is not required (e.g. staff remaining with SPC through contract renewal/extension were generally not required to provide one). When such reports are produced, some are comprehensive and address key Component objectives, while others are not.

SPC Programme Results Report: With the transfer to core funding, this Results Report is expected to function as the key organ for reporting achievements to CRGA and key donors such as Australia and New Zealand. The most recent Programme Results Report covers the 2013-14 year; the year during which the MTR was carried out. The 2013-14 Report pre-dates the move to core funding for PFFSP Components, nevertheless it does include reference to work carried out under at least one PFFSP Component area; Component 2.1 tuna data management. The next Programme Results Report is expected to be produced in 2016.

Rating 5

⁴ Where reports cover more than 4 years, it indicates staff were employed prior to the PFFSP on similar work. Duty travel missions can vary in duration from days to months, so the number of reports does not indicate the total number of travel days.

Analysis and Learning

The Program has produced an impressive array of materials for communicating technical issues [from pamphlets through to peer reviewed publications], that are available to interested stakeholders. These stand as a record of work done and as source documents for knowledge transfer.

From an evaluation perspective the Review is also interested in the way the Program staff identify the best way of working to achieve the outcome they want, and how these lessons are passed on. This issue was raised in some interviews with Program staff. The Review inferred from this that there are occasions when staff review a particular process or event and look for ways of doing things more effectively.

Comment has been made above that the range of staff and Program reports vary in their content and coverage. Focusing on the Program staff reports, these ranged from being full and comprehensive descriptions, to being simply a 'formality' to be completed as a contract requirement, or in some cases, not required at all. Where full reports were available, the review found them to be heavy on activities (country visits) and outputs (workshops), with very little comment on the outcome from these activities. Also, there is a tendency to focus on the positive, and not reflect on things that went wrong or could have been done better.

Against this background it has not been straightforward for the Review to identify specific lessons learned from the Program.

However the Review has used staff reports and interviews to identify issues of interest from the perspective of 'lessons learned'. The table below provides illustrative examples from selected Components of activities seen as being successful, and others where lessons were identified in relation to effectiveness or impact.

Table 8: Indicative summary of lessons learned				
Program Component	Successes	Areas of learning		
1.2 Management and development of export fisheries for aquarium fish	<u>Best practices</u> – this emerged as a key and critical element of the past 4 years; therefore more time was spent with companies implementing these as well as developing more tools to achieve these independently.			
1.3 Development of		So many countries, so many sub-activities;		
mariculture opportunities		difficult to attend to all.		
2.1 Tuna data management		Can make the best tools available, but it means nothing if they are not used. Need to follow-up; learn how countries use the tools and respond to their needs/circumstances.		
2.2 Inland aquaculture	Linking with private sector; transferring knowledge from other parts of the world; "people believe it when they see it with their own eyes".			
2.3 Deepwater snapper	Capacity building - This project provided financial and supervisory support for several students to complete postgraduate degrees. These students have now completed their studies, and have moved back to their respective fisheries departments where they are implementing the skills and knowledge they have gained. This approach should be used for future projects	The project budget was insufficient to achieve all of the stated objectives.		
3.1 Community based fisheries management	Successful participatory process			

Plain text: issues identified in staff reports or interviews Italics: issues identified by reviewer

The above serves to illustrate that an enhanced system for identifying lessons learned could be utilised to improve future project implementation. In this way effective ways of working (or missteps) could be shared between staff rather than remain as personal experience. The Review was advised that this has been identified as one of the key priorities for the new SPC Strategic Plan 2016-2020.

Rating: 4

Conclusion of Impact Evaluation

The review's assessments against the impact criteria are summarised in Table 9.

Table 9: Impact Evaluation Summary				
Evaluation Criteria	Rating (1-6)	Explanation		
Relevance	6	The Program is well aligned with the SPC/DFAT partnership and funding agreements and current SPC FAME Division and sector strategies		
Effectiveness	5	The Program has been implemented as it was designed and has been effective in assisting Pacific Island Countries and Territories		
Efficiency	5	The Program is well managed, and responsive.		
Sustainability	5	The Program is supporting member countries/territories, against a background where sustainability without external support is not a realistic expectation. The move to core funding allows for SPC sustain an equivalent level of support at Program conclusion.		
Gender equality	4	There are systems in place but a need to raise awareness about SPC and FAME commitments and implementation on this issue.		
Monitoring and Evaluation	5	SPC FAME has committed resources to appoint a Monitoring, Evaluation and Learning Advisor within the Division.		
Analysis and Learning	4	Understanding lessons learned appears to be an informal process that would benefit from being strengthened.		

Expenditure

The audited statement of income and expenditure to 30 November 2015 is summarised in Table 10.

This shows that all Component funds have been fully utilised, apart from Component 1.4, which has been extended by agreement to May 2016.

Table 10: Financial statement to 30 November 2015 (AUD)								
Component	Income	Expenditure	% spent	Balance				
C 1.1 Scientific advice for oceanic	1,099,424	1,099,424	100%	\$0				
fisheries								
C 1.2 Aquarium fish	1,158,274	1,158,274	100%	\$0				
C 1.3 Development of mariculture	1,249,226	1,249,226	100%	\$0				
C 1.4 Assistance for export	1,313,425	1,313,425	100%	\$0				
requirements								
C 2.1 Tuna data management	2,179,054	1,950,350	90%	\$228,704				
C 2.2 Inland aquaculture	1,302,725	1,302,725	100%	\$0				
C2.3 Deepwater snapper	1,127,976	1,127,976	100%	\$0				
C3 CBFM Workshop	300,000	300,000	100%	\$0				
Total	\$9,878,104	\$9,649,400	98%	\$228,704				

Conclusion and Recommendations

The Mid-Term Review noted that:

'the Program was developed at a time when SPC FAME was experiencing budgetary pressure and attendant concern about loss of key positions within the Division. This strongly influenced the design and content of the Program. In effect, this Australian Government funding initiative provided the opportunity to maintain and enhance key services provided by the Division to its members in the form of technical 'backstopping' across a range of priority areas. This led to its development as a set of largely stand-alone components addressing different areas within the fisheries and aquaculture sectors. The resulting Components represent a mix of core ongoing work and additional initiatives that are linked by their common contribution to food security and livelihoods.'

The Program can therefore be seen in retrospect as something of a 'stop-gap' initiative, that allowed priority work to continue while a more sustainable funding partnership was established. This understanding provides the background to the initiation and delivery of the Program, and the transition to a core funding mode.

In assessing the Program overall, the Review finds that:

- Since the MTR, the Program has continued to be run effectively and efficiently.
- All Components, apart from Component 2.1 (tuna data management) had concluded at the time of the Review.

- Component 2.1 is scheduled to continue through to early 2016, at which point all funds are expected to have been fully utilised.
- All Components have been effective in contributing towards development/food security objectives of the Program and SPC-FAME.
- The recommendations of the MTR have been implemented in part. Some have been accommodated as part of the move towards core funding and the attendant shift in focus of the M&E system. Others have been fully addressed; while some issues remain e.g. with respect to gender equity.
- There is an ongoing transition of the Program Component activities towards a core funding model. As Components have come to conclusion under PFFSP Program funding, SPC has reviewed their relevance and made decisions on whether to continue to support them as priority core business, or refocus in other areas. Of the seven completed Components, four have continued 'seamlessly', in some cases employing the same staff.
- The Program has benefited from integration into the FAME core program, particularly through synergies available through use of other FAME resources and co-funding arrangements between different donors and agencies.
- In terms of Monitoring and Evaluation; in line with the move to core funding, the focus has shifted from the specific PFFSP Program's detailed outputs and objectives, towards assessment against the higher level objectives of the SPC FAME strategic Plan. At the same time, there is a move towards reporting on FAME activities as part of the annual SPC general reporting to its governing body, and through the Programme Results Report.
- FAME has shown its commitment to improving its monitoring, evaluation, learning and reporting performance through the appointment of a dedicated MEL Advisor within the Division.
- There are some areas suggested for improvement:
 - Gender equity FAME has a positive approach to this area in terms of generic policies, and inclusion of gender aspects in project design, however this issue did not feature in Component reports or discussions with Component staff.
 - Learning Procedures for analysis and learning arising from Component activities appear to be largely informal, and learning is held as individual experience rather than through a systematic approach designed to improve delivery of outcomes.

Recommendations

Gender Equity:

The Review noted that some policies and strategies are in place in this area, but identified an ongoing need to raise awareness of this issue.

Recommendation 1: That SPC FAME makes use of the new (2015) SPC-wide process to support gender analysis to highlight the importance of gender considerations in project planning and implementation, focussing on shared benefits between women and men.

Institutional Learning:

The Review encourages a more systematic approach to identifying better ways of implementing Programs and projects.

Recommendation 2: That SPC formalise its approach to post-project/event review of its activities to identify lessons-learned and promote their incorporation into future work and project/activity design.

Concepts for improved monitoring:

Although the Program M&E Framework and Matrix are no longer in service, these documents contain some good ideas for program monitoring. The review considers that rather than simply setting the framework aside, some of these ideas and concepts should be incorporated into future monitoring work. Examples are:

- Components 2.2 and 2.3 include reference to tracer studies; i.e. following up on participants in capacity building activities such as training or sponsored study. This is a potentially very useful way of assessing the medium to long-term usefulness and effectiveness of various forms of training. Such studies could provide a sound basis for determining better means of delivering capacity development.
- Several components include the development of national, sector, or sub-sector plans or policies. It would be useful to maintain a database of current policies and plans to ensure that they are available and not 'reinvented' unnecessarily.

It is relevant to note that the Land Resources Division of SPC has been developing the concept of establishing a 'Policy Bank' – a web portal which functions as an open repository of national and regional strategies, policies and plans, and potentially legal and regulatory requirements (refer: http://www.spc.int/pafpnet/ and http://www.spc.int/en/media-releases/2219-pioneering-agriculture-policy-bank-launch-for-vanuatu.html). This 'Policy Bank' approach may offer a useful model for FAME in the fisheries sector.

Recommendation 3: That SPC implement specific monitoring approaches specified in the PFFSP Design documents (Phase 1 and Phase 2) including/in particular:

- Tracer studies (or longitudinal studies) of participants in capacity-building activities (e.g. training, sponsored study)
- Maintaining a status record of national sector/sub-sector plans and policies/strategies, potentially using a 'Policy Bank' model.

List of Acronyms

ACIAR	Australian Centre for International Agricultural Research
CRGA	Committee of Representatives of Governments and Administrations
CFP	Coastal Fisheries Programme of SPC-FAME
DEVFISH II	Development of Tuna Fisheries in the Pacific ACP Countries Project II (EU)
DFAT	Australian Department of Foreign Affairs and Trade
EU	European Union
FFA	Pacific Islands Forum Fisheries Agency
НАССР	Hazard Analysis and Critical Control Points
IACT	Increasing Agriculture Commodity Trade: EU – funded Project
M&E	Monitoring and Evaluation
NGO	Non-governmental organisation
OFP	Oceanic Fisheries Programme of SPC-FAME
PFFSP	Pacific Fisheries for Food Security Program
SPC	The Pacific Community
SPC FAME	SPC Division of Fisheries, Aquaculture and Marine Ecosystems

Annex A: CONCEPT NOTE - PART 1



Purpose

This document outlines AusAID's planned approach to and implementation of the proposals provided by the Secretariat of the Pacific Community's (SPC) Division of Fisheries, Aquaculture and Marine Ecosystems (FAME).

• A three-year commitment with SPC is proposed to commence on 2010-2011 and going through until 2012-13 (totalling **AUD \$4,820,350**).

Outline of the Proposal

- The Secretariat of the Pacific Community (SPC) fisheries programs are dedicated to ensuring that 'the marine resources of the Pacific Islands region are sustainably managed for economic growth, food security and environmental conservation'. (SPC Division of Fisheries, Aquaculture and Marine Ecosystems (FAME) strategic plan 2010-2013).
- 2. A range of activities in support of this objective are already in progress, however a number of recent analyses and consultations (see also Attachment 2) including the SPC and Forum Fisheries Agency (FFA) 2010 report *The Future of Pacific Island Fisheries* highlighted a number of gaps in current programs. SPC FAME's '*Fisheries for Food Security Programme'* (the Programme) (See also Attachment 1) addresses these gaps by providing:
 - Scientific advice for the development of Oceanic Fishery Management Measures
 - Management and development of export fisheries for aquarium fish
 - Development of mariculture (saltwater aquaculture) opportunities
 - Assistance to meet export requirements for marine products

Context and Rationale

1. Food Security through Rural Development Initiative

3. AUD 23.45 million has been allocated to Pacific fisheries from the Food Security through Rural Development Initiative to lift fisheries productivity, improve rural livelihoods and build community resilience. The delivery strategy for the fisheries component of this initiative - *Pacific Fisheries through Rural Development* (Attachment B) notes that implemented principally through the two key regional organisations – FFA and SPC with targeted bilateral support to strengthen the capacity of national fisheries agencies.

- 4. Key challenges that PICTs face in meeting their future food security requirements through fisheries development relate to:
 - Maintaining the contribution of coastal and inland fisheries to local fish consumption and livelihoods; and
 - Maximising and distributing the long-term national benefits from sustainable offshore fisheries.

The Role of the SPC FAME

- 5. The SPC serves 22 PICTs through technical assistance, training and research. Its work focuses on land resources (forestry and agriculture), marine resources (fisheries and maritime) and social resources (human development, public health, statistics, demography and media). SPC Division of Fisheries, Aquaculture and Marine Ecosystems (FAME) provides important assistance to member countries on the management and development of their coastal fisheries and aquaculture development. It also provides crucial scientific advice and stock assessments to member countries on their oceanic fisheries, for the purposes of national fisheries management and regional negotiations. SPC FAME works closely with other regional organisations, FFA and the Western and Central Pacific Fisheries Commission (WCPFC), especially in the area of science and monitoring of oceanic tuna fisheries.
- 6. Given the small-size of many of the nations involved, the geographic span of oceanic fisheries, and increasing global interests in Pacific fisheries, regional organisations are critical to achieving food security goals. AusAID has a long standing relationship with SPC both as a member of their governing bodies and as a donor. AusAID currently provides AUD14.85 million as 'core funding' to SPC for its work on fisheries and non fisheries activities. It is imperative that AusAID ensures coherence between core and project funding, and the activities implemented through this additional funding.

Fisheries for Food Security Programme

- 7. Australia's support to SPC will continue to contribute to AusAID's two primary objectives for fisheries related aid in the Pacific under 'Valuing Pacific Fish: A Framework for Fisheries Related Development Assistance in the Pacific' (AusAID's Pacific Fisheries Framework). These are:
 - To maximise the flow of benefits (for nutrition, livelihoods and revenues) of Pacific island peoples from sustainable commercial and subsistence fisheries; and
 - To implementing effective ecosystem-based fisheries management.
- 8. The objective of AusAID's support to SPC through AusAID's Food Security through Rural Development Initiative is:
 - To engage with and support a sustainable, well governed, effective and efficient regional organisation that works towards improving food security in PICTs through lifting fisheries productivity, improving rural livelihoods and building community resilience from the sustainable management of fisheries.
- 9. SPC FAME's Fisheries for Food Security Programme (see also **Attachment 1**) outlines four main components:

[•] Component 1: Scientific Advice for the development of Oceanic Fishery Management Measures. This objective of this concept supports sustainability of fish resources and therefore contributes to food security in two ways. First, by boosting national economic growth of the member countries which in turn, opens access to other food sources and second, by providing tuna resources for direct consumption;

- Component 2: Management and development of export fisheries for aquarium fish. The objective of this concept would broadly impact on food security for communities by boosting trade, which would then provide a source of income for rural and urban communities. This concept does not impact on fisheries that are supplied for food for these communities.
- Component 3: Development of mariculture opportunities. This concept positively impacts on food security in the region by encouraging private enterprise which boosts employment, economic growth, an add to local food supplies.
- Component 4: Assistance to meet export requirements for marine products. This concept will assist the private sector and national authorities to meet requirements that will allow them to gain entrance to export markets. This will enhance economic growth and increase employment.

2. Performance Monitoring

- 10.SPC FAME has developed a process for monitoring and evaluating the activities proposed under the Programme. Specific outputs and outcomes for each component are specified in the proposal (see also **Attachment 1**). SPC FAME will work with PICTs to further refine the key indicators.
- 11. SPC FAME will monitor the efficiency of the program through its annual work programming and evaluation process, which are to be assessed by AusAID and member countries and territories. SPC FAME also monitors performance on a broader scale by having the Division reviewed by international experts. The most recent review was completed in 2009 and the next is scheduled for the end of the strategic plan period.
- 12. To address emerging fisheries priorities and remain relevant to their membership SPC FAME is committed to:
 - giving greater attention to achieving measurable and sustainable benefits at the national level, especially in food security and employment;
 - greater degree of joint SCP/FFA cooperation to transcend the coastal/offshore boundary, including in fisheries governance, measurement of change supporting the private sector and fisheries legislation; and
 - extended and coordinated efforts to build adequate capacity and capability within fisheries agencies.
- 13. The Pacific's Regional Institutional Framework (RIF) is being reformed to improve organisational efficiency, coordination and collaboration in delivery of services to PICs. Under the RIF, Australia and its Pacific Island Country Partner Governments have encouraged Regional Organisations to pursue a range of reforms with a view to improving effectiveness. To date, SPC has been largely successful in very difficult circumstances, in implementing these reforms.

Risks and Risk Management Strategies

- 14. SPC FAME has established systems and processes to manage risks including through regular senior management discussions and the annual reporting of progress against FAME's Strategic Plan and Annual Work Plan to SPC management and SPC's governing body. SPC FAME's Risks and Risk Management Strategies for the Division as a whole are detailed FAME's Strategic Plan, including for the following risks:
 - Inadequate resources
 - Uptake of scientific advice
 - Acceptance of scientific assessments
 - Ecosystem approach problems
 - Capacity issues
 - Enforcement of management rules
 - Uptake of new activities
 - Biosecurity risks in aquaculture
- 15. In addition to the risks that SPC FAME have identified and addressed in the Strategic Plan, SPC FAME has detailed the potential risks and risk management strategies for

each activity proposed in the Programme. These are detailed in the concept notes (see also **Attachment 1**).

3. Environment, Sustainability and Gender

4. Environment

- 16. Fisheries management increasingly involves consideration of environmental issues and climate change. Environmental conservation is important and SPC FAME ensures that it is integrated into its activities. The, AusAID supported, *Vulnerability Assessment of Pacific Fisheries to Climate Change* (to be completed in 2010), will provide additional guidance for SPC activities.
 - 5. Sustainability
- 17. SPC FAME's Programme focuses on both environmental and economic sustainability. Sustainability of the outcomes of the program is addressed under each component. Overall sustainability will be addressed by engaging with individual PICTS and the private sector to ensure on-going ownership and relevancy of the program and building the capacity of PICTS and SPC officials.
 - 6. Gender
- 18. SPC FAME Strategic Plan 2010-2013 acknowledges that gender stereotypes have an impact on the role of women in Pacific fisheries. FAME works with other divisions of SPC to address gender imbalance within SPC as well as in its activities. As part of its commitment to improving the gender balance, SPC produces an information bulletin, 'Women in Fisheries', that highlights gender roles in coastal fisheries, women's fishing activities in urban and rural communities and gender issues in development. SPC policies ensure that jobs and training are available to men and women and SPC has gender experts who provide advice on project design. Gender continues to be a guiding principle in AusAID's aid program and AusAID will continue to work with SPC to ensure advancement on gender issues.

ATTACHMENT 1

FISHERIES FOR FOOD SECURITY PROGRAMME

Project Proposal

to AusAID

by

Secretariat for the Pacific Community

4 June 2010

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FISHERIES FOR FOOD SECURITY PROGRAMME

Introduction

Pacific Island countries and territories (PICTs) are unusually dependent on capture fisheries for food security. Annual per capita fish consumption in all Pacific Islands is above the global average of 16.5 kg; and in several small island countries the figures are among the highest in the world. Much of this is supplied by subsistence fishing, with a high proportion of coastal households directly involved in catching fish. Catches from inshore subsistence fishing (people fishing to supply their families) are estimated at 110,000 tonnes, making an annual contribution to GDP of the PICTs of over US\$166 million (2007 data). This is often undervalued in official statistics. A further 45,000 t. is landed annually from commercial coastal fisheries, much of it for sale on local markets.

While most of the 2 million tonne catch of offshore (tuna) fisheries is taken by foreign based vessels or destined for export, this sector also makes a major contribution to national food supplies. This is particularly true in urban centres where catches unsuitable for export provide a relatively low-cost source of protein. Dark meat tuna, canned for the local market, also provides an affordable and easily-stored protein food that is appreciated in several countries with tuna processing industries.

The role of fisheries in food security is not just about providing fish for consumption, of course. Income generation and employment in export-oriented fisheries and aquaculture is equally important in ensuring that people have adequate access to food – especially in some of the poorer countries in the region. It is noteworthy that FAO identifies Kiribati, Papua New Guinea, Solomon Islands, Tuvalu and Vanuatu as 'low income food deficit' countries.

AusAID's strategy for food security stresses the need to promote sustainable production and improve the economic opportunities for the poor. It also identifies the need for increased trade, and assistance in meeting export standards (*Food security strategy 2004*). Similarly, the need "to maximize the flow of benefits to Pacific Islanders from sustainable commercial and subsistence fisheries" is at the heart of AusAID's strategic objectives for the fisheries sector (*Valuing Pacific Fish, 2007*).

The SPC fisheries programmes are dedicated to ensuring that "the marine resources of the Pacific Islands region are sustainably managed for economic growth, food security and environmental conservation" (*FAME strategic plan 2010-2013*). A range of activities in support of this objective are already in progress. The aim of this proposal is to deliver results in a number of key areas that have been identified as gaps and priorities, in consultation with member countries and territories⁵. These needs and priorities are highlighted in *The Future of Pacific Island Fisheries* (2010) report commissioned by SPC and FFA which considered the future of fisheries over a 25-year timeframe (2010-2035) to provide the basis for long-term strategic approaches to the development and management of fisheries at national and regional levels.

⁵ These consultation fora include- SPC's governing body i.e. the Committee of Representatives of Governments and Administrations (CRGA), the Heads of Fisheries (HOF) meetings, the Forum Fisheries Committee (FFC), the Marine Sector Working Group of CROP agencies as well as each PICT's Joint Country Strategy process with SPC.

This proposal consists of four components as follows:

- Component 1: Scientific Advice for the development of Oceanic Fishery Management Measures
- $_{\odot}$ $\,$ Component 2: Management and development of export fisheries for aquarium fish
- Component 3: Development of mariculture opportunities
- $_{\odot}$ $\,$ Component 4: Assistance to meet export requirements for marine products

These address strategies developed by the recent Pacific Food Summit (April 2010) described in *Towards a Food Secure Pacific: Framework for Action on Food Security*, 2011-2015:

- Develop and strengthen policy, legal and regulatory frameworks for sustainable production and trade of agriculture, aquaculture, forestry and fisheries' products: (Components 1, 2, 3, 4).
- ii. Increase the production, productivity and resilience of agriculture and fisheries' systems. (Components 1, 3, 4).
- iii. Increase the contribution of oceanic fisheries' resources to domestic food supplies and employment. (Components 1, 4).
- iv. Enhance food processing capacity and value-adding of agriculture and fisheries' products. (Components 1, 3, 4).
- v. Increase competitiveness and trade of agriculture and fisheries' products in domestic and international markets. (Components 2, 3, 4).
- vi. Promote sustainable management of land, freshwater, agrobiodiversity and marine resources. (Components 1, 2, 3, 4).

Each of the four components addresses specific problems and could be undertaken in isolation; but there are linkages and subject to available funding a project that combines all four work areas can be expected to make a more substantive contribution to fisheries for food security. While it is difficult to assign priorities to the four components (all are regarded as very important), the first three components can be implemented by SPC immediately. Component 4 would require a few months' lead time from a funding decision.

Figure 1 on the following page presents a logic model which shows how the food security problems in PICTs drive the project's objectives and outputs, and how these outputs are linked to the expected outcomes and the ultimate impact on improving food security.
Food		PROJECT components	KE] [KE	Y outcomes		PROJECT IMPACT
FooD SECURITY Problems to be addressed PICTs have high levels of poverty and their income and employment are threatened by overfishing and limited by lack of economic opportunities.		 PROJECT components and objectives 1. improve use of science in the management of fisheries stocks 2. develop environmentally and economically sustainable marine aquarium trade as an important alternative income source to poor PICTs and therefore increase food security. 3. promote and support small and medium mariculture (saltwater aquaculture) enterprises PICT as an alternative sustainable source of food, jobs and income. 4. assist PICT government and private sector to 	Ке 1. 2. 3.	high quality scientific stock assessments and evaluation of management options conducted and findings communicated to key decision makers technical and training assistance and advice to government and private sector in 8 PICTs in development and implementation of sustainable marine aquarium trade technical and training assistance and advice to government and private sector in 6 PICTs in development and		Ке 1. 2. 3.	EY outcomes introduction of management measures that will maintain the stocks of tuna and other oceanic species at or above the level which provides a maximum sustainable yield. growth in PICT marine aquarium trade in providing a sustainable new source of employment and income. growth in PICT mariculture industry in providing a sustainable new source of food, employment and income.	*	 PROJECT IMPACT Improved food security in PICT through improved income and employment. Key indicators for each PICT: Employment in fisheries and aquaculture GDP contribution of fisheries and aquaculture (where feasible, this data will be broken down by gender)
		meet requirements and standards for marine products in new and more profitable export markets in order to		development and implementation of national mariculture strategies		4.	growth in value of PICTs fisheries exports as a source of emplovment and		
PFFSP — Final Evaluat	tion Report	:: January 2016	4.	technical and training assistance to national authorities and exporters on export standards and			RISKS AND EXTERNAL CONI Where possible, strate been developed The potential influence beyond the control of th and political factors) ar	gies to point of confinite projection of also a	IG FACTORS mitigate risks have founding factors ect (e.g. economic acknowledged

Figure 1. Fisheries For Food Security Logic Model

Component 1 - Scientific advice for the development of oceanic fishery management measures

Objective:

The objective of this component is to ensure that the fisheries management measures agreed by members of the Forum Fisheries Agency (FFA), and its two sub-groups, are based on the best possible scientific advice. This objective supports the broader goal of a sustainable fishery for tuna and associated species, contributing to food security directly by providing for healthy tuna resources for direct consumption and indirectly through economic growth and financial security to ensure access to other food sources.

Strategy:

The FFA member countries are the key players in the management of the region's tuna fisheries. About half of the tuna caught in the Western Central Pacific Ocean (WCPO) comes from their waters, and there is a long history of collaboration through the Agency. Although members can, and do, implement management measures in their own EEZs, cooperation among them is important for three reasons:

- The resources are shared, and are followed by very mobile fishing fleets, so there is a need to coordinate management measures across several zones;
- The fleets of distant-water fishing nations operate in most zones, and can 'play one country off against another' in licensing negotiations if there is no common position on management measures; and
- The FFA countries form a strong bloc in the Western Central Pacific Fisheries Commission (WCPFC) and need to work together to ensure that the Commission agrees measures that are in their interests.

After many years in which tuna catches have grown steadily in equatorial waters, overfishing is now considered to be occurring on one of the four main species (bigeye tuna) and a second species (yellowfin) is fully exploited. As a result, there is an urgent need to take management action that will effectively limit fishing mortality for these species. SPC provides the scientific advice needed to analyze a range of possible measures for their effectiveness, and works with FFA advisers to determine the economic impacts on member countries. This work is conducted mainly with the Parties to the Nauru Agreement (PNA), whose zones are important for the main fisheries for tropical tunas – skipjack, yellowfin and bigeye. A number of measures were agreed for the purse seine fishery in 2008, including a limit on the number of days fished by purse-seiners, but these need to be tightened and refined to be fully effective. A new scheme to control fishing effort in the equatorial longline fishery is also needed.

The other sub-group – the Sub-committee on Southern Tuna and Billfish Fisheries (SC-STBF) – comprises countries to the south of the main tropical tuna fishing areas, which have important domestic longline fisheries targeting albacore tuna. The major concerns in this fishery are the maintenance of stocks which will ensure the fishery remains economically viable; and the impact of a growing distant water fishery targeting swordfish. Better bio-economic modeling of albacore

fisheries, to advise limits for licensing, and a comprehensive assessment of the swordfish resource are the immediate priorities for this group.

SPC has endeavoured to provide scientific advice to these groups for some years, but the volume of work now being demanded and the cost (time and money) of participating in the various meetings to present the results requires a dedicated officer to work with FFA. This will allow the scientist to establish a rapport with the representatives of member countries, and ensure that the scientific advice is relevant and delivered appropriately at the decisive meetings.

Table 1: Outputs and outcomes for Component 1

Objective:

Improving the quality and use of science in the management of fisheries stocks to ensure the sustainability of fisheries which are a major source of income and employment in PICTs.

Overall outcome

Introduction of management measures that will maintain the stocks of tuna and other oceanic species at or above the level which provides a maximum sustainable yield (or other agreed reference points). As measured by:

- Number of recommendations from the scientific analyses adopted by the WCPFC Commission and implemented through management decisions in the form of Conservation and Management Measures (CMMs)
- Improved status of these stocks by year four as determined by agreed reference points

Specific Outputs	Specific Outcomes expected by end of Y4					
Evaluations of alternative management options (e.g. Management Strategy Evaluation) are presented to key fisheries management bodies (e.g. the Forum Fisheries Committee (FFC), PNA, and Management Options Consultation), and incorporated into the joint SPC/FFA bioeconomic modelling project for tropical tunas (this work is funded through EDF10) (annually-Years 1, 2, 3, 4) [minimum one paper produced and three montions attended per year]	Improvements in the management regime for the purse seine fishery that effectively reduce fishing mortality on bigeye and constrain yellowfin mortality at or below current levels;					
Scientific analyses are provided in response to requests from the PNA for scientific information necessary to support the implementation of the Purse Seine Vessel Days Scheme (PS-VDS), e.g. estimation of parameters necessary for determining Total Allowable						

Effort and allocations within the Parties (annually-Years 1, 2, 3, 4) [minimum one paper produced and two meetings attended per year]	
Detailed analyses of albacore catch and effort data are undertaken for SC-STBF members to determine factors that influence fishing success and levels of effort that should support profitable catch rates. These analyses are presented to key fisheries management bodies, (e.g. the Forum Fisheries Committee, SC-STBF, and Management Options Consultation) (annually- Years 1, 2, 3, 4) [minimum two papers produced and three meetings attended per year]	Appropriate catch or effort limits in national fisheries targeting albacore that result in both profitable fishing operations and sustainable utilization of the resource
Detailed analyses of longline effort are undertaken (with a focus on the EEZs of PNA members) to determine historical patterns of catch and effort and relative fishing power of different fleets, to support the technical design of the longline Vessel Days Scheme (LL-VDS) and determinations of Total Allowable Effort and allocations within the Parties. These are presented to key bodies, e.g. the PNA Task Force for the LL-VDS, and the PNA. (annually- Years 1, 2, 3, 4) [minimum one paper produced and two meetings attended per year]	The introduction of a Vessel Day Scheme that will constrain effort in the equatorial longline fishery;
Complete a swordfish stock assessment for the South West Pacific that is accepted by the WCPFC-Scientific Committee and subsequent analyses of potential management options (Years 3 & 4) [minimum one paper produced and two meetings attended per year]	The introduction of management measures in the Southern fishery for swordfish as evidenced by the adoption of a new Conservation and Management Measure (CMM) by the WCPFC
Results will be incorporated into WCPFC-Scientific Committee working papers and presented at the annual meeting of the WCPFC-Scientific Committee (Years 3 & 4) [minimum one paper produced and one meeting attended per year]	

Policy briefs and other 'non-technical' versions of key	Key decision makers have the information				
reports will be produced annually and presentations	and understanding needed to make				
be made to relevant regional forums, e.g. FFC, to	management decisions that support				
communicate scientific findings to wider non-technical	sustainable fisheries, contributing to food				
audience (e.g. government officials, ministers, the	security and economic growth.				
fishing industry, community leaders and the general					
public) (annually- Years 1, 2, 3, 4) [minimum two					
papers produced and three meetings attended per					
year]					

Risks and Risk Management:

This project component is designed to address one of the key risks and lessons learned from fisheries around the world – a failure to translate scientific information on overfishing of stocks into management action to address the problem. By providing a dedicated scientist to work with FFA, PNA and the SC-STBF, this project component will provide consistent high quality scientific advice to the organizations that drive most of the management measures adopted in the region.

There is a significant risk that countries will be unable to agree on measures that they perceive as disadvantageous to their national interest. FFA devotes considerable resources to coordinating regional consensus. Additional joint FFA/SPC work on the economic impact of management measures will also inform decision makers and provide the 'least cost' options.

A final risk is that scientific advice will be presented in a form that is not readily understood by decision makers. Again, having an officer dedicated to working with FFA and attending all meetings of their membership helps to inform SPC on how to frame their advice. Funds are also included in the budget for the communication of scientific findings to a wider non-technical audience.

	Cost AUD\$					
Item	Y1	Y2	Y3	Y4	TOTAL	
Personnel – Fisheries Scientist (FFA liaison) for 4 years	164,375	164,375	164,375	164,375	657,500	
Specialized technical consultancies	25,000	25,000	25,000	25,000	100,000	
Travel (for the Fisheries Scientist and other OFP staff as appropriate) – to FFA/PNA/SC-STBF meetings, national consultations	50,000	50,000	50,000	50,000	200,000	

Budget

Communications – drafting and	12,500	12,500	12,500	12,500	50,000
publication of non-technical material					
Evaluation	7,500	5,000		7,500	20,000
Subtotal – operation costs	259,375	256,875	251,875	259,375	1,027,500
SPC project management fee @ 7%	18,156	17,981	17,631	18,156	71,925
Total	277,531	274,856	269,506	277,531	1,099,425

Component 2: Management and development of export fisheries for aquarium fish

Objective

The objective of this project component is to establish effective management and monitoring arrangements in countries that have an existing marine aquarium trade. The component will also work with two or three countries to promote the development of the trade where it does not exist at present. The marine aquarium trade provides a sustainable source of income for coastal communities, which does not compete with fisheries supplying fish for food.

Strategy

The marine aquarium trade in the Pacific Islands is a story of successful private sector development. There are currently 12 countries involved, with at least two others wishing to enter the trade. The business is estimated to be worth USD \$40–60 million a year to Pacific Island countries and territories (PICTs) and accounts for 10–15% of the global supply. It is estimated to provide some level of income (ranging from full-time employment to occasional sales and royalty payments) to over 5,000 Pacific Island households.

The companies operating in the Pacific Islands have generally sought to establish an environmentally sustainable business, driven by the demands of their customers, and have avoided the bad practice which is prevalent in major suppliers like Indonesia and the Philippines. This can be best supported by transparent and soundly based management plans, put in place by PICT Governments, with the backing of appropriate legislation. Assisting with this is the main activity of this component.

The countries are at different stages of developing and/or managing their aquarium fishery. In Samoa and Nauru there is no fishery, but surveys have found a suitable resource and the airline links would seem to offer opportunities. In these countries this project component will assess the financial viability, and encourage linkages between the Government and suitable private sector partners. In FSM and Solomon Islands, there are active fisheries but no management arrangements, and these needs to be developed through a consultative process. Marshall Islands and Kiribati have management guidelines in place, which need to be developed into formal management plans. Palau has a management plan, but it is outdated and needs to be reviewed in the light of changes in the industry. Tonga, Fiji and Vanuatu (which account for the bulk of the trade) have well defined management plans in place, and need assistance mainly with monitoring of export volumes. Papua New Guinea has pursued a rather different approach from other PICTs, and has been subsidizing the start-up of a supposedly commercial operator. There are reports that this is not going well, and this project component may be able to assist with putting in place more commercially sound arrangements (to be discussed during the SPC joint country strategy mission in 2010).

The second cluster of activities is associated with the private sector: financial assessment of potential new operations and promoting opportunities to the private sector. This project component can also provide capacity building for local fish collectors in the areas of catching and handling. This leads to better quality and higher survival rates of fish at capture and export, giving increased financial returns and reducing waste of the resource.

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This component will also take into consideration any existing efforts from other groups and will consult and develop working relationships with those groups that are relevant to learn from their experiences and to avoid duplication of work. Some of these groups include the Marine Aquarium Council on certification for this industry, the Queensland Department of Primary Industries with their experience in managing this industry, and other projects such as the Coral Triangle Initiative with their experience with Asian based marine aquarium operators and CRISP for the application of post larval capture in the marine aquarium industry.

Table 2: Outputs and outcomes for Component 2

Objectives

To develop environmentally and economically sustainable marine aquarium trade as an important alternative income source to poor PICTs and therefore increase food security.

Overall outcome

Delivery of sustainable economic benefits to the PICTs from the development and management of the marine aquarium trade.

General measures:

- Growth in PICT marine aquarium industry as measured by:
 - \circ $\,$ value of production from countries with established trade is accurately recorded and sustained at current levels
 - number of new enterprises and jobs created in PICTs without a current aquarium export business
 - exports from PICTs maintain a good reputation with importers as being sustainably sourced

Spo	ecific Outputs	Specific Outcomes expected by end of Y4				
•	Work with at least 8 PICT governments and marine aquarium industry in developing and implementing management plans for an environmentally and economically sustainable trade (2 PICTs a year)	Appropriate management plans implemented and operating effectively in 8 countries.				
•	Provide advice, resources assessment services, to PICT governments to build capacity in monitoring, fisheries resources assessment and managing aquarium fisheries (2 PICTs a year)					
•	Databases established to monitor aquarium exports in at least 4 countries, with staff training in using the database for data entry and analysis. (2 in Year 1, 2 in Year 2)	Database being used effectively to regularly and reliably monitor exports, resources assessment, and economics of the fishery.				
•	Sub regional workshop for training in database management for participants from					

•	at least 6 countries (Year 2) Provide training to national fisheries authority staff to build local capacity for managing National marine aquarium trade (2 in Year 1, 2 in Year 2).	
•	Work with 2 to 3 countries to promote the development of the trade where it does not exist at present.	Sustainable aquarium export business established in at least 1 PICT which does not currently have aquarium export business
•	Financial assessment/economic appraisal completed on potential new operations and promoting opportunities to the private sector. (Year 1)	
•	Training provided to local fish collectors in at least 2 PICTs in the areas of catching and handling to promote and ensure use of industry-wide best practices. (1 in Year1, 1 in Year 2, with Years 3 & 4 focusing limited training to maintain industry best practices and on exit strategy)	Reduced mortality of collected aquarium fish in several enterprises in at least 2 PICT, increased profitability for established business.
•	Develop and distribute: marine aquarium fish identification cards for resources monitoring, database user manual and code of conduct for best practices in aquarium fish collection and handling	Improved awareness of sustainable aquarium fisheries in at least 8 PICT

Risks and risk management

This component is designed to address the main risk (experienced in some producer countries) that the fishery will develop in a destructive and unsustainable way. In general, this has not been the experience in the Pacific where operators have perceived it to be in their interests to avoid this kind of image and have been very cooperative with efforts to establish and enforce management plans.

The trade faces economic risks in that expenditure on non-essential items in developed countries tends to fall during an economic recession, and that air freight may decline or become more expensive if tourist numbers fall. There is little that the project can do about these risks, but the efforts to ensure a sustainable fishery with improved returns may mitigate the impact.

Aquarium fish exports to European markets are constrained by certification requirements. SPC is assisting countries in the region to meet OIE (an animal health organization) reporting requirements. The trade facilitation component of this programme would assist in this area. There is also a trend to replace wild-caught aquarium products (fish, corals and invertebrates) with aquaculture products. Capture at the post-larval stage for rearing to maturity also shows promise. While there is always likely to be a demand for wild caught aquarium fish, this is an opportunity for some species that will be pursued under the mariculture component of the project as an alternative income-earning opportunity.

Budget

	Cost AUD\$					
Item	Y1	Y2	Y3	Y4	TOTAL	
Personnel – senior fisheries scientist (marine aquarium trade) for 4 years	164,375	164,375	164,375	164,375	657,500	
Consultancies – economic appraisals in support of development	40,000	10,000			50,000	
Travel – to PICTs for fieldwork, industry training, and management plan development	37,500	37,500	37,500	37,500	150,000	
Database development (yr 1) and sub- regional workshop (yr 2)	30,000	40,000			70,000	
Equipment for field work and training	12,500	12,500	12,500	12,500	50,000	
Attachments of national fisheries staff for training	12,500	12,500	12,500	12,500	50,000	
Information development and dissemination		20,000	15,000		35,000	
Evaluation	7,500	5,000		7,500	20,000	
Subtotal – operation costs	304,375	301,875	241,875	234,375	1,082,500	
SPC project management fee @ 7%	21,306	21,131	16,931	16,406	75,775	
Total	325,681	323,006	258,806	250,781	1,158,275	

Component 3 – Development of mariculture opportunities

Objective:

The objective of this component is to promote and support small and medium mariculture (saltwater aquaculture) enterprises in the Pacific Island countries and territories. This will contribute to employment and economic growth, particularly in rural areas, and in the case of some products will add directly to local food supplies. Mariculture can provide an alternative to capture fisheries, relieving pressure on over-exploited coastal resources.

Strategy

On a global basis, aquaculture is growing faster than any other form of food production and is predicted to overtake capture fisheries as a supplier of fish for food in the near future. In many PICTs, however, the potential for growth of the sector has yet to be realised. In 2007 the value of production was US\$211 million dollars but it was dominated by pearls and prawns from the French territories. In the last five years or so, however, a number of new small and medium sized mariculture ventures have started in other Pacific Island countries, targeting local and niche export markets. This project component aims to build on these successes, and will also contribute directly to local fish supply by culturing sustainably trapped wild fish fingerlings in cages using local feed ingredients.

In the line with the recommendations of the 2009 AusAID funded review of the SPC Marine Resources Division; this project component will start with a critical analysis of the opportunities and constraints to mariculture development, emphasising economic and market factors. It is expected that this will refine the existing SPC Aquaculture Action Plan (2007), which has identified the key mariculture commodities (particularly pearls, prawn, seaweed and marine aquarium species). It will also inform national aquaculture strategies or legislation, which will be developed through a consultative process, with strong private sector input.

This project component will then provide advice and technical assistance with the implementation of the mariculture components of these strategies. This will include addressing issues with production techniques for some commodities, but also help to overcome other constraints, and may include assistance with developing new legislation where required. There will be an emphasis on developing skilled aquaculture scientists/technicians at the national level, and a number of projects will involve post-graduate students from the region.

This project component has strong linkages with other initiatives, notably the ACIAR mini-projects and the work of CRISP on post-larval capture and culture. There are synergies with components 2 and 4 of this programme.

Table 3: Outputs and outcomes for Component 3

Objectives

To promote and support small and medium mariculture (saltwater aquaculture) enterprises in the Pacific Island countries and territories. This will contribute to employment and economic growth, particularly in rural areas, and in the case of some products will add directly to local food supplies. Mariculture can provide an alternative to capture fisheries, relieving pressure on over-exploited coastal resources.

Overall outcome

An increase in the number and production of sustainable mariculture enterprises in the region, providing more employment and income earning opportunities.

Growth in PICT mariculture industry as measured by:

- o number of new mariculture enterprises
- \circ number of jobs created

Spe	ecific Outputs	Specific Outcomes expected by end of Y4				
•	Updated analysis of opportunities and constraints to mariculture development in PICTs (Year 1)	Mariculture component of 6 national aquaculture strategies or legislation endorsed and implemented				
•	One regional mariculture workshop conducted for government staff and private sector (Year 1)					
•	Mariculture component of 6 national aquaculture strategies or legislation completed (2 in Year 1, 4 in Year 2)					
•	At least 2 individual training attachments organized (yearly)					
•	Ongoing communication of project outputs to stakeholders (email, SPC aquaculture website, press releases) (yearly)					
•	Advice and technical assistance to facilitate uptake by private enterprise of commodities not currently farmed in at least 4 countries (1 in Year 2, 1 in Year 3, 2 in Year 4)	Uptake by private enterprise in at least 4 countries of commodities not currently farmed for domestic sales, import substitution or export - as a direct result of project efforts				
•	Advice and technical assistance to facilitate uptake within a rural or peri-urban community of wild capture-based	Uptake within a rural or peri-urban community in at least 2 countries of sustainable techniques developed by the project for wild capture-based				

	mariculture of finfish in at least 2 countries (1 in Year 3, 1 in Year 4)	mariculture of finfish, which contributes towards local fish food security					
•	In partnership with PICTs, produce and implement a plan for developing skilled aquaculture scientists/technicians at the national level.	4 Pacific Island nationals obtain MSc qualifications from applied research projects supervised by the SPC mariculture officer					
•	This includes at least 4 relevant research projects for capacity development undertaken which involve post-graduate students from the region (2 in Year 3, 2 in Year 4)						

Risk and risk management:

An important risk (indeed almost a certainty for many commodities) is that aquaculture products from the Pacific Islands will be unable to compete on international markets with efficient low-cost producers in Asia. This will be addressed by a thorough evaluation of economically viable opportunities, a focus on import substitution for local/tourism markets and development of a few commodities in which the region has a competitive advantage or for niche export markets.

Niche markets are, unfortunately, subject to over-supply in some cases. This project component will aim to address this through realistic production targets in national strategies, and improved monitoring of market trends.

Meeting export market requirements for sanitary standards and certification is likely to be extremely challenging for some countries. Component 4 of the programme will assist countries to address this issue for some items and some markets (such as export to Europe for food products).

In collaboration with the quarantine and veterinarian programs of SPC's agriculture division this project component will address aquatic biosecurity risks. This will include disease or genetic risk analysis and developing protocols for responsible movement of live aquatic species, prior to a new activity.

A problem encountered in some Pacific Island countries has been that Government attempts to monopolise mariculture production proves unsustainable in the long term. This project component will try to emphasize the role of the private sector in the development of national strategies, and will give priority to technical assistance requests that are likely to be useful to private enterprise.

Budget

	Cost AUD\$					
ltem	Y1	Y2	Y3	Y4	TOTAL	
Personnel – mariculture officer for	164,375	164,375	164,375	164,375	657,500	
4 years						
Consultancy – analysis of	20,000	20,000	20,000	20,000	80,000	
opportunities and constraints						
Travel – to PICTs for fieldwork and	25,000	25,000	25,000	25,000	100,000	
strategy development						
Regional mariculture workshop	100,000				100,000	
(Government & private sector)						
Training and study visits	15,000	15,000	15,000	15,000	60,000	
Specialist consultancies – legal,	33,333	33,333	33,333		100,000	
economic						
Information and communications	12,500	12,500	12,500	12,500	50,000	
Evaluation	7,500	5,000	0	7,500	20,000	
Subtotal – operation costs	377,708	275,208	270,208	244,375	1,167,500	
SPC project management fee @	26,440	19,265	18,915	17,106	81,725	
7%						
Total	404,148	294,473	289,123	261,481	1,249,225	

Component 4: Assistance to meet export requirements for marine products

Objective

The objective of this project component is to assist national authorities and the private sector to meet requirements and standards for marine products for various export destinations. This will allow them to access the most profitable overseas markets; and so secure and increase employment in the sector.

Strategy

The value of fisheries exports from the PICTs nearly doubled in the period 1999-2007, and many of the new jobs created in the sector are in the processing of fisheries products for export. This is particularly true of tuna processing, where the number of jobs has more than doubled in the last six years and further investment is in the pipeline; but various other fishery and aquaculture products, including live fish and invertebrates for the marine aquarium trade, are also exported.

The European Union (EU) has emerged as a particularly attractive market for fishery products, but also has some of the most rigorous standards for sanitary inspection and documentation. In the case of fishery products for human consumption, only two Pacific Island countries and two French territories are able to meet these requirements at present. As a result, several countries that have products demanded in Europe, and which would yield a better return if sold there, are foregoing the opportunity to export to that market. These include Fiji, Marshall Islands, Samoa and Vanuatu. In other countries, notably the Federated States of Micronesia, potential investment in tuna processing will require access to the EU market.

To add to this, a new EU regulation intended to prevent Illegal, Unreported and Unregistered (IUU) fishing requires that fishery products must be accompanied by a validated catch certificate from the flag state of the harvesting vessel. Other documents are needed in the case of an indirect import. These certification requirements impose a sizeable challenge for the countries in the region. For aquarium exports, the EU requires that countries are members of the World Organisation for Animal Health (OIE) and participate in their disease reporting system. This is a substantial expense for countries with small export volumes, and SPC has negotiated an arrangement that can be shared between the small island countries, but they still need to handle the reporting.

As well as the EU, other importing countries have requirements that national authorities and/or individual exporters often find difficult to meet. These requirements typically become more stringent and more complex over time, with a need for regular upgrading of systems and skills in both the government authority and the private sector.

While there have been a number of short-term projects to address the problems of market access, particularly for sanitary standards for the EU, the countries that have been successful have benefited from an input of technical assistance sustained over several years. While this can be provided on a bilateral basis, the systems and training required are identical and it would be more efficient for SPC to provide a service that will roll them out in several countries at the same time. This project component will focus on the countries which stand to benefit most from improved market access, and will provide support and mentoring to the relevant authorities and private sector in those

countries over a period of four years. It will also ensure that countries already exporting to the EU do not lose that opportunity. As well as working in-country and providing office based advice from an expert, sub-regional training courses will be organised. It is not expected that the technical assistance position will be based in Noumea. Depending on the home of the person recruited, either Suva or a home-based contract will be more cost effective.

This project component has linkages with the FFA/SPC DevFish-2 project, which will provide shortterm inputs to address obstacles to tuna industry development, as well as the other components of this programme.

Table 4: Component 4 outputs and outcomes

Objectives

To assist national authorities and the private sector in PICTs to meet requirements and standards for marine products for various export destinations. This will allow them to access the most profitable overseas markets; and so secure and increase employment in the sector.

Overall outcome

An increased value of fishery exports from the PICTs, through the ability to target markets which provide optimum returns. Measured by:

- value of fisheries exports from PICTs
- new jobs created in fish processing for export

Sp	ecific Outputs	Specific Outcomes expected by end of Y4			
•	Advice and mentoring provided to at least 4 national authorities and 8 exporters (yearly)	 PNG and Solomon Islands remain listed export of fishery products to the EU and least 2 other Pacific Island countr 	for at ries		
•	In-country technical assistance and training provided to national authorities and exporters in at least 4 countries (yearly)	graduate to the list and can comply with II documentation requirements;	UU		
•	One sub-regional training course on standards for sanitary inspection and documentation organized (Year 1, 2, and 3)	• The number of listed processi establishments in PICs approved for expe- to the EU doubles from 5 to 10;	ing ort		
•	At least 4 individual training attachments organized (yearly)	 OIE reporting by countries is maintained a PICs are able to export marine aquarity products to Europe; 	ind um		
•	Small grants for laboratory and other technical equipment provided to at least 4 national authorities and/or exporters (yearly)	• At least 5 private sector suppliers are able export to new markets (other than EU) as result of advice and assistance provided the project.	to s a by		

Risks and risk management

This project component is designed to address the risk, already experienced, that sanitary requirements will become increasing complex. In addition there is a growing amount of certification required for other purposes – IUU, wildlife conservation, and animal welfare - to deal with. National authorities and exporters need to be kept up to date with changes, and can never afford to become complacent.

A number of external factors may affect the attractiveness of the EU market – exchange rates, progress with free trade negotiations for the Pacific and competitor countries, changes in market demand, etc. If this occurs, the project may need to redefine its outcomes to focus more on access to alternative markets.

A significant risk is that the national authorities and/or private sector producers will lack the funding needed to achieve and sustain the improvements required for market access. This project component provides some operational funding to meet short-term requirements; but it will be necessary to focus on countries and enterprises that are able to mobilise the necessary resources, and for which it makes economic sense to go down this path.

Many Pacific governments suffer from high staff turnover which could affect sustainability of the project. Strategies will need to be adopted so that a cadre of competent officers built up by the project are retained.

	Cost AUD\$					
Item	Y1	Y2	Y3	Y4	TOTAL	
Personnel – senior specialist for 4 years	164,375	164,375	164,375	164,375	657,500	
Specialist in-country consultancies – laboratory services, databases	25,000	25,000	25,000	25,000	100,000	
Travel – to PICTs for fieldwork	37,500	37,500	37,500	37,500	150,000	
Training courses and attachments	50,000	50,000	50,000	50,000	200,000	
Equipment and operational support	25,000	25,000	25,000	25,000	100,000	
Evaluation	7,500	5,000	0	7,500	20,000	
Subtotal – operation costs	309,375	306,875	301,875	309,375	1,227,500	

Budget

SPC project management fee @ 7%	21,656	21,481	21,131	21,656	85,925
Total	331,031	328,356	323,006	331,031	1,313,425

Effectiveness

The objectives for each component are specified along with clear, measurable and achievable outputs and outcomes (see Tables 1-4). These objectives, outputs, and outcomes are designed to meet needs and priorities identified in consultation with PICTs and key partner agencies.

These consultation for ainclude: SPC's governing body i.e. the Committee of Representatives of Governments and Administrations (CRGA), SPC Heads of Fisheries meetings, Forum Fisheries Committee, Marine Sector Working Group of CROP agencies, as well as each PICT's Joint Country Strategy process with SPC.

The links between project objectives, outputs, outcomes, and impacts are shown in the logic model in Figure 1. Project outputs are essentially what the project will produce with this funding to achieve the intended outcomes, which in turn are expected to lead to impacts of improved food security.

The effectiveness of each component in achieving the outcomes and impact will be evaluated at the end of the project. The evaluation framework and plan is outlined in the section on 'Monitoring and Evaluation'.

The main risks and plans to prevent or mitigate them are identified below the output and outcomes table for each project component.

Where appropriate, key partnerships which contribute to achieving project objectives have been identified. These include FFA and PICT governments (for Component 1), and PICT governments and the private sector (for Components 2, 3, 4).

Efficiency

The development of each project component was based on consultation with relevant partner agencies, PICTs and other key stakeholders to ensure that:

- the components are well designed with relevant outputs that will be effective in achieving intended outcomes and impacts;
- where appropriate, project implementation arrangements are harmonised with other donors, relevant agencies, and aligned with partner government systems to avoid unnecessary duplication, overlap and confusion and maximize synergies. The partnership between SPC and FFA in Component 1 is a good example.
- key roles and responsibilities of all parties involved in project implementation have been identified in the descriptions for each component. Further details will be developed in collaboration with PICTs within the first month of project commencement.
- the budget for the project components are appropriate and realistic in enabling outputs and intended outcomes to be achieved effectively and efficiently.

In addition to the consultation fora listed in the previous section under 'Effectiveness', other parties/bodies consulted for particular project components include: FFA secretariat, and members of the Forum Fisheries Committee (Component 1), and Coral Reef Initiatives for the Pacific, The Queensland Department of Primary Industries, Marine Aquarium Council and the Coral Triangle Initiative (Component 2).

Programme efficiency is also ensured through an annual work programming and evaluation process carried out by SPC's Fisheries, Aquaculture, and Marine Ecosystems (FAME) Division, and international experts are periodically commissioned to undertake independent reviews of the Division (most recently in 2009).

Monitoring and evaluation

Purpose

A framework for monitoring and evaluation of the Fisheries for Food Security programme has been developed. The key purpose is to:

- c. provide accountability to donors and other key stakeholders on programme outputs and outcomes, including meeting AusAID reporting and evaluation requirements, and
- d. identify what has worked well and what has not, lessons for improvement and future direction for the project.

Logic model

A logic model of the project is presented in Figure 1 to show how the food security problems in PICTs drive the project's objectives and outputs of individual project components, and how these outputs are linked to the expected outcomes and the ultimate impact on improving food security. The logic model also notes the potential impact of risks to the project outcomes and impacts. The main risks and plans to prevent or mitigate them are identified below the output and outcomes table in each project component section. However, there are also external risks beyond the control of the project such as national and international economic and political factors, and the impact of these will be taken into account in project monitoring and evaluation.

Performance indicators

This logic model provides a framework for the monitoring and evaluation of the programme's outputs and outcomes. From this framework, a list of key performance indicators for each project component has been developed. This includes indicators on the impact of each project component on the higher level objectives of the project, i.e. improving food security through poverty alleviation and economic development (e.g. measures of growth in income and employment). Where feasible, these income and employment indicators will be gender-disaggregated to measure impact on men and women. Only the most important indicators were selected to minimise burden on data collection and reporting.

One of the first key tasks during the first project phase (i.e. within the first 6 months) is to work in consultation with PICTs (and partner agencies, where relevant) to further develop the details of this monitoring and evaluation plan, including refining the performance indicators, identifying baselines,

and setting up or improving data collection systems for output and outcomes. This collaborative work will help strengthen the capacity of PICT's local monitoring and evaluation systems.

Timing and approach

- **Start of Year 1**: Work with PICTs to refine performance indicators, identify baselines, and set up/improve data collection systems for outputs and outcomes
- **Ongoing:** Monitoring of project activities, outputs and finances will be undertaken by programme management to ensure each project component is on track to achieving its outputs, outcomes, and within budget. This will be undertaken with the organisation's existing resources.
- End of Year 2: A mid-term evaluation will be conducted to:
 - assess project operation- how well is it going, whether on track to meeting objectives, and outputs; and
 - get feedback from key partner agencies and clients (SPC members) on satisfaction with quality of project outputs and delivery
- End of Year 4: An end of project evaluation will be undertaken to assess achievement of project outcomes and impact based on the indicators listed in Tables 1 to 4 as well as any additional indicators developed in Year 1.
 - data gathered to assess the indicators will include objective quantitative data (e.g. statistics on income and employment) as well as qualitative feedback (e.g. surveys and interviews) from participating PICTs and key partner agencies.
 - this evaluation will be undertaken by external consultant(s).

Reporting

Project outputs, outcomes and impact will be reported and reviewed at the following levels:

- Annual reporting to AusAID
- Annual reporting to SPC management (i.e. Heads of Fisheries) and governing body (i.e. CRGA) against implementation of the FAME Strategic Plan and annual work plan.
- Where applicable, annual reporting to partner agencies on joint work, e.g. Component 1: annual FFA/SPC colloquium that reviews progress on joint work and develops annual workplans, and Component 4: six-monthly FFA/SPC round-table to monitor progress and develop workplans for the EU-funded DevFish-2 project

Gender equality

This project proposal contributes to advancing gender quality in various ways, including:

- Tuna processing for export is an industry in which women typically make up some 80% of the workforce, due to their reliability and manual dexterity.
 - Component 1 focuses on ensuring the tuna stocks are well managed which ensures sustainability of export enterprises. This offers the potential to reduce the high proportion of women in vulnerable employment which characterizes Oceania⁶ by providing full time sustainable jobs and income.

⁶ Millennium Development Goals Report 2008 (United Nations, 2008)

- Component 4 also helps expand the tuna export industry and therefore employment opportunities for women, by helping PICTs meet requirements for exporting to new and more profitable markets.
- Marine aquarium exports: Component 2 focuses on developing marine aquarium exports as a new source of employment and income opportunities. The differential impact on men and women is not clear at this stage, but will be monitored and assessed during the project.
- Mariculture: Component 3 focuses on developing the mariculture industry as an alternative source of food, jobs and income. The trading of mariculture fish for domestic consumption, is likely to benefit rural women in particular who make up a high proportion of fish sellers in local markets.

SPC has gender equality experts in-house who can advice on ways to promote employment of women in the new marine aquarium fisheries and mariculture sectors. They can also provide assistance in project monitoring and evaluation e.g. in the reporting of gender-disaggregated income and employment data to measure impact on men and women. The organisation also has policies in place to ensure that project jobs and training places are equally available to men and women.

Sustainability

This proposal focuses on improving the sustainability of fisheries as "the most significant renewable resource that Pacific Island countries have for food security, livelihoods and economic growth" (The Future of Pacific Island Fisheries, February 2010, SPC & FFA). Therefore, sustainability is a direct aim of this proposal. As summarized in Figure 1 and explained in the rest of the proposal:

- Component 1 contributes to <u>environmental sustainability</u> through improving sustainable management of fully and over-exploited fisheries resources through the use of high quality scientific stock assessments. This will be achieved by increasing transparency in fisheries management, thereby making it more difficult to take environmentally damaging decisions for short-term gain. This project component also complements assistance in developing sustainable tuna management arrangements at national and WCPFC level, that form a core activity of the SPC Oceanic Fisheries Programme.
- Components 2 and 3 focus on strengthening existing industries and developing new sustainable fisheries industries in countries which lack these industries (export of aquarium fish and mariculture, respectively) as an alternative source of <u>sustainable jobs and income</u>, and therefore reducing over-dependence and pressure on fully/over-exploited coastal fisheries stocks.
- Component 4 focuses on providing assistance to PICTs in meeting export requirements and standards for marine products that are designed to ensure no significant negative <u>environmental</u> impacts are likely to occur.

Tables 1 to 4 in this proposal identify the specific outcomes of each project component that are designed to improve sustainability. Risks and constraints to achieving these outcomes are described in the specific Component sections, along with risk management strategies. Specific risks to the <u>sustainability of benefits/change</u> from the project include:

 high turnover among government officials in many PICTs- this proposal addresses this risk by working closely with both government officials as well as private sector companies in the project implementation and operation. Private sector involvement is critical as they are the engine of economic growth and have financial interests in ensuring project effectiveness and efficiency in developing the fisheries industry. This collaborative work will also strengthen the ability of PICT government agencies to provide relevant and timely response to the needs of the private sector.

ownership, capacity and resources to maintain desired activity outcomes after the AusAID funding has ceased – this risk is mitigated by the projects' focus on working collaboratively with PICTs in developing and implementing national plans/strategies for management of particular fisheries. This collaborative work is aimed at ensuring PICTs have ownership over the plans developed. All four project components focus on building PICTs capacity to continue the work and sustain benefits and change through in-country training, technical assistance, attachments (on-the-job training).

The environmental and technical sustainability of this programme will be monitored and evaluated through the outputs and outcomes listed for each project component. The plan for monitoring and evaluation is described earlier in this proposal.

The impact of climate change on fisheries and aquaculture in the Pacific is an important issue that SPC is examining in a separate project funded by AusAID. The key threats from climate change appear to include:

- o changes to the distribution and abundance of tuna;
- decline in coral reefs and associated fisheries;
- increased operating costs associated with 'climate proofing' shore-based facilities and upgrading fleets to provide improved safety at sea; and
- damage to ponds for freshwater aquaculture.

The project is guided by a Technical Working Group, comprising relevant experts and representatives from Council of Regional Organizations in the Pacific (CROP) agencies and national fisheries departments. The project will be completed around mid-2010 and will produce:

- a summary report to guide policy makers and managers on the actions needed to maintain the productivity of fisheries in face of climate change and ,
- an authoritative book that provides an up-to-date assessment of the likely impacts of climate change on fisheries in the region; the vulnerability of oceanic, coastal and inland fisheries and aquaculture; and supporting information.

Budget Summary

	Cost AUD\$					
Item	Y1	Y2	Y3	Y4	TOTAL	
Component 1: Scientific advice for the development of oceanic fishery management measures	259,375	256,875	251,875	259,375	1,027,500	
Component 2: Management and development of export fisheries for aquarium fish	304,375	301,875	241,875	234,375	1,082,500	
Component 3: Development of mariculture opportunities	377,708	275,208	270,208	244,375	1,167,500	
Component 4: Assistance to meet export requirements for marine products	309,375	306,875	301,875	309,375	1,227,500	
Subtotal – operation costs	1,250,833	1,140,833	1,065,833	1,047,500	4,505,000	
SPC project management fee @ 7%	87,558	79,858	74,608	73,325	315,350	
Total	1,338,392	1,220,692	1,140,442	1,120,825	4,820,350	

ATTACHMENT 2

Additional Information for the SPC "Fisheries for Food Security" proposal to AUSAid

Content of the covering statement

1) Rationale for a regional approach to coastal fisheries

The Pacific Islands Regional Coastal Fisheries Management Policy and Strategic Actions (Apia Policy) was developed in February 2008 by regional Heads of Fisheries with technical support from the Secretariat of the Pacific Community (SPC). It was endorsed by the fourth Forum Fisheries Committee Ministerial Meeting held in Palau in May 2008. The Apia Policy provides a regional response to the collective concerns and expectations of Forum Leaders expressed in the Vava'u Declaration on Pacific Marine Resources (October 2007), which placed priority on the development and management of coastal fisheries to support food security, sustainable livelihoods and economic growth for current and future generations of Pacific people.

This regional policy on coastal fisheries is the first to address the collective concerns of government leaders and fisheries authorities. It was developed from interviews, questionnaires completed by fisheries agencies, results from regional workshops held in Noumea in October/November 2007, and recommendations from fish stock assessment and policy and planning workshops held in 2008. A draft Policy was discussed and endorsed by all SPC member countries at a meeting in Samoa in February 2008.

As stated in this policy, the collective vision of Pacific leaders and heads of fisheries agencies is 'Healthy marine ecosystems and sustainable coastal fisheries that provide seafood security and continuing livelihoods for current and future generations of Pacific people'. The goal that addresses this vision is 'To ensure the optimal and sustainable use of coastal fisheries and their ecosystems by Pacific Island communities'. Most importantly, the policy describes the strategic actions that fisheries authorities have prioritised as vital to achieving this goal.

Fisheries authorities in the region face common issues such as a lack of local technical capacity, inadequate management regimes and insufficient monitoring of coastal fisheries to support their development efforts. Those weaknesses can be addressed through a regional approach hence the need to secure donor funding and assistance to pursue the strategic actions outlined in the Apia Policy and thus ensure the sustainability of coastal resources in the Pacific Island region.

2) SPC's previous achievements (highlights) and key lessons learnt (including drawing upon any relevant analysis) and how these have supported food security

SPC's Policy Brief "Fish and Food Security" (Noumea, 2008) provides a relevant, although concise, analysis of the food security issue in the region. It also provides policy makers with some recommended actions aimed at increasing the contribution of both costal and oceanic fisheries to food security. (<u>http://www.spc.int/DigitalLibrary/Doc/FAME/Brochures/Policy_Brief1_08.pdf</u>)

The recommended policy actions are:

- 1. Maintain the contribution of coastal fisheries to food security monitor catches to keep harvests within sustainable limits and ensure coastal developments do not damage fish habitats.
- 2. Use more of the national tuna catch for food security.
- 3. Expand the national infrastructure for food security by installing low-cost inshore fish aggregating devices (FADs) to assist rural subsistence fishermen to catch tuna.
- 4. Introduce regulations for landing 'discards' and 'bycatch' from commercial tuna vessels at urban centres to provide low-cost fish.
- 5. Diversify the supply of fish in rural and urban areas by developing sustainable small-pond aquaculture for freshwater fish, such as Nile tilapia.

Policy actions 1, 2 and 5 are reflected in the SPC "Fisheries for Food Security" proposal to AusAid.

SPC's recent achievements in those areas include:

- Provision, through the EU-funded PROCFish-C project, of scientific information on the status, use and management prospects of reef fisheries in 17 countries and territories;
- Introduction of community-based costal fisheries management in 11 countries and territories; <u>http://www.spc.int/coastfish/doc/coastfish_docs/technical_rep/Ropeti_10_YapMngmtPlan.</u> <u>pdf</u>

http://www.spc.int/coastfish/doc/coastfish_docs/technical_rep/Anon_10_EAFguidelines.pd <u>f</u>

- Support the introduction small-pond aquaculture (tilapia) and mariculture (rabbit fish) in Vanuatu, the Cook Islands, Samoa, Nauru and the Solomon Islands; <u>http://www.spc.int/coastfish/news/Fish_News/130/Pickering_130.pdf</u>
- Provision of technical assistance and training for the introduction of inshore FAD programmes in Nauru, Kiribati, Tokelau, Samoa and the Marshall Islands; <u>http://www2008.spc.int/DigitalLibrary/Doc/FAME/InfoBull/FishNews/Blanc_121.pdf</u> <u>http://www.spc.int/coastfish/news/Fish_News/124/Feature_Nauru_124.pdf</u>
- Provision of advice and training for the introduction of coastal sport fishing in the Cook Islands, an eco-friendly tourism-based activity that contributes to livelihood improvements and the relieving of pressure from reef fisheries <u>http://www.spc.int/coastfish/News/Fish_News/128/FishNews_128_14_NFDTS.pdf</u>

SPC has provided technical assistance and training in fisheries and aquaculture to Pacific Island countries and territories for more than 50 years, and has learned many lessons. Projects and programmes are regularly reviewed with a view to improving effectiveness and efficiency. Most recently the two fisheries programmes were reviewed in 2009 by an independent team of consultants, and SPC's response to the recommendations was endorsed by CRGA. The activities and approach proposed under the fisheries for food security project proposal are consistent with this analysis.

3) Range of current activities in the coastal program component (for commercial and subsistence fisheries and aquaculture) and how these will support food security

The 2010-13 Strategic Plan of the FAME Division provides a detailed description of current activities undertaken by the Oceanic and Coastal Fisheries Programmes.

http://www.spc.int/mrd/compendium/doc/FAME_StrategicPlan.pdf

This Strategic Plan was developed with direct inputs from regional Heads of Fisheries (6th Heads of Fisheries meeting, Noumea, February 2009) and subsequently endorsed by regional Fisheries Ministers (Forum Fisheries Committee, Niue, May 2009).

Most of the activities in the Strategic Plan are supporting food security, either directly or indirectly.

The liaison between the SPC Oceanic Fisheries Programme and the Forum Fisheries Agency is of particular importance as this will provide the basis for sound tuna fisheries management regimes in the Pacific. National fisheries authorities will be in a better position to make informed decisions for ensuring that a fairer share of their national tuna catch is used for food security. To that effect, OFP's support to FFA is a result area under each of OFP's objectives in the Strategic Plan and the first component of the SPC "Fish for Food Security" proposal will facilitate this process.

4) Analysis and consultations undertaken to determine "the gaps" and future priorities for food security projects.

A number of analyses and consultations have been undertaken to determine "gaps" and future priorities for food security projects. These include:

- The Heads of Fisheries meeting (Noumea, February 2010)
 The meeting specifically requested the post-harvest/export facilitation work that is being proposed under the 4th component of the SPC "Fisheries for Food Security" proposal;
- The Future of Fisheries study (2009-10)

http://www.spc.int/mrd/Meetings/Informal HOF Honiara/Future PICTs Fisheries sum mary_final.pdf

- The Pacific Food Summit (Port Vila, April 2010) (Theme 3 of the resulting draft "Framework for Action on Food Security in the Pacific" provides strategies to enhance the contribution of fisheries to food security)
- The informal Head of Fisheries meeting (Honiara, May 2010)

FISHERIES FOR FOOD SECURITY PROGRAMME PART 2

Final Project Proposal

to AusAID

by

Secretariat for the Pacific Community

August 2011

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FISHERIES FOR FOOD SECURITY PROGRAMME PART 2

Introduction

Pacific Island countries and territories (PICTs) are unusually dependent on fish for food security. Annual per capita fish consumption in all Pacific Islands is above the global average of 16.5 kg; and in several small island countries the figures are among the highest in the world. Much of this is supplied by subsistence fishing, with a high proportion of coastal households directly involved in catching fish. Catches from inshore subsistence fishing (people fishing to supply their families) are estimated at 110,000 tonnes, making an annual contribution to GDP of the PICTs of over US\$166 million (2007 data). This is often undervalued in official statistics. A further 45,000 t. is landed annually from commercial coastal fisheries, much of it for sale on local markets. Unfortunately there are few opportunities for increasing production from inshore reef and lagoon systems, and the fish needed to supply food for a growing population will have to come from other sources. It is noteworthy that FAO identifies Kiribati, Papua New Guinea, Solomon Islands, Tuvalu and Vanuatu as 'low income food deficit' countries.

While most of the 2 million tonne catch of offshore (tuna) fisheries is taken by foreign based vessels or destined for export, this sector also makes a major contribution to national food supplies. Artisanal, or small scale, fishing for tuna for subsistence and sale on local markets is a significant but poorly measured component of the catch, with potential for increase. It is particularly important in some of the smaller island and atoll countries which have few other opportunities to increase domestic food production. The first component of this project addresses the need to improve monitoring of artisanal tuna catches, and strengthening national tuna fishery databases (both for artisanal and industrial catches).

Access to fish by inland populations in Melanesia is already limited to freshwater fisheries and aquaculture. These countries will also experience some of the strongest population growth and urbanisation resulting in further deficits in coastal areas. The development of small and medium scale freshwater aquaculture enterprises represents one of the best opportunities to meet these shortfalls. Unlike capture fisheries, in which the catch (even for tuna) is near or even exceeds sustainable limits, aquaculture offers real opportunities to increase fish total supplies. This development brings some risks, requiring the introduction of new species or strains of fish to maximize production, and must be handled responsibly. The second component of this project will pursue this work.

The role of fisheries in food security is not just about providing fish for consumption. Income generation and employment in fisheries that target export and high-value local markets is also important in ensuring that people have adequate access to food. The resource of deepwater snappers provides the basis for such fisheries in a number of PICTs. Lack of accurate stock assessments is thought to be limiting the scope for sustainable development of these fisheries in such countries, and ensuring better data collection, and the development of national capacity to analyse it and develop appropriate management systems is the aim of component three.

AusAID's strategy for food security stresses the need to promote sustainable production and improve the economic opportunities for the poor (*Food security strategy 2004*). Similarly, the need "to maximize the flow of benefits to Pacific Islanders from sustainable commercial and subsistence fisheries" is at the heart of AusAID's strategic objectives for the fisheries sector (*Valuing Pacific Fish, 2007*).

The SPC fisheries programmes are dedicated to ensuring that "the marine resources of the Pacific Islands region are sustainably managed for economic growth, food security and environmental conservation" (*FAME strategic plan 2010-2013*). A range of activities in support of this objective are already in progress. The aim of this proposal is to deliver results in a number of key areas that have been identified as priorities, in consultation with member countries and territories⁷. In line with the 2009 review of the Marine Resources Division (now FAME) that recommended against 'one size fits all' projects, two components are targeted on a sub-group of countries where they are most needed. These needs and priorities are highlighted in *The Future of Pacific Island Fisheries* (2010) report commissioned by SPC and FFA which considered the future of fisheries over a 25-year timeframe (2010-2035) to provide the basis for long-term strategic approaches to the development and management of fisheries at national and regional levels.

These address strategies described in the multi-agency regional plan *Towards a Food Secure Pacific: Framework for Action on Food Security*, 2011-2015:

- vii. Develop and strengthen policy, legal and regulatory frameworks for sustainable production and trade of agriculture, aquaculture, forestry and fisheries' products: (Components 1, 2, 3,).
- viii. Increase the production, productivity and resilience of agriculture and fisheries' systems. (Components 1, 2, 3).
- ix. Increase the contribution of oceanic fisheries' resources to domestic food supplies and employment. (Component 1).
- x. Promote sustainable management of land, freshwater, agrobiodiversity and marine resources. (Components 1, 2, 3).

Figure 1 on the following page presents a logic model which shows how the food security problems in PICTs drive the project's objectives and outputs, and how these outputs are linked to the expected outcomes and the ultimate impact on improving food security.

The concepts for each project component were thoroughly discussed at the SPC Heads of Fisheries meeting in March 2011; component 2 also draws on recommendations of early meetings of sectoral specialists in aquaculture, notably a technical consultation on Tilapia aquaculture in late 2009, ACIAR project FIS/2009/061 "Aquaculture and Food Security in the Solomon Islands – Phase 1" (in which SPC was a collaborator with Worldfish and SI MFMR), and 'Tahiti Aquaculture 2010'.

⁷ Notably the 7th Heads of Fisheries (HOF) meeting, the Forum Fisheries Committee (FFC), and each PICT's Joint Country Strategy process with SPC.

Food security problems to be addressed PICTs have high levels of poverty and their income		 Project components and objectives 5. Improve monitoring and understanding of artisanal tuna fisheries, and the management of national tuna data, so 	Ke 5.	Sustainable systems in place in 12 countries to collect and analyse artisanal tuna fishery data; national tuna data	Ke 5.	y outcomes Interests of artisanal fisheries properly considered in national tuna management; Impact of adaptations to improve artisanal		Project impact (parts 1 & 2) Improved food security in PICT through improved income and employment. Key	
and employment are threatened by overfishing and limited by lack of economic opportunities.		that this important fishery can be developed and sustained.		systems adapted to handle this data and upgraded for industrial tuna fisheries data in 12 PICTs.		tuna catches (e.g. FADs) supported by government policy; tuna fisheries data used effectively in all PICs to monitor fishery.		 indicators for each PICT: Employment in fisheries and aquaculture 	
			 Promote and support small and medium inland aquaculture enterprises in PICTs as a sustainable source of food, jobs and income – through technical assistance with planning and to address production constraints. 	6.	Improved capacity for aquaculture development policy and planning; technical constraints to increased production overcome; increased skills and knowledge base; improved capacity for aquatic animal health management and bioacaurity	6. 7.	Growth in PICT inland aquaculture providing a sustainable increase in supply of fish for food, employment and income. Sustainable management of deepwater snapper resources sustains	▲	 GDP contribution of fisheries and aquaculture (where feasible, this data will be broken down by gender)
		7. Improve monitoring, stock assessment and national capacity for management of deepwater snapper resources to ensure sustainable employment and exports from this fishery.	7.	Data collections systems and trained stock assessment staff support sustainable management of deepwater snapper fisheries in at least 4 PICTs.	-	and, where applicable, allows expansion of the fishery. Risks and external conf Where possible, strated been developed The potential influence beyond the control of th and political factors) an	foundir gies to r of conf his proje e also a	ng factors mitigate risks have ounding factors ect (e.g. economic acknowledged	

Figure 2. Fisheries For Food Security (part 2) Logic Mode

Component 1 - Enhancing national tuna fishery monitoring and data management including artisanal tuna fisheries

Objective:

To improve the monitoring and data management of national tuna fisheries by SPC members, including the development of capacity to collect and manage data from artisanal (including subsistence) tuna fleets to support effective management of these fisheries as important contributors to local food security.

Strategy:

Tuna is increasingly seen as one of the main solutions to the food security needs of Pacific Islanders, and SPC in consultation with national fisheries administrations is actively promoting and supporting the deployment of inshore anchored fish aggregation devices (FADs) to increase the access of coastal communities to tuna resources. There is currently little factual information on the impact that industrial tuna fishing is having on artisanal catches, and the extent to which FADs or management measures (such as excluding purse seiners from coastal waters) can mitigate this and increase the availability of tuna for local consumption. Despite the important subsistence/artisanal tuna fisheries in many SPC island members, only five have basic monitoring programmes, while several others are seeking assistance to begin monitoring the catches associated with newly deployed FADs. Therefore, there is an increasing need to institute effective monitoring and data management and development of these fisheries at the national level. At the same time, there is a need to develop and upgrade national tuna data management for all fisheries. This will allow the analysis of artisanal tuna data in the context of the whole fishery, as well as delivering direct benefits in terms of management and control of the region's largest fishery.

SPC's strategy in assisting its members to meet evolving tuna fishery monitoring needs is two-fold. First, the SPC's Oceanic Fisheries Programme (OFP) offers assistance in the development and implementation of effective monitoring programmes. This involves a range of activities dependent on needs, but can include provision of training to fisheries staff, infrastructure such as computer hardware and software, data forms, sampling equipment and funding for the employment of contract staff. The second aspect of OFP support is to ensure high and consistent standards across the region both for the collection of data, and for its processing, management and reporting. In this regard, OFP provides expertise in the design of monitoring programmes, competency-based training standards, data processing services and/or training, auditing of national monitoring programmes and associated data systems, and customized computer software for data management, reporting and analysis. This project will support these two roles with a particular emphasis on artisanal tuna fishery monitoring.

Table 5: Outputs and outcomes for Component 1

Objective:

Improving the quality and use of tuna fishery data in the management of national tuna fisheries to ensure their sustainability. This will include, where appropriate, artisanal tuna fisheries, which are a major source of food and livelihoods in many PICTs.

Overall outcome

Sustainable systems in place in 12 PICTs to collect and analyse national tuna fisheries data, including artisanal tuna fisheries data. The systems will provide accurate and timely data for:

- Reporting to the Western and Central pacific Fisheries Commission;
- Management of the national tuna fishery;
- Evaluation of measures to safeguard and develop artisanal tuna fisheries.

Specific Outputs	Specific Outcomes expected by end of Y4
National tuna fishery monitoring systems based on the regional standard implemented in 12 PICTs.	Countries are using up-to-date and WCPFC compatible tuna data collection forms. (Indicator – report of the biennial SPC/FFA Tuna Fishery Data Collection Committee circulated and data forms and supporting resource material available on line)
 Enhanced national tuna fisheries data management systems (TUFMAN) implemented and in-country advanced TUFMAN training delivered in 12 PICTs. The specific enhancements will include: New fishery management tools, including a Vessel Days Scheme (VDS) management module; A new sub-system to reconcile logsheet and other fishery data using Vessel Monitoring System (VMS) data; and A comprehensive TUFMAN data query system, including generation of maps and graphs. 	Countries have comprehensive information for all aspects of national tuna fisheries management and staff trained in systems use (Indicator – documentation of tuna fisheries in WCPFC Part 1 Annual Reports; duty travel reports)
Standardised data collection and management protocols for tuna fisheries, including artisanal fisheries, in place for 12 PICTs and documented in national fishery tuna data procedures documents.	Countries collect accurate data on tuna catches in the context of all tuna fishing operations in their EEZs and by their national fleets wherever they operate (<i>Indicator – revised national tuna data</i> procedures documents, which include procedures for monitoring artisanal

	fisheries)
Fishery monitoring support requirements assessed in 12 PICTs.	The short and medium term resource requirements required to sustain the national tuna fishery monitoring systems have been identified. (<i>Indicator - National</i> <i>Plans of Action for Fishery Monitoring</i> <i>available for 12 countries.</i>)
Data from 3 national subsistence/artisanal fleets and 3 fleets specifically utilising in-shore FADs are collected and analysed, with results included in national reports provided to the countries concerned.	Impact of inshore FADs is analysed for 3 countries and results used to demonstrate value of national FAD programmes (Indicator – Number of Fisheries departments with budget to support FAD deployment)
TUFART (subsistent/artisanal tuna database and reporting system) is installed and operationalised in 12 countries, or as required	Countries can manage, retrieve and analyse data to support national management planning (<i>Indicator – Number</i> of countries submitting artisanal data as part of their annual reports to WCPFC)
Audits completed for 12 national tuna monitoring systems	Action taken by countries to remedy weaknesses and gaps in tuna fishery monitoring shown by audits (<i>Indicator</i> – <i>improved data coverage following audit</i> <i>reports</i>)
Eight national and two regional tuna data workshops conducted, with focus on subsistence/artisanal tuna fisheries where appropriate	Monitoring team trained in 8 countries and skills of tuna data coordinators in 12 PICTS enhanced (<i>Indicator – workshop reports</i> and evaluation of workshops by participants available)

Risks and Risk Management

SPC has been providing technical support to member countries for many years and is therefore familiar with many of the problems that can arise. The project is designed to address the risk that 'what is not measured is not valued' and the emphasis on artisanal fisheries responds directly to the concern that these important activities are undervalued simply because they have not been well quantified.

At an operational level the project design recognizes that work will be carried out with national fisheries administrations that often lack the resources needed to invest in equipment and operational costs for new areas of work. The project budget caters for these, and countries will be required to take over these expenses as the project is implemented.

A further risk with capacity building activities is that trained staff will leave the fisheries service. The project emphasizes in-country training with groups of fisheries staff, so that capacity is not developed exclusively in one or two individuals.

Linkages

The project builds on many years' work at SPC to develop the capacity to collect and manage tuna fisheries data at the national level. It will complement work under the EU SciCOFish and DevFish 2 projects to improve the functionality of national databases for both fisheries management and combating IUU fishing. It directly complements a project that will be financed under the AusAID fisheries for food security programme at FFA to support artisanal tuna fisheries, and improved data collection is recommended by the same consultancy report that recommended the FFA project.

Budget

	Cost AUD\$					
Item	Y1	Y2	Y3	Y4	TOTAL	
Personnel – fisheries monitoring superviser	142,000	142,000	142,000	142,000		
Personnel – fisheries database administrator	124,000	124,000	124,000	124,000	1,064,000	
Data collection and entry – staff in country,	150,000	150,000	50,000	50,000	400,000	
fieldwork costs, forms, in-country workshops						
Travel – to PICTs for fieldwork	75,000	75,000	75,000	75,000		
Meetings – 2 regional tuna data meetings		75,000		75,000	450,000	
IT equipment for national fisheries	25,000	25,000	25,000	25,000	100,000	
departments						
Information development and dissemination	2,500	2,500	2,500	2,500	10,000	
Evaluation		5,000		7,500	12,500	
Subtotal – operation costs	518,500	598,500	418,500	501,000	2,036,500	
SPC project management fee @ 7%	36,295	41,895	29,295	35,070	142,555	
Total	554,795	640,395	447,795	536,070	2,179,055	

Exchange rate assumed throughout – AU\$1 = CFP 85

component 2 - support for the development of inland aquaculture

Objective

To support the development of inland aquaculture in PICTs, particularly in Melanesia, by providing technical advice for planning and to overcome constraints to production.

Strategy

Aquaculture presents many opportunities for economic and social development, with new activities being pursued throughout the region. Part 1 of the 'Fisheries for Food Security' project targeted the development of mariculture (seawater aquaculture); this component focuses on opportunities for aquaculture in inland areas, encompassing freshwater and brackish-water aquaculture. Clearly the greatest opportunities exist in the large Melanesian islands with abundant land and freshwater resources. These are also the islands with large inland populations that lack access to coastal fisheries resources; and which will see most of the population growth and urbanization. With coastal fisheries resources facing over-exploitation in many areas, causing rising fish prices, aquaculture provides these countries with a real prospect of putting more fish on the table. They thus have both the need and the opportunity for development, which will build on progress already made.

The project will address constraints to sustainable development of aquaculture in four main areas, which have been identified from various regional consultations and country visits:

- Support for strategic policy development and planning for aquaculture at the national level, including management of biosecurity risks;
- Development of technical solutions to aquaculture production constraints in the key areas of 'feed and seed';
- Development of more skilled Pacific Islander aquaculture specialists through training and supervised research;
- Establishment of a regional aquatic animal health programme that makes best use of limited resources across the region and beyond.

A clear **plan** is seen as important to guide development of the sector, to establish the roles of Government and private sector and the priorities for assistance. Papua New Guinea is the most recent member to request SPC's help in designing a strategic development plan for aquaculture (in August 2011). Vanuatu, Solomon Islands and Fiji have plans that were developed with SPC assistance, but periodic review and updating and assistance with implementation will be needed as well as assistance to other countries.

Feed and seed are the universal requirements for aquaculture development. Many farmers rely on imported feed which is more costly and can be difficult to obtain. Most or all of the necessary ingredients for producing suitable feeds, particularly for tilapia, can be obtained in the target countries. The materials available vary from one location to another and there is a need to develop appropriate formulations and feed-making capacity at a district level. Because demand is still at fairly low levels, commercial animal feed producers (where they exist) have sometimes been reluctant to set up production at this time. Smaller-scale manufacturing thus still requires technical
assistance. Meeting the growing demand for '**seed**' – the juveniles for stocking ponds - requires the development of hatchery facilities at different levels. Generally a government-run hatchery would maintain the genetic lines of broodstock and serve as a quarantine facility for necessary importation. Multiplier hatcheries to supply farmers can be managed by local entrepreneurs – particularly for tilapia which use low-tech systems. SPC currently has requests to support development of both types of hatchery, through assistance with the design and training of staff in operations. Developing the **skills** needed to support aquaculture development: a key output will be at the MSc. level, by supporting supervised research. SPC has also been requested to help with curriculum develop for farmer training and extension workers, however, and will support the development of these programmes through the National Fisheries College in PNG, and elsewhere as needed. Finally the ability to address problems of disease will be important in ensuring the increased production is not derailed by this problem. This is discussed further in the section on 'risks'.

While the concept of 'subsistence aquaculture' to provide food security for poor rural communities is attractive, global experience analysed at a meeting in late 2009⁸ has shown that this approach is not successful without ongoing subsidies, which are unlikely to be sustained in PICs. This project recognises that private enterprise, at all scales, will drive aquaculture development – providing food but also employment and income to meet the cost of inputs needed to sustain viable production levels. The project will therefore work with member governments to promote private sector development of small and medium-scale aquaculture ventures supplying local and urban markets as a sustainable means of meeting the growing demand for fish. For freshwater fisheries development the project will focus particularly on Fiji, Solomon Islands, Papua New Guinea and Vanuatu as countries with potential; but it is expected that activities will also assist Samoa and other high island countries. The aquatic animal health network will provide a service more widely and will involve some Pacific Island Territories in the role of service providers to their neighbours.

Table 2: Outputs and outcomes for Component 2

Objective:

To support the development of inland aquaculture in PICTs, particularly in Melanesia, by providing technical advice for planning and to overcome constraints to production.

Overall outcome

Sustainable development of small scale and medium aquaculture enterprises (both existing and new) supplying local and urban markets. These will provide:

- increased supplies of cultured fish for food;
- o increased employment and income-earning opportunities in aquaculture enterprises.

This overall outcome will be measured primarily by the increase in annual fish production from inland aquaculture. Employment and income for men and women will also increase but can probably only be measured through sample surveys.

Specific Outputs	Specific Outcomes expected by end of Y4
4 national aquaculture plans developed or updated; 4	Plans defining policies and roles of
biosecurity risk or environmental impact assessments	Government and private sector in place to

⁸ See <u>http://www.spc.int/aquaculture/index.php?option=com_docman&task=cat_view&gid=54&Itemid=32</u>

for new aquaculture developments completed.	support development; risk assessments and EIAs needed before development can take place are completed and provide appropriate safeguards (<i>Indicator – Project</i> <i>progress reports</i>)
Technical advice on design, construction and operation of 2 new hatcheries provided; Feed formulation for 3 locally produced feeds developed and tested.	2 new hatcheries operational and meeting needs for juveniles; Locally produced feed substitutes for imported feed in at least 3 production systems (<i>Indicator – National</i> <i>reports</i>)
12 aquaculture MSc students supervised through practical and nationally relevant projects.	12 new qualified technical staff with at least 50% employed in aquaculture enterprises or in aquaculture extension by end of project (<i>Indicator – tracer study on students</i>)
Network for aquatic animal disease diagnosis and testing established and in use by member countries.	Countries using regional network to monitor and control disease (Indicator – requests to network for diagnostic services)

Risks and Risk Management

A key risk that the project is designed to address is the risk of undesirable ecological impacts of species that have been introduced for aquaculture becoming pests in the wild, as well as the risks of introducing new parasites and diseases that can impact both cultured and wild species. The incorporation of biosecurity measures in national aquaculture planning and the capacity to assist with risk assessments will help to manage these risks while still allowing controlled importation necessary for development of the sector.

The emergence of disease as aquaculture expands and intensifies has proved a significant risk for the development of the industry elsewhere in the world. There is an almost complete absence of trained aquatic veterinarians in the region, while diagnostic services are only available in a few specialised laboratories. The strategy to address the needs of what is still a very small industry in the Pacific Islands is to make best use of available resources through a network that will allow countries to seek assistance and share experience.

Plans relying on private sector involvement are always vulnerable to unfavourable changes in investment and business conditions. While these are generally beyond the scope of the project to influence, the spread across several countries with very different prospects for economic growth should allow identification of opportunities in at least some locations.

Linkages

This project will be the centre-piece of SPC work in Inland Aquaculture for the next four years, and it will provide the ability to help coordinate and further extend the outcomes of three parallel initiatives in which SPC is a collaborating partner.

An ACIAR-funded Worldfish project, FIS/2010/057 Aquaculture and food security in Solomon Islands - Phase II, is in the final stages of approval and will involve the SPC Inland Aquaculture working with Worldfish researchers. This project will address key researchable issues to assist Solomon Islands in implementing promising directions for inland aquaculture as identified by ACIAR FIS/2009/061. The initial focus will be on researching the feasibility of milkfish farming, and then on-farm trials on husbandry and management systems for milkfish and/or Nile tilapia. Partnership building and institutional and personnel capacity strengthening will be a focus of the project. Of the PICTs Worldfish is constrained to working only in Solomon Islands, so an important role for SPC will be to extend results from this project to other PICTs (Vanuatu, Fiji, Samoa, Cook Islands) through this present Inland Aquaculture project.

In June 2011 SPC launched the EU-funded IACT project (Increasing Agriculture Commodity Trade) which has an aquaculture component, and an emphasis on export or import substitution of aquaculture commodities. This complements this proposed project - with its emphasis on technical assistance and working mainly through government systems - as a vehicle for providing support direct to the private sector, with an emphasis on larger enterprises.

SPC is also a collaborator in the ACIAR PARDI project (Pacific Agribusiness Research for Development) which can bring value chain analysis, value-adding and marketing expertise to inland aquaculture commodities.

	Cost AUDŞ					
Item	Y1	Y2	Y3	Y4	TOTAL	
Personnel – Aquaculture specialist	120,000	120,000	120,000	120,000		
Personnel – Project assistant*	60,000	60,000	60,000	60,000	720,000	
Travel – to PICTs for fieldwork	37,500	37,500	37,500	37,500		
Meetings – 2 sub-regional meetings		50,000		50,000	250,000	
Training – MSc research project costs	25,000	25,000	25,000	25,000	100,000	
Consultancies and diagnostic services	25,000	25,000	25,000	25,000	100,000	
Equipment and communications	10,000	5,000	5,000	5,000	25,000	
Information development and dissemination	2,500	2,500	2,500	2,500	10,000	
Evaluation		5,000		7,500	12,500	
Subtotal – operation costs	280,000	330,000	275,000	332,500	1,217,500	
SPC project management fee @ 7%	19,600	23,100	19,250	23,275	85,225	
Total	289,600	353,100	294,250	355,775	1,292,725	

Budget

* Position also provides support to Mariculture and Export Facilitation components of part 1 project.

Component 3 – improving the management of deepwater snapper resources in pacific island countries

Objective:

To improve the stock assessments for deepwater snapper in Pacific Island countries to allow sustainable development of the fishery, while developing national capacity to undertake this kind of work.

Strategy:

Deepwater snapper are an important fisheries resource in a number of Pacific Island countries. Caught on the outer reef slope and around seamounts, they are out of the range of many small-scale inshore fishers and have largely escaped the overfishing that characterizes the more valuable inshore resources. Snappers are good-eating, and because of their deepwater habitat they are not subject to ciguatera poisoning which makes large reef fish a risky choice in many of the small island countries. They support export fisheries, notably in Tonga, supplying a market in Hawaii. In countries with tourist industries they are sought after by hotels and restaurants, and can command relatively high prices. While there are a number of species with different characteristics, deepwater snapper are generally large but slow-growing by tropical standards. In many cases, fisheries have developed on a previously unfished resource, yielding impressive catches at first which soon declined. There is a lack of management plans in most PICTs except the US territories and Tonga, and a lack of information on the status of stocks which could be used to develop plans. In recent meetings of Heads of Fisheries, Pacific Island Countries have called on SPC to assist with stock assessments of this resource. This follows a more general request for assistance to develop national capacity for fisheries stock assessment.

A recent review of snapper fisheries management measures in PICTs⁹ identified requirements that are not being met in most. These include:

- 1. Application of financial and human resources to ensure collection of high quality data of sufficient coverage to meet the needs of management; and
- 2. Availability of scientific and technical expertise familiar with the resources, their assessment and management.

This project will address these needs, while building capacity in-country to sustain data collection systems and stock assessment skills. The project will focus on Marshall Islands, Samoa, Tonga and Vanuatu in line with priorities identified in SPC Joint Country Strategies.

⁹ McCoy M.A. 2010. Overview of deepwater bottomfish fisheries and current management activities in Pacific Island countries and territories. SPC report (in press).

Table 3: Outputs and outcomes for Component 3

Objective:

To improve the stock assessments for deepwater snapper in Pacific Island countries to allow sustainable development of the fishery, while developing national capacity to undertake this kind of work.

Overall outcome

Improved assessments of deepwater snapper resources are provided for at least 3 PICs with systems and staff in place to further monitor the fishery, undertake stock assessments and refine estimates over time. This will provide for:

- \circ $\;$ Management of the national snapper fishery; and
- \circ $\;$ Identification of opportunities to further develop the fishery where appropriate.

Specific Outputs	Specific Outcomes expected by end of Y4
A new data management system developed for deepwater snapper (SNAPMAN) with similar user interfaces to the system used for Tuna is installed and operational in at least 3 PICs	3 functional data management systems (Indicator – data supplied for backup at SPC HQ)
Data collection systems for the deepwater snapper fishery are in place and supported in at least 3 PICs using logsheets, observers where practicable, and port samplers; data is collected and entered	At least 2 full years' data for three countries collected during the course of the project (Indicator – as above)
Data on growth rates of the major target species, providing comparisons between countries, is collected and analysed for at least 3 PICs	Growth rate information analysed and documented (<i>Indicator – SPC publication of the results</i>)
Maps of relevant underwater features and estimates of potential habitat for at least three major target species	Habitat analysis and potential yield estimated for at least 1 PICT (Indicator – Resource profile report to country)
At least one catch depletion experiment is carried out for an isolated seamount population of snappers to estimate key population parameters	Unexploited population size and natural mortality estimated for three target species (Indicator – SPC publication of results)
At least 3 Pacific Island fisheries graduates obtain an MSc or higher qualification including a project/thesis on the assessment of deepwater snappers in their home country, under supervision of SPC (this may be modified in countries where appropriate staff are already qualified to MSc level to focus solely on the project and attachments)	Three national fisheries administrations have qualified snapper stock assessment scientists working for them (<i>Indicator</i> – <i>trace on supervised graduates</i>)

Linkages:

The project complements other work on coastal and oceanic fisheries resources by SPC, supported from a variety of sources. It responds to the fact that deepwater snapper has tended to fall between other projects – it is not tuna or a related species (on which Oceanic Fisheries Programme work is focused), but it has also not been covered by Coastal Fisheries Programme work which has focused on the shallow water fish and invertebrates that form the basis of most coastal fishing activities.

Funding for a pilot project in New Caledonia has recently been approved. This will allow development of the SNAPMAN software, as well as testing data collection and the results of this will help to inform detailed planning of this project.

Risks and risk management:

The project is designed to address the principal risk to the snapper fishery, that in the absence of credible stock assessments, managers will be under pressure to allow changes to the fishery that make it unsustainable. In Tonga, for example, there is already pressure to relax restrictions on the fishery that have been in place for many years. Conversely, in the absence of accurate assessments, there may be opportunities missed to expand the fishery creating new enterprises and jobs.

The project also strengthens the capabilities of SPC to assist with the development of Pacific Island's fisheries scientists by providing a dedicated position with a strong role in training and supervision of research. Currently this work conflicts with the need to 'get on and do the job' in delivering stock assessments and scientific advice to a range of clients.

Operational risks associated with data collection and management are largely catered for in the project design. There is some risk regarding the sustainability of these systems, but the objective to deliver improved assessments within the life of the project means that a useful result will be achieved even if systems cannot be maintained. Also by focusing on a few countries that have frequently stated strong interest in this work, there should be a better chance of sustainability than if effort was spread across the entire region. As in other training activities there is a danger that scientists qualified under the project will not remain with national fisheries administrations, but given the relatively high level of expertise and the cost of training at this level, it is not possible to expand the number of scientists trained in each country.

Budget:

	Cost AUD\$				
Item	Y1	Y2	Y3	Y4	TOTAL
Fisheries Scientist – Snapper (4 years)	130,000	130,000	130,000	130,000	520,000
Travel and meetings	25,000	25,000	25,000	75,000	150,000
Data collection – local staff & equipment	50,000	50,000	50,000	50,000	200,000
3 MSc scholarships and attachments	60,000	120,000	10,000	10,000	200,000

Vessel charter and operations	40,000	10,000	40,000	10,000	100,000
Information development and dissemination	2,500	2,500	2,500	2,500	10,000
Evaluation	0	5,000	0	7,500	12,500
Subtotal – operation costs	307,500	342,500	257,500	285,000	1,192,500
SPC project management fee 7%	21,525	23,975	18,025	19,950	83,475
Totals	329,025	366,475	275,525	304,950	1,275,975

Effectiveness

The objectives for each component are specified along with clear, measurable and achievable outputs and outcomes (see Tables 1-4). These objectives, outputs, and outcomes are designed to meet needs and priorities identified in consultation with PICTs and key partner agencies.

The links between project objectives, outputs, outcomes, and impacts are shown in the logic model in Figure 1. Project outputs are essentially what the project will produce with this funding to achieve the intended outcomes, which in turn are expected to lead to impacts of improved food security.

The effectiveness of each component in achieving the outcomes and impact will be evaluated at the end of the project. The evaluation framework and plan is outlined in the section on 'Monitoring and Evaluation'.

The main risks and plans to prevent or mitigate them are identified below the output and outcomes table for each project component.

Where appropriate, key partnerships (including complementary projects) which contribute to achieving project objectives have been identified.

Efficiency

The development of each project component was based on consultation with relevant partner agencies, PICTs and other key stakeholders to ensure that:

- the components are well designed with relevant outputs that will be effective in achieving intended outcomes and impacts;
- where appropriate, project implementation arrangements are harmonised with other donors, relevant agencies, and aligned with partner government systems to avoid unnecessary duplication, overlap and confusion and maximize synergies. The partnership between SPC, Worldfish and ACIAR in Component 2 is a good example.
- key roles and responsibilities of all parties involved in project implementation have been identified in the descriptions for each component. Further details will be developed in collaboration with PICTs within the first month of project commencement.
- the budget for the project components are appropriate and realistic in enabling outputs and intended outcomes to be achieved effectively and efficiently.

Programme efficiency is also ensured through an annual work programming and evaluation process carried out by SPC's Fisheries, Aquaculture, and Marine Ecosystems (FAME) Division, and international experts are periodically commissioned to undertake independent reviews of the

Division (most recently in 2009). An internal review of the Division's strategic plan is scheduled for early 2012.

Monitoring and evaluation

Purpose

A framework for monitoring and evaluation of the Fisheries for Food Security programme has been developed. Reporting on Part 1 and Part 2 of the project will be integrated as far as possible. The key purpose is to:

- e. provide accountability to donors and other key stakeholders on programme outputs and outcomes, including meeting AusAID reporting and evaluation requirements, and
- f. identify what has worked well and what has not, lessons for improvement and future direction for the project.

Logic model

A logic model of the project is presented in Figure 1 to show how the food security problems in PICTs drive the project's objectives and outputs of individual project components, and how these outputs are linked to the expected outcomes and the ultimate impact on improving food security. The logic model also notes the potential impact of risks to the project outcomes and impacts. The main risks and plans to prevent or mitigate them are identified below the output and outcomes table in each project component section. However, there are also external risks beyond the control of the project such as national and international economic and political factors, and the impact of these will be taken into account in project monitoring and evaluation.

Performance indicators

This logic model provides a framework for the monitoring and evaluation of the programme's outputs and outcomes. From this framework, a list of key performance indicators for each project component has been developed. This includes indicators on the impact of each project component on the higher level objectives of the project, i.e. improving food security through poverty alleviation and economic development (e.g. measures of growth in income and employment). Where feasible, these income and employment indicators will be gender-disaggregated to measure impact on men and women. Only the most important indicators were selected to minimise burden on data collection and reporting.

One of the first key tasks during the first project phase is to further develop the details of this monitoring and evaluation plan, including refining the performance indicators, identifying baselines, and setting up or improving data collection systems for output and outcomes. This collaborative work will help strengthen the capacity of PICT's local monitoring and evaluation systems.

Timing and approach

- **Start of Year 1**: Work to refine performance indicators, identify baselines, and set up/improve data collection systems for outputs and outcomes
- **Ongoing:** Monitoring of project activities, outputs and finances will be undertaken by programme management to ensure each project component is on track to achieving its outputs, outcomes, and within budget. This will be undertaken with the organisation's existing resources.
- End of Year 2: A mid-term evaluation will be conducted to:

- get feedback from key partner agencies and clients (SPC members) on satisfaction with quality of project outputs and delivery
- End of Year 4: An end of project evaluation will be undertaken to assess achievement of project outcomes and impact based on the indicators listed in Tables 1 to 4 as well as any additional indicators developed in Year 1.
 - data gathered to assess the indicators will include objective quantitative data (e.g. statistics on income and employment) as well as qualitative feedback (e.g. surveys and interviews) from participating PICTs and key partner agencies.
 - this evaluation will be undertaken by external consultant(s).

Reporting

Project outputs, outcomes and impact will be reported and reviewed at the following levels:

- Annual reporting to AusAID
- Annual reporting to SPC member sectoral specialists (i.e. Heads of Fisheries) and governing body (i.e. CRGA) against implementation of the FAME Strategic Plan and annual work plan.

Gender equality

SPC is keen to promote the engagement of women in project activities and as project beneficiaries. In particular there have already been some successful aquaculture ventures led by female entrepreneurs and women's community groups. Women are also normally involved in the marketing of tuna caught by small scale fishing operations, and interventions to assist them in this role are envisaged under the EU DevFish 2 project.

The organisation has recently completed a study of gender in fisheries science and management¹⁰ which proposes three ways to increase the representation of women in this field: The first is by raising the profile of fisheries as a potential career as well as the profile of women already working in the sector; the second is by providing a support network; and the third is by strengthening the institutional level (work environment and conditions). Detailed recommendations for the implementation of these proposals are provided in the report and will be implemented as far as this is practicable by SPC through various projects. For example recommendation 5 "provide funding for scholarships in fisheries science and management at the postgraduate level as a means to promote capacity building" is directly addressed by components 2 and 3 of this proposal.

Gender specialists in the organisation can also provide assistance in project monitoring and evaluation e.g. in the reporting of gender-disaggregated income and employment data to

¹⁰ Demmke Patricia and Kelvin Passfield: Gender in Oceanic and Coastal Fisheries Science and Management based on case studies in Solomon Islands, Marshall Islands and Tonga. A report for the SciCOFish Project – March 2011 available at www.spc.int/DigitalLibrary/Doc/FAME/Reports/Tuara_11_GenderOceania.pdf

measure impact on men and women. The organisation also has policies in place to ensure that project jobs and training places are equally available to men and women. Women have been recruited for two out of the four technical assistance posts supported by the first part of this programme.

Sustainability

This proposal focuses on improving the sustainability of fisheries as "the most significant renewable resource that Pacific Island countries have for food security, livelihoods and economic growth" (The Future of Pacific Island Fisheries, February 2010, SPC & FFA). Therefore, sustainability is a direct aim of this proposal.

Risks to sustainability of project outcomes are identified separately for each component. As far as possible, these have been addressed in the design.

	Cost AUD\$					
Item	Y1	Y2	Y3	Y4	TOTAL	
Component 1: Artisanal tuna data &	518,500	598,500	418,500	501,000	2,036,500	
tuna data management						
Component 2: Inland aquaculture	280,000	330,000	275,000	332,500	1,217,500	
Component 3: Deepwater snapper	307,500	342,500	257,500	285,000	1,192,500	
Subtotal – operation costs	1,106,000	1,271,000	951,000	1,118,500	4,446,500	
SPC project management fee @ 7%	77,420	88,970	66,570	78,295	311,255	
Total	1,183,420	1,359,970	1,017,570	1,196,795	4,757,755	

Budget Summary

Annex C: Concept Note – Part 3

Community-Based Ecosystem Approach to Fisheries Management Four Day Workshop Synopsis

Suggested Date: March 2015 aligned with the SPC FAME HOF

1. Coastal fisheries are the cornerstone of food security and livelihoods for many Pacific Island communities. Between 70 to 90 per cent of animal protein is derived from fisheries in many Pacific Island populations and nearly 50 per cent of coastal households derive their first or second income from fisheries.

Despite their significance, subsistence and small scale fisheries are largely unmanaged and increasingly overfished, particularly for those close to urban areas where the demand for fish supply is high.

With the increase in urban populations and increase in demand for food supply from the coastal fisheries, it is it is not likely that the coastal fisheries production will expand in future. On the contrary, it is likely that the coastal fisheries production will decline and the situation will become worse in the future.

An estimated 75 per cent of Pacific Island coastal communities will not meet food security needs by 2030 due to a forecast 50 per cent growth in population, the likely effects of climate change, ongoing environmental degradation and inadequate distribution networks.

Maintaining levels of fish production from coastal resources, providing new opportunities to access offshore tuna, and generating new avenues of income where possible will be fundamental to bridging this gap. Given the complexity of management systems and the tenureship surrounding coastal areas and resources in most if not all Pacific Island countries, community-based fisheries management using an ecosystem approach is seen as a key driver of such an outcome.

2. It is therefore proposed that the Secretariat of the Pacific Community's division of Fisheries, Aquaculture and Marine Ecosystems (SPC FAME), supported by the Australian aid program, host a four day Community-Based Ecosystem Approach to Fisheries Management Workshop.

3. SPC FAME is the primary regional body with a regionally agreed mandate to bring coherency and new technical expertise to the Pacific coastal fisheries sector.

SPC FAME supports its Pacific Island members in their management of coastal fisheries, sustainable development of nearshore resources and aquaculture.

Community-based management is one of SPC FAME's core activities. SPC FAME engages and encourages this approach through national fisheries departments through to Pacific Island Communities. SPC FAME supports community-based fisheries management initiatives with clear and accurate information.

At the national level, SPC FAME focuses in on the sustainable implementation of management plans and regulations that are enforceable and support community-based fisheries management. SPC, through its Coastal Fisheries Programme is strengthening linkages and collaborations with NGOs and civil society to foster better delivery of community-based fisheries management at the community level.

Purpose of Workshop and Outcomes

4. The purpose of the proposed four (4) day workshop will be to assess and support the strengthening of community-based fisheries management approached, and to strengthen partnerships and collaborations amongst community-based practitioners, with the intention to maintain food security and enhance livelihoods from sustainable coastal fisheries in the region.

The proposed workshop will gather around 50 Pacific coastal experts from regional organisations, donors, governments, industry and civil society, who are actively supporting coastal fisheries management in the region.

5. Suggested outcomes of the proposed workshop are:

- a. Provide a stocktake of community-based fisheries/coastal management programmes and approaches. Identify gaps in knowledge, coverage, applicability and lessons learnt in the Pacific region.
- b. Strengthen coordination of monitoring and evaluation of community-based fisheries approaches nationally and regionally.
- c. Identify ways of scaling out community-based fisheries approaches for enhanced, sustainable outcomes in food security and livelihoods.
- d. Identify achievable priorities and needed interventions for regional assistance and continued collaboration and coordination.

6. The workshop will generate four working papers (one for each of the above outcomes) and a summary report that will subsequently be distributed to Pacific Island governments and nominated stakeholders. These will be non-binding papers that may prove useful as reference points for future coastal fisheries coordination.

7. Australia will contribute up to AUD300,000 to SPC FAME to support the stocktake, drafting of reports and workshop participation costs. The Workshop Steering Committee would ideally be kept small with representatives from SPC. WorldFish/ANCORS, LMMA, and DFAT. DFAT would also support SPC engaging a workshop facilitator and a coordinator to support the drafting of workshop reports, inclusive of comments from participants.

8. Participants in the workshop could include representatives from:

SPC (FAME, M&E and Food Security, Gender, Youth) DFAT, ACIAR, Department of Environment, Geoscience Australia SPC Member National (and Territorial) Fisheries Administrations SPC Member National (and Territorial) Conservation Departments FFA GIZ SPREP Packard USP Future of Fish LMMA WWF WorldFish CI ANCORS FAO RARE TNC World Bank New Zealand Japan

Annex D: Terms of Reference

Draft Terms of Reference

Final Evaluation Report

Pacific Fisheries for Food Security Programme

Agreement Number 57439

The Pacific Fisheries and Food Security (PFFS) Programme is a technical assistance project to provide support to Pacific Island country and territory (PICT) members of SPC in a number of priority areas, identified by the Heads of national Fisheries administrations. The project is well integrated in a more extensive work programme, and to some extent is filling gaps identified in that programme, but there are strong linkages between components. There are also clear synergies with support provided to FFA under the food security initiative for work in tuna fisheries management and market access for tuna products.

The project was developed in two parts – the first part, started in November 2010. This has components on scientific advice for tuna fisheries management; the marine aquarium trade; development of mariculture (salt water aquaculture); and export certification of fisheries products to allow market access. A second phase, starting in November 2011, added three new components – tuna fisheries monitoring; inland aquaculture development; and stock assessment of deepwater snappers. The project was initially launched by an exchange of letters for part 1; but this then rolled into a grant agreement (57439) covering both parts signed on 30 November 2011, with a completion date for the project set at 31 October 2015.

Under the grant agreement, an independent mid-term evaluation was undertaken in late 2013 and a report with recommendations provided to SPC. With the project now in its final months, a final independent evaluation report is required to meet the terms in the grant agreement. Therefore the following terms of reference are for a consultant to produce a final evaluation report for the project, and more specifically:

- 2. A report of no more than 25 pages plus appendices covering the following:
 - a. Executive summary covering the main findings
 - b. Background and methods
 - c. Evaluation of the purpose, scope and implementation (process evaluation).
 Process evaluation to also include assessment of the uptake of recommendations from the mid-term evaluation
 - d. Evaluation of the relevance, effectiveness, efficiency and sustainability (impact evaluation). Impact evaluation to also examine gender equity and any other cross-cutting issues relevant to the project

- e. Evaluation of the expenditure, with SPC providing the financial statement for the project
- f. Conclusions and recommendations, including key results and learnings
- g. Appendices as required.
- 3. The work will be undertaken with the consultant travelling to Noumea for 8–10 days to undertake the evaluation and consult with key project implementation stakeholders.
- 4. The evaluation will be undertaken in close collaboration with the FAME Monitoring, Evaluation and Learning Adviser.
- 5. A draft report will be produced by the consultant and provided to SPC for comment by 30 November 2015.
- 6. SPC would have 10 days in which to provide comments on the draft report to the consultant by 14 December 2015, with the final report provided within one week of the comments being provided by 20 December 2015.

Annex A Supplementary Paper:

Attachment A to Mid Term Evaluation TOR

Questions to guide an Independent Progress Report

DAC criteria

1. Relevance

- Are the objectives of the Program relevant to Australian Government and partner government strategic priorities, including SPC's Strategic Plan objectives and results (as amended in 2013), AusAID's Pacific Fisheries Framework (2007) objectives and intermediate outcomes, the following Food Security through Rural Development (FSRD) Initiative outcomes; and AusAID's Regional Situation Analysis objectives for regional assistance and cross cutting policies including gender equity, climate change and disability.
- Consider the current level of commitment of SPC Members to the Program and whether the objectives were relevant to the context/needs of beneficiaries?
- Consider the extent to which the Program activities are harmonised with the work of other regional organisations, donors and NGOs supporting coastal and oceanic fisheries in the pacific.
- If not, what changes should have been made to the Program or its objectives to ensure continued relevance?

2. Effectiveness

- To what extent were the stated objectives and outputs as stated in the Programs monitoring and evaluation matrix achieved to date?
- What is the likelihood of the stated objectives and outputs being achieved by the end of the Program.

3. Efficiency

- Has the implementation of the Program made effective use of time and resources to achieve the outcomes to date (i.e delivered value for money)?
 Sub-questions:
 - Are the projects well targeted?
 - Has the Program been well managed and co-ordinated and has it been responsive to changing needs?
 - Has the Program suffered from delays in implementation? If so, why and what was done about it?
 - Has the Program had sufficient and appropriate staffing resources?
- Was a risk management approach applied to management of the Program (including anticorruption)?
- What were the risks to achievement of objectives? Were the risks managed appropriately?

4. Impact

- To what extent have development outcomes been achieved to date?
- Has the Program produced intended or unintended changes in the lives of beneficiaries and their environment, directly or indirectly?
- Were there positive and/or negative impacts from external factors?
- What is the likelihood of further outcomes being achieved by the end of the Program?

5. Sustainability

- Do beneficiaries and/or partner country stakeholders have sufficient ownership, capacity and resources to maintain the Program outcomes after Australian Government funding has ceased?
- Are there any areas of the Program that are clearly not sustainable? What lessons can be learned from this?

6. Gender Equality

- What were the outcomes of the Program for women and men to date?
- Does the Program promote equal participation and benefits for women and men? Sub-questions:
 - Does the Program promote more equal access by women and men to the benefits of the Program, and more broadly to resources, services and skills?
 - Does the Program promote equality of decision-making between women and men?
 - Does the Program help to promote women's rights?
 - Does the program help to develop capacity (donors, partner government, civil society, etc) to understand and promote gender equality?

7. Monitoring and Evaluation

- Does evidence exist to show that objectives have been achieved?
- Were there features of the M&E system that represented good practice and improved the quality of the evidence available?
- Was data gender-disaggregated to measure the outcomes of the Program on men and women?
- Does the M&E system collect useful information on cross-cutting issues?

8. Analysis & Learning

- How well has the current design addressed previous learning and analysis?
- How well has learning from Program implementation and current reviews been integrated into the Program?

Annex E: List of Documents

This Annex provides a list of documentation made available to the Review by SPC, along with other Reference documents. Some pre-date the FSSP Program.

SPC / Government of Australia Agreements

COMMONWEALTH OF AUSTRALIA represented by the Australian Agency for International Development (AusAID) ABN 62 921 558 838 and SECRETARIAT OF THE PACIFIC COMMUNITY (SPC) FOR PACIFIC FISHERIES FOR FOOD SECURITY PROGRAM Ausaid agreement number 57439:

Agreement 57439; **Amendment No. 1.** (60pp – includes full project descriptions for Phases 1 and 2) [signed version November 2011]

Agreement 57439 **Amendment No 2**. (undated, but file name refers May 2013; 'minor change in payment schedule': Changed payment date of Tranche 5. signed Mann/Batty)

Agreement 57439 **Amendment No 3**. (February 2014: Redistribution of Tranche Payments 5 and 6 – change to payment dates)

Approval commit relevant money and enter into and an arrangement for Pacific Fisheries for Food Security Program: \$2,005,580 **new funding for Part 3** of the Program: 'Community Based Fisheries Management Workshop' in early 2015. (relates to amendment 4)

Agreement 57439 **Amendment No 4**. (September 2014: Addition of Part 3 CBFM workshop task; increase in financial limit 300,000)

Agreement 57439 Amendment No 5. (October 2015; 'no cost extension to 31 May 2016')

Ten-Year Partnership Agreement:

Secretariat of the Pacific Community – Government of Australia Partnership for Pacific Regionalism and Enhanced Development 2014 – 2023 – March 2014. (20pp)

Contribution Agreement:

Amendment 1 of the Regional Contribution to Core Services and Programs (Pacific) between Department of Foreign Affairs and Trade (DFAT) and Secretariat of the Pacific Community (SPC). DFAT Agreement Number: 69294/1 - May 2014. (4pp)

MTR and Management Responses

- PFFSP Mid-Term Review Final Final Report Dec 2013
- pacific-fisheries-food-security-program-mtr-man-resp (DFAT)
- Status of implementation of the AusAid Food Security Independent mid term review report Recommendations (SPC FAME)

FAME strategic Documents

- SPC Division of Fisheries, Aquaculture and Marine Ecosystems (FAME) Strategic Plan 2013-2016
- A new song for coastal fisheries pathways to change: The Noumea Strategy (2015)

SPC and FAME Reporting Documents

Narrative Reports

- Yr 1 2011 Annual Report for AusAID QAI rep.
- Yr 2 [draft] 2012 Annual Report for AusAID QAI rep
- Yr 3 [draft] 2013 Annual Report for DFAT QAI 2013 (1)-LC-JH
- SPC Programme Results Report 2013-2014
- FFS outputs (2013-2015) 02.11.15
- Copy of Fisheries for Food Security 1 ME matrix_Export Reqs 261113 (1)
- Copy of Copy of Mariculture ME matrix_ruth_11_11_2014
- End of service report_Ruth Garcia Gomez_Jan2015
- SPC Ausaid Report for Post Harest and Export_Version0

Financial Reports

- Food Security Yr1-2 report 2010-2013-signed
- Yr 2 2012 Food-Security-Financial-report-1Jan2010-28Feb2013
- Yr 3 2013 FAME-food-Security-Financial-Report-01Jan2010-28Feb2013
- Yr 4 2014 Financial report Phase 1 (to 31.08.2014)
- Yr 4 2014 Financial report Phase 2 (to 31.08.2014)
- AusAID-FS-Exp-to-present(with-POs)-Phases1&2-to-31-10-2015-VALUES-ONLY (4) [Nov 2015] .xls

Gender Data

- FAME training IRIS output
- Trainings for the period 01 July 2014 to 31 December 2014 (1)

FSSP Component Information and Knowledge Products

C 1.1 – Scientific Advice for Oceanic Fisheries

• Table of outputs for FFS review 2015

Activity 1

- Review-Implementation-and-Effectiveness-CMM-2008-Rev-1 2012
- Status of tuna fisheries and stocks in the WCPO for PNA Ministerial 2012
- Status of tuna fisheries and stocks in the WCPO for PNA Ministerial 2012
- WP5 SPC evaluations Final 2013

- FFC status of fisheries v4 2014
- VDS Tech status of fisheries 2014
- IP5 SPC CMM2014-01 evaluation
- Status of stocks and fisheries MOC10 2014
- Status of stocks and fisheries PNAMin 2014
- SC11-WCPFC11-03 WCPFC11-2014-15 Evaluation CMM 2013-01
- FFA_SPC Colloquium 2015
- PNA Status of stocks and fisheries v2 2015
- FFC93 Status of stocks and fisheries v2 2015
- SPC CMM evaluation for WCPFC12 2015

Activity 2

- Agenda Item 2.1 SC-SPTBF12 IP4 Longline characterisation (Update) 2012
- LL characterisation SCSPTBF12
- GN-IP-04 South Pacific Albacore Fishery SC9 Repaired 20 Aug 2013
- Agenda Item 1 2 SC-SPTBF13 WP 3 Science Review (stock_assessment and reference points) Final REV1 2013
- Agenda Item 1 2 SC-SPTBF13 WP 4 Science Review (range contraction)_final 2013
- Agenda Item 2.1 SC-SPTBF15 IP3 SP Regional Bioeconomic FINAL 2013
- Agenda Item Workshop IP6 SC-SPTBF13 Regional data paper final 2013
- Agenda Item Workshop IP7 SC-SPTBF15 Regional data paper FINAL 2013
- Agenda Item 2 1 SC-SPTBF15 IP8 Range contraction FINAL 2013
- Agenda Item 2.1 SC-SPTBF15 WP3 Stock status update FINAL 2013
- WCPFC-TCC9-2013-IP08 South Pacific Albacore Fishery_0 2013
- Agenda Item 2.1 SC-SPTBF16 IP 2 Current state of the SP ALB fishery_0 2014
- Agenda Item 2.1 SC-SPTBF16 IP 2 (supp.) Stock take of the South Pacific albacore fishery_0 2014
- Agenda Item 2.1 SC-SPTBF17 IP.3 LL fishery overview 2014
- Agenda Item 2.1 SC-SPTBF17 IP4 Regional data paper 2014
- Agenda Item 2 1 SC-SPTBF17 IP4 Options for SPA TRP v4 2014
- Agenda Item 2.1 SC-SPTBF17 WP.3 Stock status update 2014
- SC10-SA-WP-07 [Trends in the SPALB LL fishery FINAL] 2014
- INFO5 TKA2 SPA data update final 2015
- IP2 TKA1 Regional data paper 2015
- TKA2-IP3 Options for S-ALB TRP 2015
- WP3a TKA2 Stock status update final 2015
- WP4 TKA1 Options for S-ALB TRP 2015
- Pilling et al 2016 SPALB bioeconomics

Activity 3

- LL VDS Workshops LL VDS PAE allocation by vessel category_FINAL v2 (.xls undated)
- Draft Analysis of zone-based and HS CPUE TV 2012
- PNA Intro to reference points 2012

- Workings sangaa_30_Jan_2012_final .xls
- effort_data_update request from Sangaa 230913 .xls
- PNA HCRs and SKJ 2013
- PNA Mgmt framework 2013
- PNA ref point workshop 2013
- PNA reference points 2013
- RP HCR Workshop Report Draft01 5 Aug SPC 2013
- Draft PNA HCR 2014
- Outline PNA policy brief 20 Feb 2014
- PNA Mgmt framework (2) 2014
- PNA reference points (2) 2014
- SC10-MI-WP-02 Management Strategies SKJ PS example 2014
- SC10-MI-WP-03 Potential TRPs over stock range YFT example 2014
- SC10-MI-WP-05 [Impact of PS set type on YFT] 2014
- SC10-MI-WP-09 PNA paper on candidate TRP for WCPO skipjack 2014
- VDS-T & SC3_Working Paper 3_ Target Reference Points and Harvest Control Rules 2014
- Prelim_shark catch report_Nov2014
- Regions_n_biomass incl CK_TK 27_01_14 .xls
- Regions_n_biomass with CK_TK 12_14 .xls
- Regions_n_biomass with CK_TK 12_14_values_updatedcylprojection .xls
- VDSTSC4 WP.6 Consequences of future effort levels for the skipjack fishery REV1 2015
- VDSTSC4 WP7 Examining effort creep within the PNA purse seine fishery FINAL v2 2015
- VDSTSC4_wp7 Effort creep 2015
- VDSTSC4_wp6 TRPs 2015

Activity 4

• TVM range contraction project update gmp 2015

C 1.2 – Aquarium Fish

• AUSAID matrix_2015_Aquarium_CW .xls

Fact Sheet

• Anon_15_Aquarium_trade_FactSheet

Newsletter articles

- FishNews136x_10_AquariumNC 2011
- FishNews139_16_Remoissenet 2012

- FishNews141_18_PNG_Aquarium 2013
- FishNews141_37_Dandava_Oli 2013
- FishNews145_30_Wabnitz 2014
- FishNews146_11_Wabnitz 2014
- FishNews146_09_Wabnitz 2015

Reports

- EcoReef Farms_Company specific Fish Care (undated)
- Wabnitz & Nahacky_2013_Commercial survey for ornamental fish species in Nauru
- Wabnitz & Nahacky_2014_Kosrae Aquarium Fishery Report
- Confidential_SB Coral NDF Workshop Summary & Outcomes FINAL 2014
- Nahacky & Wabnitz_2014_French Polynesia Black List
- Wabnitz & Nahacky_2014_Tonga_Best practices report
- Wabnitz & Nahacky_2015_Best practices_final
- Wabnitz_2015_A lagoonarium for Aitutaki_final report
- Wabnitz Nahacky_2015_PNI Aquarium Fishery Report_DRAFT
- Wabnitz & Coles_2015_Live rock sustainability assessment Tonga_v2
- Wabnitz and Nahacky_2015_Rapid commercial aquarium fish surveys in Upolu
- Wabnitz et al_2015_Temperature profiles of live fish transport between New Caledonia and the United Kingdom

Scientific Articles

- Borsa et al_2014_Tridacna noae SuppInfo
- Borsa et al_2015_Distribution of Noah's giant clam, Tridacna noae_Author copy

Consultancy reports

- Kelly_2014_Report_to_SPC_Coral_Species_ID_Workshops
- Kiritimati Summary 2014_final
- Report_to_SPC_Coral_Finder_Workshops-2014
- CITES-regional analysis_coral and giant clam 2015
- Teitelbaum_2015_Coral fragmentation assessment evaluation_Pohnpei

C 1.3 Mariculture

Fact Sheets

- Sandfish
- Fiche technique Holothurie (1)
- Anon13_GiantClams_FactSheet_VF
- fiche technique benitiers_100 2013
- Anon_14_BarramundiFactSheet

- Anon_14_Corals_FactSheet
- Anon_14_MarineFood_FactSheet

Newsletter Articles

- FishNews138_21_Garcia 2012
- FishNews138_23_Launay 2012
- FishNews139_14_Brown 2012
- FishNews139_20_Southgate 2012
- FishNews139_22_Rivaton 2012
- Article_JAPH-D-13-00312 2013
- FishNews140_09_Pickering 2013
- FishNews140_11_Garcia 2013
- FishNews140_20_Southgate

Reports

- MBP_Final 1 UOG (undated)
- IRA monodon PNG (1) (undated)
- Palau giant clam manual (undated)
- Proposal_sandfish IRA_Kiribati 27_10_draft
- GomezKinch-2011-Proposal-IntroductionCobia-PNG-Final-12Dec11 (2)
- HambreyConsulting_12_MaricultureReport
- Regional strategy on aquatic biosecurity_draft vers 150907 (2012?)
- Anon_12_Samoa_Aquaculture_Plan
- IRA_seaweed_FSM_2012
- SPC Final Report 9 26 13 (FSM Simon Ellis)
- IRA_barramundi_Fiji 21-01-2014
- kiribati sandfish-final 2015

C 1.4 Assistance for Export Requirements

• SPC Ausaid Report for Post Harest and Export_Version0 2015

Newsletter Articles

- FishNews138x_15_Competent (2012?)
- FishNews139_07_Numilengi (2012?)

C2.1 Tuna data management and artisanal tuna data

• Anon_13_TunalDCards

• Scanning - the Complete Guide

C2.2 Inland Aquaculture

Newsletter Articles

- FishNews130_24_Pickering 2009
- FishNews131_19_Lal 2010
- FishNews132_20_Billings 2010
- FishNews133_23_MilkfishFJ (2010?)
- FishNews135_13_Pickering 2011
- FishNews137_02_Pickering 2012
- FishNews140_09_Pickering 2013

C2.3 Deepwater Snapper

ID Cards

• Anon_13_DeepBottomIDCardsUpdated

Journal Articles

- Williams et al. 2012a
- Williams et al. 2013-J Appl Ichthyol
- Wakefield et al 2014
- Species distribution models of tropical deep-sea snappers (2015)
- Wakefield et al 2015 H. octofasciatus indian pacific
- Williams et al. 2015b

Meeting Documents

• WP6_Deepwater_Snapper_E 2013 (HoF)

Newsletter Articles

- FishNews136x_08_DeepSnappers 2011
- FishNews138_04_Williams 2012
- FishNews142_12_Williams 2013
- FishNews145_06_Williams 2014

PFFSP Staff Duty Travel Reports (DTR)

C 1.1 – Scientific Advice for Oceanic Fisheries

Titles in plain font: "Food Security funded trips"

Titles in italics: "Other FFA support or liaison"

- Duty Travel Report GMP Oct_Nov 2010
- Duty Travel Report FFA_SPC Colloquium GMP February 2011
- Fiji_Offshorecommoditiestaskforce_Feb11_trip_report
- Duty Travel Report GMP PNA 30th Officials meeting April 2011
- Duty Travel Report GMP FFA_SPC CMM 2008_01 planning meeting April 2011
- Duty travel report Fiji_eNGO and FFA MOW CMM2008-01_Apr_May11 v2
- Duty travel report SC_SPTBF May11_Samoa
- Duty Travel Report GMP WCPFC SC7 meeting August 2011
- Duty Travel Report GMP PASAI fishery audit planning meeting August 2011
- Duty Travel Report GMP Pacific Tuna Forum Sept 2011
- Duty Travel Report GMP MSC Certification prep Fiji albacore longlines October 2011
- Duty Travel Report GMP Oct_Nov 2011
- Duty Travel Report PNA VDS TWG GMP Feb 2012
- Duty Travel Report FFA Colloquium GMP March 2012
- Duty Travel Report PNA LL VDS Country briefings GMP Apr 2012
- Duty Travel Report PNA Annual Meeting GMP Apr_May 2012
- Graham Pilling SC8 Busan Aug-12
- Graham Pilling Honiara October-12
- Graham Pilling Tuvalu October-12
- Trip report Graham PILLING Palau PNA-support Feb-2013
- Trip report Graham Pilling Port Vila Feb-2013
- Trip report Graham Pilling Tuvalu April-2013
- Trip Report Graham Pilling Honiara May-2013
- Trip Report Graham Pilling Honiara 22 Oct 1Nov 2013
- Trip Report Graham Pilling PNA33 meetings Honiara-March 2014 v2
- Trip Report Graham Pilling Apia-Tokelau May-2014
- Trip Report Graham Pilling Yap-Mar-2015 v2
- Trip Report Graham Pilling Funafuti-May-2015

C 1.2 – Aquarium Fish

- DTR_CW_Nauru_10-20 Oct 2011
- French Polynesia_DTR_Final April 2012
- Vanuatu_Aquarium Trade baseline_April2012
- La Foa_Duty Travel Report_Compressed April 2012
- Trip Report_Colette Wabnitz_Nauru 1244 June 2012
- CXI _T7_1503_Colette Wabnitz_Kiritmati Aquarium trade plan July Oct 2012
- Majuro DTR_T7_1501_Colette Wabnitz_Aug 2012

- French Polynesia_Colette Wabnitz_DTR 1251 Nov Dec 2012
- Cook Islands_Colette Wabnitz_Dec2012_2719
- Trip Report_Colette Wabnitz_Tonga 3090 Apr May 2013
- Trip Report_Colette Wabnitz_Papua New Guinea_June 2013- 1244
- Colette Wabnitz_DTR_Tonga_Sept2013
- Colette Wabnitz_DTR_French Polynesia_Cook Islands_May Jun2014
- Colette Wabnitz_French Polynesia_Wellington_Nov2014
- Trip Report_Colette Wabnitz_Samoa_Apr2015
- DTR_Colette Wabnitz_French Polynesia-Cook Islands_June-July 2015

C 1.3 Mariculture

- DTR_Kiribati_Oct_2011
- DTR_PNG_Nov_2011
- DTR_NC_Dec_2011
- DTR_Fiji_March_2012
- DTR_Vanuatu_March_2012
- DTR_Samoa_April_2012
- DTR_Melbourne_May_2012
- Joint_DTR_Guam_May_2012
- DTR_PNG_June_2012
- DTR OIE_SPC workshop Fiji June 2012
- DTR_Rome_July 2012_RuthGarcia
- DTR_Samoa_August_2012
- DTR_NC_September_Ruth_Garcia 2012
- DTR_PNG_September_R Garcia 2012
- DTR_FSM_Guam_October_2012 Ruthgg
- DTR_Indonesia_October_2012 Ruthgg
- DTR_PNG_November 2012_Ruthgg
- DTR_NC_December 2012_Ruth_Garcia
- DTR_Lombok_LobsterWorkshop_April_2013_RuthGarcia
- DTR_Seaweed_symposium_ May 2013_Ruthgg
- Seaweed Symposium May 2013 contact list.xls
- DTR__Guam_Biosecuritytraining_May_2013_RuthGarcia
- DTR_PNG_MaricultureDev_May _2013_RuthGarcia
- DTR_Kadavu_June2013_RuthGarciaGomez
- DTR_LaFoa_28June13_RuthGarciaGomez
- DTR_OIE_WAHIS Training Kiribati_Sept 2013
- DTR Aquaculture Policy Training Fiji Sept2013
- DTR_CVA conference_Fiji_Sep2013
- DTR_Kiribati_Sept13_RuthGarciaGomez
- DTR_Samoa_Oct13
- DTR_Palau_9-17Nov13_RuthGarciaGomez
- DTR_Fiji_Nov2013
- DTR_Kiribati_March2014_RuthGarciaGomez
- DTR_SavuSavu_Mar14_RuthGarciaGomez
- DTR_NC_26-27March14_RuthGarciaGomez

- DTR_Kone_24-25April14_RuthGarciaGomez
- DTR_FrenchPolynesia&Fiji_May14_RuthGarciaGomez
- DTR_Tontouta_02-03June14_RuthGarciaGomez
- DTR_Boulouparis_04-05June14_RuthGarciaGomez
- DTR_WAA_Adelaide_10-12June14_RuthGarciaGomez
- DTR_Vanuatu_15-20June14_RuthGarciaGomez
- DTR_Bourail_08-09July14_RuthGarciaGomez
- DTR_FSM_10-18August14_RuthGarciaGomez
- DTR_Tonga_08-18Oct14_RuthGarciaGomez
- DTR_Samoa_26Oct-01Nov14_RuthGG
- DTR_Suva-Tarawa_03-10Nov14_RuthGarciaGomez (2)

C 1.4 Assistance for Export Requirements

- DTR Combined Devfish 2 meeting Nandi_Version1.211011 Oct 2011
- DTR_Vanuatu & Solomon.150711 Jun July 2011
- Report on visit to Vanuatu_150711 Jun July 2011
- DTR_PNG & Fiji.200911 July-Sep 2011
- DUTY TRAVEL REPORT_PNG SI FIJI.051211 Nov Dec 2011
- Duty Travel Report_Fiji.160212 Jan Feb 2012
- Duty Travel Report_Fiji PNG.270412 March 2012
- Duty Travel Report_Kiribati & Solomon Island.250412 April 2012
- DTR_Auckland. 290512 May June 2012
- Trip Report for PNG & Fiji_230712 Jun July 2012
- DTR_HACCPtrainingCourses_T Numilengi_120829 Sept 2012
- DTR_Fiji and Solomon Island_Nov 2012
- Duty Travel Report_PNG.March 2013
- DTR_Cook Island. May 2013
- Duty Travel Report for PNG_ May 2013
- DTR_Fiji.July 2013
- Trip Report_Sept 2013
- DTR_T7Activity3443_Canada_T.Numilengi Sept Oct 2013
- DTR Fiji_Nov 2013
- DTR_PNG.Feb 2014
- DTR_Fiji-Marshall Island_15March-13April14_Activity3229_T.Numilengi
- DTR_PNG_1-25May 2014_Activity3222_T.Numilengi
- DTR_Suva. June 2014
- DTR_Kiribati.July 2014
- DTR_Solomon and Fiji_Sept to Dec2014
- DTR Vanuatu_22Feb2015
- DTR_T7activity3229_Lae_07March-05April 2015_T.Numilengi

C2.1 Tuna data management and artisanal tuna data

Brogan:

- FSM National Tuna Data Workshop March 2010
- DTR Solomons and Nauru May 2010
- Duty Travel Report Debriefing Workshop July 2010
- Duty Travel Report Solomons. October 2010
- Signed SB Observer Scanning Contract0001 Oct 2010
- Letter SI to Global Nov 2010
- DTR Kiribati Dec 2010
- DTR Tonga March 2011
- Duty Travel to Marshalls July 2011
- PS Obs Guide write up + visit to Dept of Fisheries (Vanuatu) Nov 2011
- Duty Travel Report to Samoa Dec 2011
- DTR Vanuatu March 2012
- D Brogan Nauru June-12
- D Brogan French Polynesia Sep-12
- 2010 ALB PF (DTR Sept 2012).xls
- 2011 ALB PF (DTR Sept 2012).xls
- Observateur embarqué v2 (DTR Sept 2012)
- D Brogan Tuvalu Sep-12
- DTR to Solomons Islands Nov 2012
- DTR for mini-DCC (observer) Rarotonga Feb 2013
- Trip Report Deirdre Brogan Noumea-Nauru March 2013
- Trip Report Deirdre Brogan Tuvalu June 2013 (2)
- DTR Kiribati July 2013
- DTR Nauru August 2013
- DTR Samoa Oct 2013
- Trip report Deirdre Brogan NouNadiHnrPvilaNou 01 February 2014
- DTR Tuvalu April 2014
- DTR Kiribati July 2014
- Brogan DTR FSM and RMI May 2015
- DTR Brogan Tuvalu June 2015
- Brogan KI August 2015

Bagshaw:

- TR Steven Bagshaw AU SPC FFA IMS ER and EM Meeting Apr May 2015
- Trip report Steven Bagshaw-NouSydHnlMajHnlSydNou-09 July 2015

Hunt:

- Trip report Andrew Hunt NouVliNou 12 October 2014
- Trip report Andrew Hunt NouAklNiueAklNou 10 January 2015
- Trip report Andrew Hunt NouSydHnlMajHnlSydNou 04 July 2015
- Trip report Andrew Hunt FFA Tufman 2 September 2015

Duprez:

- Bruno Deprez Rarotonga June-2012
- Trip report Bruno Deprez NouNanHirVliNou 28 June 2014
- Trip report Bruno Deprez NouAklNuAklNou 14 August 2015 T7 914
- Trip report Bruno Deprez FFA TUFMAN2 September 2015

Schneiter:

- Tagging Jun July 2008-IT setup
- FSM-Jun 2011-06-DutyTravel
- Kiribati July-2012- Travel report
- 2012-09 Travel Report Emmanuel Schneiter Pohnpei
- DTR_Smart_PDF_Trial_Solomons_03_2013-Schneiter
- Purse PDF Logbook (final rev 2) (DTR March 2013)
- Solomons_NZ_07-2013
- DTR Funafuti TUVALU 10-2014

C2.2 Inland Aquaculture

- Papua New Guinea aquaculture officer travel report 27 July 5 Aug 11
- 08 Vanuatu M. lar project travel report 27 Aug11
- DTR_Activity1145_ACIAR-IACT PacificFisheriesforFoodSec_T Pickering-A Singh_PNG Aug 2012
- DutyTravelTripReport_T71139_CookIslands_T.Pickering_120820 Aug Sept 2012
- DTR_T7activity1145_T.Pickering_121022 Nov 2012
- DTR_T7activity1091_Bangkok_T.Pickering Jan- Feb 2013
- DTR_T7activity1146_Vietnam_T.Pickering May 2013
- DTR_T7activity3828_Newcastle_T.Pickering Jun 2013
- DTR_Fiji Pearl Farmers Business Skills Research and Training_T.Pickering_A.Singh Nov 2013
- DTR_T7Activity3818_PNG_16-23Feb14_TimPickering_11Mar14

C2.3 Deepwater Snapper

- DTR Samoa July08
- DTR Australia Sep09
- DTR New Caledonia (FV Yellow Fin) Mar 2010
- DTR New Zealand Albacore Tagging Apr-May 2010
- DTR Australia Aug10
- DTR Honolulu_WPSAR_Apr11
- DTR Solomon Is_EAFM_July11
- DTR Tuna Conference California May 2012
- DTR Nukualofa Apia Aug-12
- DTR Vanuatu Aug-12
- DTR Lifou Oct-12

- DTR FV Pacific Sunrise_deepwater snapper Oct_Nov12
- DTR FV Pacific Sunrise_deepwater snapper Nov12
- DTR Deepwater snapper_Perth Jan-13
- DTR Deepwater Snapper Students April 2013
- DTR Deepwater snapper, Port Vila, 03 June 2013
- DTR Port Vila Deepwater Snapper June 2013
- DTR Kavieng deepwater snapper Oct 2013
- DTR Kavieng deepwater snapper Feb2014
- DTR Tonga deepwater snapper Jun2014
- DTR International Otolith Symposium, Spain Oct2014

Annex F: People Interviewed

Table Annex F 1: People consulted during Review process						
Agency /role	Person	Position				
SPC FAME	Lindsay Chapman	Deputy Director FAME (Coastal Fisheries)				
Management						
	John Hampton	Chief Scientist & Deputy Director FAME (Oceanic				
		Fisheries) -				
	Robert Jimmy	Aquaculture Adviser				
	Shelton Harley	Principal Fisheries Scientist (Stock Assessment and				
		Modelling)				
	lan Bertram	Coastal Fisheries Science and Management Adviser				
	Michel Blanc	Nearshore Fisheries Development Adviser				
	Peter Williams	Principal Fisheries Scientist (Data Mgmt.)				
	Neville Smith	Principal Fisheries Scientist (Ecosystem & Fisheries				
		Monitoring)				
SPC – FFSP staff	Graham Pilling	Fisheries Scientist – FFA Liaison [Component 1.1]				
	Colette Wabnitz*	Fisheries Scientist (Aquarium trade) [Component 1.2]				
	Ruth Garcia Gomez*	Mariculture Officer [Component 1.3]				
	Timothy Numilengi*	Fisheries Development Officer (Post-Harvest)				
		[Component 1.4]				
	Deidre Brogan	Fisheries Monitoring Supervisor [Component 2.1]				
	Steven Bagshaw	Senior analyst developer [Component 2.1]				
	Tim Pickering	Inland Aquaculture Adviser [Component 2.2]				
	Ashley Williams*	Fisheries Scientist (Deep water Snapper) [Component				
		2.3]				
SPC FAME staff	Paul Judd	Programme Administrator (OFP)				
	Jonathan Manieva	DevFish Officer				
	Connie Donato-Hunt	Monitoring, Evaluation and Learning Advisor				
	Marie-Therese Bui	Project Administrator				
	Michel Bermudes	Mariculture and Aquatic Biosecurity Specialist				
	Stephen Brouwer	Fisheries Scientist (National Level Support)				
SPC staff	Brigitte Leduc	Gender Equality Advisor				
	Mei Lin Harley	Planning Advisor (Monitoring and Evaluation)				
FFA	Hugh Walton	DevFish Advisor				
DFAT	Perry Head	Director FES				
	Peter Lindemayer	Acting Director FES				
	Susan Foley					
	Mike Wight					

* No longer working with SPC at the time of the review.

Annex G: Summary of Management Responses to MTR

Table Annex B.1: Summary of Documented Agency responses to MTR Recommendations							
MTR Recom	mendations	DFAT Res	sponse	SPC Re	esponse		
		Response	Actions	Actions required	Comments/Status/Progress		
1. That FAME shoul is an explicit focus of Program/Compone outcomes in the FA process.	d ensure that there on nt objectives and ME annual planning	Partially Agree Our funding is relatively seamless with SPC FAME's core business, which is a positive. But we do agree that linking funding to outcomes is sensible.	SPC FAME to explicitly plan for the PFFSP objectives during annual work planning processes	FAME planning processes should place priority on Program objectives and outcomes for work under each of the Components. This would provide an opportunity to deliberately weigh up Program risks and opportunities such as linkages with external projects; potential of novel technologies etc.	For coastal, the objectives of each project or component of project are considered in the work planning and actual work plan for each component of the project and these activities are entered into the IRIS system and reported against each year.		
2. That FAME reviews the M&E framework to ensure that it is useful as a management tool through:	a) Reviewing Component outcome statements and performance measures to ensure that they are relevant (in light of progress to date and increased flexibility under the Australian Government funding envelope) and follow a consistent approach;	Agree The M&E is historically not SPC FAME's strength. There need to be useful indicators that are linked to measurable, accessible data so that we can better describe the good work being done by SPC FAME.	DFAT to work with SPC FAME to re-work the high-level food security objectives and to create a useful M&E Framework. DFAT will reconsider funding reallocations for the programs M&E.	Review Component outcome statements and performance measures to ensure that they are relevant	Outcomes have been taken into consideration in the planning stage and work plans each year to ensure the outcomes will be achieved at the end of the project cycle. Some of the indicators may need some adjusting, and this will be included in the final outcome statements of the project components.		

b) Reviewing data relating to performance indicators as part of the annual wor planning process;	*		Review data relating to performance indicators as part of the annual work planning process	Need to strengthen this area and MEL capacity within FAME to cover this for all reporting requirement.
c) Develop a revised version of the M&E matrix that focuses on outcomes and indicators at Program and Component level.			Develop a revised version of the M&E matrix that focuses on outcomes and indicators	This could be a big task that has not been tackled at this stage, so may need to get some assistance or guidance from [SPC corporate M&E staff]
3. That FAME reviews the budget allocations and projections for the term of the Program and discusses wit DFAT changes that may be appropriate to improve delivery or reflect changing priorities.	Agree DFAT is happy to make contract amendments to reflect changing priorities or needs to ensure that the money is being spent in the most effective way possible.	SPC FAME to consult with DFAT section if there are changing priorities which require a contract amendment.	Review and reallocate funding within Components on the basis of need / priority within the Program (i.e. across different Components), which offers flexibility to address both expenditure and timing, and proposes that FAME reviews the budget allocations and projections, in light of the flexibility available with respect to the high level objectives, and the recommendations of this Review.	In the agreement the final report for both Phase I & II in November 2015. Based on this we have extended contracts of some staff under Phase I to give them the 4 years to implement their project, as a couple of components commenced almost a year late. All funding will be spent by November 2015.
4. That FAME places increased emphasis on economic and social viability of development activities, in addition to technical considerations.	Agree This should already be in place as it was part of the design. The Review has rightly identified this shortcoming.	SPC FAME to re-visit concept notes and ensure that all socio- economic activities outlined were undertaken and/or reported on, and take steps to improve	Increased emphasis on the economic factors and the social context in order to optimise the prospects of developing sustainable practices and community/business ventures. This could be achieved, for example, through use of operational resources (e.g. for	We have noted this issue and have had our resource economist assisting with the aquaculture and mariculture components to assess the economic viability of some activities. This is an area that will need strengthening in the future.

		incorporation of economic and social viability issues in both design and M&E.	specialist consultancies) under the Program or partnerships with other projects.	
5. That FAME places specific emphasis on compatibility and accessibility across databases, and on data aspects of coastal / artisanal fisheries	Agree The review found a degree of uncertainty existed among beneficiaries (fishery authority officials) about the relationship between different initiatives relating to data; their coverage, role and purpose, capacity for data sharing and compatibility.	SPC FAME to ensure that the database initiatives are clear to the recipients and the most effective and efficient approaches are being taken, including in respect of data compatibility.	Specific focus on developing data coverage for inshore coastal stocks, compatibility across different databases, and accessibility for end users.	Coastal has been working with OFP on the small-scale tuna database where there is some potential overlap. Resource survey data is separate and the market and creel work has a different focus to the small-scale tuna database. Care is being taken to avoid any duplication or overlap.
6. That FAME regularly reviews gender disaggregated data on participation of women in its activities and takes appropriate steps to increase the participation of women.	Agree The formal emphasis on gender so far has been lacking, and more effort needs to be placed in both collecting gender disaggregated data and then <i>using</i> it. We note, however, that gender issues have been addressed in a number of fisheries activities, but in an ad hoc way.	SPC FAME to increase the amount of gender disaggregated data collected, and then use this data to actively ensure women receive equal benefit from the program.	Performance in this area could be improved, for example through regular analysis of gender disaggregated data and increased focus on the participation of women, especially in training and scholarships	This point is noted and in the coastal components sex disaggregated data is being collected where possible. A gender balance is taken into account for training, however, it is up to the country to nominate, which limits SPC ability in this area.
7. That DFAT considers future support in the form of core funding to support SPC FAME core services, subject to appropriate in-house project management and Monitoring and Evaluation systems.	Agree in principle DFAT feels that increased core funding to the FAME division of SPC would increase their flexibility to adapt to emerging priorities,	DFAT to consider this at the end of the Program, subject to funding availability.	Current Program activities represent, for the most part, FAME core services. The review supports a shift from fixed term funding to ongoing budget support for core services, subject to establishment of an M&E Position (preferably	Could not agree more with this and look forward to discussions with DFAT to see how and when this can be done. I think the MEL position within FAME will partly come through a 5-7% allocation in future from core funded activities, such as

whilst maintaining sound core services. DFAT feels, and the mid-term review supports, that many of the projects supported in this Program should be considered as core services, and funded as such.	within FAME)	these if they are moved to core in 2014/2015.
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