

**Independent mid-term review of the Fisheries for Food Security
Program**

EVALUATION REPORT

December 2013

Acknowledgments

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Disclaimer:

This report reflects the views of the Evaluation team, rather than those of the Government of Australia, SPC or its member countries and territories.

Contents

Executive Summary.....	iii
Introduction.....	1
Evaluation Findings.....	4
Conclusion and Recommendations.....	17
List of Acronyms.....	23
ANNEXES	
Annex A: Terms of Reference.....	24
Annex B: Evaluation Plan.....	36
Annex C: People Interviewed.....	52
Annex D: Concept Notes – Phase 1.....	55
Annex E: Concept Notes – Phase 2	90
Annex F: Summary of Component Status.....	110
Annex G: Duty Travel Sample Data.....	121
Annex H: Summary of Goals and Objectives.....	124
Annex I: Assessment of Financial Arrangements.....	126

Executive Summary

The Pacific Fisheries for Food Security Program (PFFSP) was initiated in November 2010 to support the Secretariat of 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 in two phases comprising four and three Components respectively. Funding was budgeted over a four year period for each Component within the Program.

PFFSP: Program Components		Funding
Phase 1	1.1 Scientific advice for the development of oceanic fisheries management measures	AUD 1,027,500
	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
Phase 2	2.1 Artisanal tuna data and tuna data management	AUD 2,036,500
	2.2 Inland aquaculture	AUD 1,217,500
	2.3 Deepwater snapper	AUD 1,192,500

The mid-term review started in August 2013, and the field work took place over the period 8-28 September. The field work involved interviews with SPC staff along with SPC member representatives in New Caledonia, Papua New Guinea, Fiji, Kiribati and Samoa (in the order visited).

The Program was evaluated across a set of standard criteria, and ratings provided for selected criteria using a standard scale; ratings are summarised below.

Evaluation Criteria	Rating (1-6)	Explanation
Relevance	6	The Program is well aligned with relevant donor and regional goals and strategies
Effectiveness	5	The Program is being implemented as it was designed and is on track to achieve the nominated component outcomes.
Efficiency	5	The Program is well managed, and responsive.
Sustainability	Satisfactory	The Program is supporting member countries/territories, against a background where sustainability without external support is not a realistic expectation.
Gender equality	4	There are some systems in place but there is a shortage of evidence relating to Program implementation on this issue.

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

- a) The Program is well managed
- b) The Program is producing the outputs specified at Component level
- c) The Program is on track to achieve (or has already achieved) the Component specific outcomes
- d) There is less certainty (with respect to both data and attribution) about achieving the high level objectives associated with the Program. However there is a sound logical connection between the Component activities and the high level objectives.
- e) There is scope for more clarity with respect to planning and priority setting to ensure that the deployment of PFFSP resources within the overall FAME work programme is targeted towards the agreed PFFSP objectives and outcomes.
- f) Gender equality is addressed through SPC policies, but there is room for improved monitoring and participation of women in FAME / Program activities.
- g) The M&E framework, and particularly the M&E matrix, do not appear to play a useful role in management or monitoring and should be reviewed in light of progress to date and the increased flexibility available within the Australian Government objectives for the overall funding envelope.

Recommendations

Recommendation 1: That FAME¹ should ensure that there is an explicit focus on Program/Component objectives and outcomes in the FAME annual planning process.

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) *developing a revised version of the M&E matrix that focuses on outcomes and indicators at Program and Component level.*

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.

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

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

¹ Where the Recommendations cite 'FAME' and 'DFAT' these terms respectively refer to the Director of FAME, and the Officer holding the relevant responsibility in DFAT.

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.

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.

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

Introduction

Initiative Background

The Pacific Fisheries for Food Security Program (PFFSP) was initiated in November 2010 to support the Secretariat of 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 Australian Government and SPC – FAME in two phases, comprising four and three Components respectively. Funding was budgeted over a four year period for each Component within the Program, in total representing approximately 15% of the SPC-FAME annual Divisional budget.

PFFSP: Program Components		Funding
Phase 1	1.1 Scientific advice for the development of oceanic fisheries management measures	AUD 1,027,500
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It is important to acknowledge 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. A combination of factors went into the selection of specific components. Some arose from recommendations of an Independent External Review of SPC (IER), while others addressed the situation where additional funding was required to maintain important projects. 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 design (as set out on the Concept Notes) incorporates provision for a mid-term review, which is the subject of this Report, and an 'end of project evaluation' at the end of year four.

Evaluation Purpose and Questions

The Terms of Reference for the Review (Annex A) set out two objectives:

- 1) To assess the Program's progress to date against AusAID's² evaluation criteria (including ratings), and to recommend changes to strengthen performance in the second half of the planned Program. This assessment should include consideration of the Program's mid-term impacts, design, management and implementation issues, and any contract variations necessary to give effect to recommended changes.
- 2) To identify options and make recommendation on future directions of support to SPC FAME to inform the development of AusAID's four year Pacific Fisheries Delivery Strategy.

The concept notes for the Program described the purpose of the mid-term review in a less formal way, being to:

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

In line with the objectives, the review has two interlinked elements, the first being a retrospective review of progress towards outcomes in order to recommend improvements for delivery of the remainder of the Program. The second looks forward to provide insights on potential future funding and priorities. In the course of discussions with the Australian Government representatives at the outset of the process, it was agreed that Review should focus primarily on the Program and its Components, with supplementary insights relating to the broader strategic direction gathered in the course of the process.

In accordance with the Terms of Reference, the review is structured around a set of standard criteria: 1. Relevance; 2. Effectiveness; 3. Efficiency; 4. Impact; 5. Sustainability; 6. Gender Equality; 7. Monitoring and Evaluation; 8. Analysis and Learning. The Terms of Reference included questions highlighting specific areas of focus within each of the criteria; these questions have been used to guide the analysis presented in this Report.

Evaluation Scope and Methods

An Evaluation Plan (Annex B) was agreed between the Review Team, SPC and DFAT in the pre-field work phase of the review. The plan sets out the evaluation methodology and expectations relating to sources of evidence/data and conduct of stakeholder interviews.

The review started in August 2013, and the field work took place over the period 8-28 September. The field work involved interviews with SPC staff along with SPC member representatives in New Caledonia, Papua New Guinea, Fiji, Kiribati and Samoa (in the order visited). Further interviews were conducted remotely (i.e. by phone or internet) after completion of the field work. The timing of the

² During the course of the mid-term review restructuring within the Australian Government resulted in the activities of 'AusAID' being delivered through the Department of Foreign Affairs and Trade. In this Report the name AusAID is used when quoting existing documents such as the Terms of Reference.

field work and countries to be visited were set down in the Terms of Reference. A list of people spoken to during the review including the schedule for interviews is attached as Annex C

Program / Component Considerations

Reviewing the Program necessarily involved a mix of Program and Component level assessments. In line with the Terms of Reference and Evaluation Plan primary consideration is given to the performance of the Program as a whole. In order to do this it was necessary first to gain an understanding of each of the Program Components and their progress towards objectives as set out in the Concept Notes for each Phase and the Monitoring and Evaluation Matrix. This then informed the overall assessment against criteria at Program level.

The Concept Notes describing the Program Components are attached as Annexes D (Phase 1) and E (Phase 2). The Review's consideration of outcomes and implementation at Component level is summarised in Annex F.

A brief background to each Component is provided below.

Component 1.1: Scientific advice for the development of oceanic fisheries management measures

This Component funds a dedicated position in SPC to liaise with the Forum Fisheries Agency (FFA). Previously this role had been sponsored by DFAT for one year. It had proven very useful, so funding was agreed to maintain the role.

Component 1.2: Management and development of export fisheries for aquarium fish

There had been work on Aquarium fish and live food fish intermittently in the past; this Program provided an opportunity to focus on aquarium fish exports, in line with SPC member needs.

Component 1.3: Development of mariculture opportunities

Mariculture has been recognised for some time as a field with considerable potential. Funding was agreed under this Program to maintain the mariculture work when existing project funding came to an end.

Component 1.4: Assistance to meet export requirements for marine products

This Component, which focuses on export facilitation, responds to the Independent External Review of SPC which recommended SPC FAME needed to address post-harvest issues.

Component 2.1: Artisanal tuna data and tuna data management

The Program supports the continuation of work on improved data management, including a specific focus on artisanal tuna fisheries.

Component 2.2: Inland aquaculture

As for mariculture, inland aquaculture has been recognised as a field with considerable potential. Funding was agreed under this Program to maintain the work with a focus on inland aquaculture, particularly in Melanesia where the potential is seen to be greatest.

Component 2.3: Deepwater snapper

This Component responds to repeated requests from particular member countries for information to support sustainable utilisation of deepwater snapper stocks.

Assumptions and limitations

The following assumptions and limitations are noted in addition to those included in the Evaluation Plan.

As noted above, the field work comprised interviews in four SPC member countries and one territory. A key assumption in the review design is that this group will provide responses that are representative with respect to the Program and membership as a whole. An analysis of duty travel reports of Program staff shows that close to half of all the in-country work took place in the five selected countries/territory, so it is reasonable to assume that there is awareness of the Program in these five. A summary of travel across the Program and Components is attached as Annex G.

In the short travel time-frame it was not realistic to expect all key stakeholders to be available during the field work. Accordingly there are limitations on the number, and level of seniority, of people interviewed. Further, the time spent with interviewees was limited. The interviews, whether with one person or a group, varied around one hour in duration. The Review acknowledges that this is not sufficient to gain an in-depth understanding of every aspect of the Program and its Components; the interview process is therefore more in the nature of a rapid assessment than an exhaustive analysis.

Evaluation Findings

This section provides an assessment against each of the criteria set out in the Terms of Reference. The content responds to the guidance questions in the Terms of Reference and Evaluation Plan. Ratings are provided for nominated criteria using the standard scale below.

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

Relevance

The issue of relevance is considered across three areas:

- Relevance and alignment with strategic priorities of Australian government, SPC and other regional agreements
- Alignment with the needs of beneficiaries and the extent of their support for the Program
- Harmonization with other regional agencies, donor and NGO activities

Australian government and SPC priorities

The Program objective is:

To engage with and support a sustainable, well governed, effective and efficient regional organisation that works towards improving food security in Pacific Island Countries and Territories through: lifting fisheries productivity, improving rural livelihoods and building community resilience from the sustainable management of fisheries.

The objective is formulated around the concept that supporting SPC is an effective way of contributing to the thematic goals/objectives of the overall funding envelope, and the expression of these goals in the fisheries sector (through relevant institutional and regional fisheries-specific strategic documents and objectives).

In that sense the objective of the Program is to primarily to *support SPC*, provided that SPC a) meets the description as being ‘a sustainable, well governed, effective and efficient regional organisation’ and b) that it ‘works towards improving food security in Pacific Island Countries and Territories through: lifting fisheries productivity, improving rural livelihoods and building community resilience from the sustainable management of fisheries’.

With respect to a); although the current process has not attempted to review SPC as an institution, the Review has seen nothing to suggest it is anything other than a well governed, effective and efficient Pacific regional organization. With respect to b) it is well demonstrated that SPC works in the way described.

Detail concerning the fisheries and food security goals appears in the stated objectives and outcomes for each of the Components. The Review finds that the Component objectives and outcomes are strongly linked with the overarching Food Security for Rural Development Initiative and consistent with the Strategic Objectives set out in ‘Valuing Pacific Fish’ DFAT’s Pacific Fisheries Framework (2007). The Program documentation indicates that the above strategies were taken into account in the design of the Program.

To the extent that the Program focuses on economic development, it is consistent with DFAT’s private sector development thematic strategy (2012). The issue of gender equity is discussed in a separate section below. The Program is also aligned with SPC FAME Strategic Plan 2013 – 16. A summary of selected Program, institutional and regional objectives is provided in Annex H.

Alignment with beneficiaries’ needs

The Review was advised that SPC member countries had asked for support and advice in each of the component areas. The records of Heads of Fisheries Meetings provide evidence for this.

Amongst the countries visited by the Review, there was consistent support for the Program and its Components. The support generally reflected the receipt of services under the components (i.e. not all SPC PICT members receive support under each component).

Harmonization with other agencies

At the level of program design, the Program Components are, where appropriate, closely aligned with FFA as the other regional agency with a fisheries focus.

In terms of activities; there was clear evidence of collaboration at Component level with other donor funded projects and personnel (in particular other DFAT funded programs delivered through ACIAR, and various EU funded programs). Where Components focus on economic development, private sector organizations were included in activities.

Overall, the Review finds that the Program remains highly relevant with the objectives and strategies cited.

Rating: 6

Effectiveness

Information on which to base an assessment of Program effectiveness was gained from:

- Content of annual Program reports
- Content of the Monitoring and Evaluation matrix
- Interviews with relevant SPC FAME Program and Component staff
- Duty travel reports, where available
- Corroboration through interviews with SPC member counterparts

Full up-to-date information is not presented in the Monitoring and Evaluation matrix or the annual reports due to the difficulties faced by SPC in collecting and deciphering the information.

Of the sources indicated, the staff interviews provided the most information. The available information on progress towards the specific outcomes of each Component is presented in Annex F along with commentary on achievements at Component level.

Progress and achievements differ across the seven Components, but taken overall, the Review finds that the activities being implemented are largely in line with the Component outputs set out in the component descriptions (concept notes). In some cases the outputs have already reached the level specified in the Component description.

The situation is similar for the specific outcomes for each Component; in several cases the outcomes specified by the end of year four of the Program have already been achieved. In other cases the work is in progress.

With respect to overall outcomes for each Component, it is difficult to make an assessment of the extent to which progress towards outcomes is attributable directly or indirectly to the Program. This is particularly evident when the outcome relates to regional or multilateral decision making, and/or when multiple agencies and actors play a role. The difficulty in determining attribution increases at higher levels (i.e. progressing from specific component outcomes to overall component outcomes and objectives, through to Program objectives and overall development objectives).

It appears that care has been taken to develop specific outcome statements that will be realised within the term of the Program. With this in mind, the Review finds that progress is on track to achieve most of the specific outcomes during the term of the Program. However the early achievement of the Component specific outcomes invites consideration of whether these outcome statements represent an appropriate level of ambition.

Rating: 5.

Efficiency

Accountability within the organisation

Accountability for the Program has been fully integrated into the framework of SPC- FAME. Overall management responsibility rests with the Director of FAME, with Component staff reporting through the respective Managers of the Oceanic Fisheries Programme (OFP) and Coastal Fisheries Programme (CFP).

Personnel

The Program and Components have, for the most part, been fully staffed for the duration of the Program to date. There have been exceptions due to delays in recruiting specialised staff. In other cases the deployment of staff under the Program has been a seamless transition, as existing staff transferred to Program component roles with the availability of continued funding. In one instance staff turnover is expected to create a temporary gap in staffing (refer Annex F).

The fact that the Program is embedded into SPC- FAME's work programme has the advantage that SPC has been able to bring its broader corps of personnel and skills to add capacity to the Program when needed. Other SPC staff (i.e. not funded under this Program) have been able to contribute to the Program outputs, either in the normal course of their work – technical or administrative - or standing in when there has been delayed recruitment of Program staff.

Finances

The situation with respect to current income and expenditure under the Program is summarised in Annex I. Overall the rate of use of financial resources is on track with the stage of the Program, although there are variations across the two Phases of the Program, and variations between Components. Concern was raised with respect to one Component that experienced a delayed start due to delayed recruitment; specifically regarding the possibility of extending the term to allow completion of a four year staff contract notwithstanding the delayed start.

The review did not conduct a line-by-line analysis of expenditure within Components, however the Review was advised that there was sufficient flexibility with respect to finances for SPC's purposes. There had been instances when Program costs from other SPC resources were used when necessary as 'bridging finance' when awaiting transfer of Program funds.

A large proportion of the Program budget is for personnel costs. Staff of the Program are employed under the generic SPC/CROP terms and conditions. Similarly, expenditure on other operating costs (use of consultants etc) is handled through the applicable SPC processes.

SPC FAME indicated that the funding is sufficient to deliver the outputs in accordance with the Program/Component design.

SPC FAME is exposed to some risks associated with exchange rate fluctuations between currencies (AUD:CPF)

Planning

FAME prepares a Divisional Work Plan which is taken to Heads of Fisheries (in years when it meets) for consideration. The Work Plan guides annual work planning and evaluation for the staff directly employed under each of the Components. Most of the detailed monitoring of progress and planning for implementation of Components takes place at the level the two FAME Programmes (OFP and CFP), guided by the SPC FAME Strategic Plan 2013-16. It was not clear to the Review how the specific requirements of the Program (from high level objectives through to Component outcomes and activities) are incorporated into this process.

Planning for most of the Components has centred on selection of SPC member participation and scheduling of in-country or regional support activities and travel. Again, the approach to this differs according to the character of the Components, but the general approach has been to focus effort where the combination of factors offers the best potential for progress. This has resulted in more Program resources going into some countries than others, as illustrated by the table in Annex G.

For the Program Components, some limitation on member participation is part of the design, due to the circumstances of respective members and their needs, and alignment with the Component objectives. For example, the objective of Component 2.3 is to provide improved stock assessments of deepwater snapper for 'at least three Pacific Island countries'; i.e. not all SPC members. In practice more than three countries have some level of participation in this Component.

Risk Management

Risk assessment is addressed in the Program design as set out in the Concept Notes, and highlighted in the Logic Model (Annexes D and E). At a broader level the SPC FAME Strategic Plan identifies several areas of risk, and strategies to address/mitigate them, that form part of the operating context for the Program.

The planning process noted above represents a risk assessment approach in that the annual work planning should result in a best assessment of the most productive use of resources, given the information available on risks and opportunities.

Responsiveness

It is evident from shifts in Component activities over time that Program implementation has been responsive to changing circumstances. This has been expressed in a variety of ways, for example through responding to country requests to address urgent/critical capacity gaps; picking up on novel technologies (aquaponics), or staff using their personal expertise to support other areas of work.

With respect to the latter example, it could be said that the Component boundaries are flexible and to some extent permeable, as there are multiple instances of cross-fertilization between Components within the Program and within SPC FAME. For example, the issue of reporting requirements to the World Organisation for Animal Health (OIE) is cited as a specific outcome under Component 1.4 (support for exports); its main relevance is to Component 1.2 (export of aquarium fish), while in practice work on this issue has been delivered by staff under Component 1.3 (mariculture).

There are also interlinkages with other donor funded programs and projects, including ACIAR projects and initiatives funded by the European Union. In some cases Program staff contribute to externally run and funded projects. Conversely, in other cases activities that recipient countries identified with this Program were delivered through a different mechanism (e.g. consultants working under EU funding).

The Review also heard that, in pursuing Program objectives, staff actively sought out partnerships with other projects and donors in order to apply greater collective resources to the issues at hand.

Several interviewees described the Program funding as a basis or platform that provides leverage for gaining additional resources and funding.

The Review interprets this kind of exchange as a positive; creating synergies between different donor/agency initiatives with similar goals to increase the impact of both.

On the other hand there is perhaps a fine line between responsiveness and opportunism, and some potential for the pursuit of additional resources to draw attention from the Component's stated focus. Making this judgement, i.e. balancing Program objectives against other priorities, short term needs and opportunities, should be a matter of routine staff and project management. The Review considers that under a Program structure such as the FSSP, planning should place emphasis on working towards the objectives and outcomes prescribed for the Program and its Components.

Rating: 5

Impact

For this Program the high level objectives are the development outcomes relating to food production, economic development, income, employment etc laid down for the Food Security through Rural Development Initiative. Assessing the Program's contribution to achieving these development outcomes is not straightforward.

There is a strong argument, in the form of the impact logic chain, leading to the conclusion that the outputs ultimately contribute towards these high level outcomes. However there is little direct evidence for either achievement of the outcomes (particularly in relation to food security at community level), or attributing change to Program activities. At the same time the Review is aware of no evidence to the contrary.

There is only one Component-level indicator, repeated across several components, for which there is documentation of positive change with respect to these high-level objectives. That indicator relates to the total value of the tuna fishery. In this case the figure already exceeded the four year program target by the end of 2012. SPC – FAME, reporting on this, observed; "While this is an encouraging result many of the factors affecting tuna prices are entirely outside the control of SPC and its members".

The major reason behind this difficulty in demonstrating causality is the great influence of external factors. In particular, the final decision making, whether it be by outside organisations, governments, communities or the private sector, is external to SPC. SPC can advise and provide support, but not put in place regional management measures or national regulations, nor run private enterprises. The Review emphasises that this is not a 'negative'; rather it is a fact of life that is part of the operating context for SPC as for other regional organisations.

Setting aside the issue of direct causality, the Component level activities can be seen to target areas that make a contribution towards the high level goals. Some examples below illustrate the character of this contribution for several of the Program Components.

Example 1: Component 1.1: Scientific advice for the development of oceanic fisheries management measures. This Component provides tailored advice to Pacific Island countries on a range of stock

status issues. The role creates a link between the formal stock assessment work of SPC (funded largely under contract to the Western and Central Pacific Fisheries Commission) and the fisheries management/policy role of the Pacific Islands Forum Fisheries Agency (FFA). The role also supports national fisheries agencies and sub-regional groupings (such as the Parties to the Nauru Agreement and Te Vaka Moana) in their consideration of management options for migratory fish stocks.

Impact logic: The Components provides supplementary information and advice to support good decision-making at national, and sub-regional level, and under the Western and Central Pacific Fisheries Commission. This builds capacity to assert the rights of Pacific Island Countries and Territories in their Exclusive Economic Zones and bring benefits from improved management of fisheries.

Evidence of impact is provided indirectly through the submission of management proposals to the Western and Central Pacific Fisheries Convention process and through demonstrated demand and appreciation for the services provided.

Example 2: Component 2.2 Inland aquaculture. This Component provides technical assistance and support for the development of fresh water aquaculture. Some key initiatives are:

- Working with clusters of farmers to develop communities of good practice;
- Overseas field visits that provide the opportunity for selected farmers and officials to gain insights and experience from successful farms outside the Pacific Islands.

Impact logic: Technical advice and shared experience of good practice (within and beyond the Pacific Islands) builds capacity to enhance production/profitability through sharing learning.

Evidence of impact is through improved performance within clusters and demonstrated demand and appreciation for the services provided.

Example 3: Component 2.1 Artisanal tuna data and tuna data management. This Component provides support for improved data management, including collection, interpretation and presentation of data from artisanal and industrial fisheries. Data management for tuna is linked with coastal fisheries data processes.

Impact logic: Good data underpins good decision-making, both regionally (through the Western and Central Fisheries Commission for tuna) and nationally (through national coastal/artisanal fisheries management) enhancing benefits from sustainable use of these resources.

Evidence of impact is through improved science/understanding of regional stocks, and incremental enhancements in knowledge and management of coastal artisanal fisheries.

It is expected that the Program will continue to contribute towards these high level outcomes for the remainder of the four year term, and it is not necessarily expected that measurable changes will be evident at the mid-term stage. This aspect should be explored further through the proposed end of project evaluation, however attributing high level change to this Program alone will remain difficult.

Note: A rating is not required for assessment of impact.

Sustainability

This criterion primarily focuses to the likelihood of in-country activities being self sustaining once the DFAT funding Program is concluded.

Beneficiary support and ownership

It was evident from country visits that in all cases the recipient country/territory counterparts were highly appreciative of the work being carried out under the Program. The relevant SPC staff working on the Components were well known to in-country stakeholders, and their work highly valued. SPC members expressed strong interest in maintaining access to the services provided by SPC staff. This applied not only with respect to the remainder of the term of the Program but also beyond.

What underlies this position, in the Review's understanding, is both the regional context and the character of the Program, in particular its Components. Most of the Components represent fields of work that have been areas of priority over a prolonged period. The long term need for technical advice and support from SPC (and other agencies) recalls the basic rationale for implementing the Program. Put another way, it has been demonstrated over a long period (decades) that much of this work is not sustainable for Pacific Island Countries and Territories without ongoing access to a regional pool of support.

There are differences between the different Components (refer Annex F). In some cases (mariculture, aquaculture) the Components address long standing areas where there is an equally longstanding lack of resources and capacity in-country. In other cases the components represent a more targeted effort on a specific issue (deepwater snapper, aquarium exports). Members consulted indicated their need for ongoing support, even though the specific services may change. For example, with respect to competent authorities, it may be that competent authorities are well established in the target countries by the end of the current Program, but countries highlighted the ongoing need for support to keep abreast of regulatory changes, changes in technology and so on.

Sustainability unrealistic

Against that background, the Review considers that for the work encompassed by the Program overall, sustainability is unrealistic in the medium term. More specifically the Review accepts the view expressed by both SPC and recipient countries that there is an ongoing need for the type of services provided under the Program through to, and beyond, the end of its current term.

The Review does not see this as a fault with the program design; to the contrary it confirms that the Program is focussed on areas of genuine need for the member countries involved. Further, it is not suggested that the Components are not effective. It is clear that plans, resource assessments, data and sound advice provide critical underpinning for future sustainability and development. But experience has shown that continuing support is required to maintain capacity and momentum.

Rating: The Review considers the rating scale does not reflect the nuance of this issue; the Review considers that the Components to be unsustainable in the narrow sense of continuing without external support; but at the same time the Program and Components are well targeted and effective.

The rating is therefore 'satisfactory' without assigning a number.

Gender Equality

SPC-FAME organisational approach to gender issues

SPC advised the Review that the organisation's approach to gender mainstreaming is to attempt to integrate women into projects rather than targeting activities (workshops, training etc) specifically for women.

SPC staff with gender specialisation were consulted early in the Program - in some cases during the design phase for the components - on points of entry for women in the Program and its Components.

The Review was advised that SPC has policies in place to ensure that project jobs and training places are equally available to women and men, and that there is systematic gathering of gender-disaggregated data on participation in SPC-FAME events such as training. Data from Duty Travel Reports (as described in Annex G) shows a 22%:78% female:male ratio of participation in a sample of training events delivered under the Program.

The SPC Human Development Programme is intending to do 'gender stocktakes' by sector.

Outcomes for women

In terms of outcomes for women and men; for most Components there is a narrative on the participation of women, and in some cases children, in Component activities. In most cases there was anecdotal information on numbers of women involved or participating in the sector.

Benefits for women were most commonly cited in relation to employment, particularly in the processing sector. It is clear that the bulk of factory staff working in tuna canning/loining plants (in PNG for example) are women. At the same time the Review heard that there is very high staff turnover in this sector. While the sector definitely provides employment and income; the Review was not in a position to draw a conclusion as to whether this kind of processing/factory work for women represents an overall benefit for women and communities.

One interviewee observed that the quality of work varies across different fields within the overall fisheries/aquaculture sector; aquaculture can be 'empowering' for women, while observer/crew work is potentially unsafe.

The Program/Component Concept Notes highlight the intention to ensure that scholarships (specifically under Components 2.2 and 2.3) are available for women. As at October 2013 three students were participating through Component 2.2 (1 female; 2 male), and two (both male) through Component 2.3. Women were strongly represented among the country representatives interviewed during the field work.

Overall the Review considered that there is room for improvement in the implementation of the SPC systems and policies relating to participation and collection/use of gender-disaggregated data.

Rating: 4

Monitoring and Evaluation

Monitoring and Evaluation System

The Monitoring and Evaluation (M&E) system comprises a series of elements including: an M&E matrix; annual narrative reporting to DFAT and updating of the matrix; Component/staff level annual reviews and planning with respect to activities outputs and finances. In addition SPC reports annually to its governing body, while SPC-FAME produces an annual report for the governing body and Heads of Fisheries meetings which reports against the FAME Strategic Plan and annual work plan.

There are a number of other M&E elements incorporated into the Component design Concept Notes, notably provision for mid-term and end of project evaluation.

For the Program, Monitoring and Evaluation is based around the tiered set of objectives and outcomes that apply across different levels of the Program and its Components. A brief commentary on the key elements at each level is provided below.

M&E element	Role and comment
Development objectives	<p>These are very high level objectives relating to livelihoods, employment, value etc.</p> <p>Because they are such a high level, attribution is difficult to determine, correspondingly, almost all activities could be said to contribute in some way, at least in theory.</p>
Program objective	The Program objective focuses on supporting SPC as a means of delivering high level objectives.
Component Objectives	The Component level Objectives provide a link between the Component and the high level outcomes; they are drafted as compound statements that offer a rationale for the Component.
Component overall outcome	<p>The overall outcome statements, for these Components restate the objective in terms of an outcome.</p> <p>In practice the drafting of these is inconsistent; they tend to be composite statements that (in some combination) recall the development objectives, provide a consolidation the Component specific outcomes and propose indicators.</p>
Component specific outcome	<p>The specific outcomes are intermediary statements that bring together the expected contribution of like groups of outputs.</p> <p>In practice these too are drafted inconsistently; they are often composite statements, and in some cases comprise (or include) text that describes indicators or sources of information.</p>

M&E Framework and Matrix

The development of a comprehensive M&E framework is a requirement under the Funding Agreement. A major element of this is the Monitoring and Evaluation matrix developed for the Program. The matrix has a separate M&E sub-matrix for each Component. In conformance with the

Funding Agreement, the matrix identifies points of alignment between Program objectives and those in SPC-FAME's Strategic Plan.

A review of the matrix shows that its content ranges from high level development objectives of the overall funding envelope (Food Security for Rural Development) through to the specific outcomes and outputs set out for each Component. The matrix has an impressive array of cells and parameters (over 1000 cells of information); it is not an easy document to navigate, nor is it easy to digest/interpret its contents. Most of matrix is devoted to activities/outputs and specific outcomes at Component level. As noted elsewhere these are, in general, designed to be directly measurable and achievable, and should be correspondingly easy to report on. However they don't give a sense of the overall direction of the Program. At the other extreme, for the high level goals there is little data and it is difficult to demonstrate a direct link between Program activities and changes in the data beyond a theoretical level.

It is not practical here to analyse every measure and indicator in the matrix. However the inconsistencies in drafting noted above contribute to difficulties in using the matrix as a monitoring or management tool. In some cases outcomes have been redrafted or reinterpreted to fit the matrix, in other instances they are transferred to different roles (e.g. as indicators or sources of information).

There is little evidence that the matrix is a 'living document'; it is complex, not user friendly, and does not seem to be particularly helpful for planning or monitoring either within FAME or for the donor.

Some may consider that the M&E framework and matrix is not proving useful because not enough effort is being put into it in terms of resources or institutional commitment / enthusiasm. It is true that the budget allocation for M&E is low compared to the figures typically cited as an appropriate proportion of Program funds to go towards M&E. A figure in the order of 5% is often used as a reference point for the proportion of funds allocated to M&E. Under this Program, there is a line item for 'Evaluation' (not Monitoring) for each Component which sums to AUD 117,500, being approximately 1% of the total funding for Program. The evident understanding is that the evaluation funds are 'reserved for the mid-term review'³ and possibly the end of Program evaluation.

On the other hand the Review has some sympathy with FAME in this area; particularly as the broader level reporting for FAME to the governing body covers the same areas of work and refers to the same high level indicators (employment in the fisheries sector, value of tuna, value of aquaculture production etc).

On the matter of costs, the line item for Evaluation is the only explicit funding set aside for this aspect, but this understates the total resources going into monitoring and evaluation, as most of this takes place as a part of the annual work planning process.

³ This wording is from the Interim Progress Report on the Program and refers specifically to the allocation under component 1.2.

Reporting

SPC Fame has produced two annual narrative reports on the Program, an interim report that covers the initial Phase Components, and annual report. It is notable that the reports are quite different in format; the first provides an update on each of the Components, while the second discusses the Program overall, highlighting particular areas of note.

It is evident that explanatory notes are updated in the matrix from time to time, but there is no clear routine evident in relation to codifying progress against indicators in the matrix even when this information is available – e.g. for specific outputs and outcomes within the Components

Cross cutting issues

Cross cutting issues such as gender, climate change etc are not recorded in the matrix, but they are included in the FAME annual report.

Looking at the formal M&E system for the Program overall, the most significant difficulty is that the M&E framework and matrix has not shown any real usefulness either as a management tool for the agency or as a monitoring tool for the donor partner.

It is relevant to note that the Review was advised by DFAT through Peer Review process that there is flexibility available with respect to the high level outcomes, as DFAT is no longer bound by the Food Security Budget Measure under which the Program was initiated. This opens the possibility of reconsidering the Program and Component objectives and aligning them more directly with the FAME Strategic Plan 2013-16.

The Review considers that in view of this change, the opportunity should be taken to revise the M&E framework and matrix to focus on agreed Program level outcomes appropriate to the fisheries sector.

Evidence that objectives have been achieved

Evidence for the achievement of Component outcomes has been gathered through a combination of staff interviews and Component documentation, corroborated by in-country interviews where possible.

The objective statements for each Component are drafted in the style of descriptions of the overall rationale for the Component. For this reason they are not readily measurable; it follows that there is little direct evidence pointing to their achievement or otherwise.

With respect to the Program's high level development objectives, as noted above, the evidence has not been presented for most parameters. With or without evidence, the difficulty remains in demonstrating causality/attribution for broad measures such as employment, income, economic value, and food security at community level. There is a sound logical case supporting the Program's contribution as discussed earlier.

Analysis and Learning

The Program was developed during a period of institutional review and external assessment. Some of the key initiatives that formed the institutional background were: Institutional re-structuring carried forward under the 'RIF' process; an Independent External Review, and a review of SPC core services carried out by an External Reference Group.

The design reflects the core work areas and priorities emerging from these processes. It also builds on the previous experience of SPC FAME, and that of individual staff in those situations where there has been continuity of employment of staff working with SPC prior to the Program starting. This aspect is particularly important, given the background of previous work (with variable success) in the Component areas.

Developing Future Directions to inform the development of [DFAT]'s four year Pacific Fisheries Delivery Strategy and future support to SPC FAME.

Thematic Areas

Through the course of the interviews the Review invited comment on future needs and priorities for the fisheries sector. The question was presented as an open one, not limited to the scope of the current Program or its Components. The Review emphasises that this does not represent a comprehensive and systematic canvassing of views or analysis of future priorities. In addition, responses assumed that management of the oceanic tuna fishery will be an ongoing priority for the region.

The response from government representatives interviewed are summarised below. This list represents issues raised; it is not presented in a priority order, either of importance or frequency it was raised.

- Climate change – as an overarching issue
- Food security
- Coastal fisheries: community aspects; database/information and management of coastal/artisanal fisheries
- Aquaculture (without distinguishing between marine or freshwater)
- Support for exports

Industry representatives highlighted the need for additional training: in the processing sector; to meet export requirements (HACCP, electronic health certificates), and for crew (engineers, ticketing for crew).

The Review notes that aside from the industry training needs, all the thematic issues raised by member countries are within the scope of the existing strategic / scoping documents on fisheries in the region, including the SPC-FAME Strategic plan.

Funding modality

A major issue for FAME is sustainability / continuity of funding to support the Division's work.

This issue was raised by SPC in the context of the organisation's challenge to maintain funding for delivery of core services to its members. It is beyond the scope of this Review to go into detail on this issue, but in essence, SPC faces a shortfall in core funding to deliver core services. A high proportion of funding for the organisation is fixed term project funding. To address this issue, SPC is developing a case for increasing core funding for an agreed set of core services (as identified through an external review process).

The same situation applies for FAME, with the bulk of Divisional funding coming through fixed term projects, one of which is the Fisheries for Food Security Program.

The mid term evaluation report for the EU-funded SciCoFish project had this to say on the situation facing SPC FAME:

For an institution that is basing its business on the implementation of four-year strategic plans, complete with clear objectives and identified domains of intervention, obtaining the bulk of its financial assistance through funding attached to projects ought to be regarded as a fundamental weakness and distraction, creating inefficiencies, and also a certain degree of ineffectiveness.

That evaluation goes on to elaborate areas where this creates inefficiency, including: duplication of effort in project formulation; multiple layers of administration; duplication of reporting; discontinuities in staffing and activities, and a mis-match between short-term funding and core work programmes that span decades.

The current review concurs with these sentiments. In relation to the current Program the Review accepts that the Program content falls within the scope of core services identified for FAME.

Conclusion and Recommendations

The Review finds that the Program overall is a compilation of Components that supports SPC FAME to deliver core services to its members. The genesis of the Program and its design reflect the ongoing nature of Component activities. It can be described as a regional programme providing technical backstopping services, supplemented by some more closely targeted initiatives that respond to current needs.

The Program is managed and delivered as an Integral part of the fabric of SPC FAME work. This influences all aspects of the Program: planning; priority setting; institutional / staff / financial backup and coordination; alignment/harmonisation with other donor projects; monitoring and reporting and so on. The Program could not function without the institutional support, expertise and experience embodied in FAME. Conversely, without the Program, there would be gaps, and/or a decline in the quality of FAME's delivery of core services.

Overall conclusion regarding the Program

Against that background the Review's overall conclusions in relation to the Program are:

- h) The Program is well managed
- i) The Program is producing the outputs specified at Component level
- j) The Program is on track to achieve (or has already achieved) the Component specific outcomes
- k) There is less certainty (with respect to both data and attribution) about achieving the high level objectives associated with the Program. However there is a sound logical connection between the Component activities and the high level objectives.
- l) There is scope for more clarity with respect to planning and priority setting to ensure that the deployment of PFFSP resources within the overall FAME work programme is targeted towards the agreed PFFSP objectives and outcomes.
- m) Gender equality is addressed through SPC policies, but there is room for improved monitoring and participation of women in FAME / Program activities.
- n) The M&E framework, and particularly the M&E matrix, do not appear to play a useful role in management or monitoring and should be reviewed in light of progress to date and the increased flexibility available within the Australian Government objectives for the overall funding envelope.

The Review makes the following recommendation to strengthen delivery of the Program for the remainder of its term.

Strengthening Program performance

Institutional issues

Planning to achieve Program objectives and outcomes

Review of the Component level activities has illustrated a significant level of interchange between Program resources and other FAME activities and processes. It has also shown significant partnerships with projects and activities of external partner agencies. Viewed positively this approach reflects flexibility and responsiveness; taking advantage of opportunities to promote linkages, synergies and effectiveness. At the same time the Review has noted, for some Components, a tendency for activities to be drawn away from the Component objectives and outcomes.

The Review finds that there is a lack of clarity about the way judgments and trade-offs are made about the use of Program resources within the FAME planning and budget process. The Review considers that the 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.

Recommendation 1: That FAME⁴ should ensure that there is an explicit focus on Program/Component objectives and outcomes in the FAME annual planning process.

Monitoring and Evaluation

The Review finds that the monitoring and evaluation of the program takes place largely at the level of annual staff work planning and assessment, much of it at the level of Component outputs. Conversely the monitoring and evaluation at higher levels, including whole Program level, is assigned relatively less attention.

There are several factors that potentially contributing to this. In particular:

- The thematic areas of the Program are the subject of Division–level reporting to the SPC governing body and Heads of Fisheries Meetings.
- The Components are integrated into the various result areas of the oceanic and coastal fisheries programmes within FAME, and are evaluated in that context.
- There are inconsistencies in the drafting of outcomes and performance measures that hinder the usefulness of the M&E process and matrix.
- FAME's lack of dedicated resources for M&E.

A further symptom of this relates to the collection and use of data to inform the indicators; it is not clear to the Review that such information, where it is potentially available, was used for any in-house monitoring of progress or to guide future work.

The Review considers that FAME should reconsider its approach to M&E for the Program to ensure that it is useful to the organization, donor, and members. While some additional resources may be required for this, it is also a matter of institutional approach.

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

- d) *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;*
- e) *Reviewing data relating to performance indicators as part of the annual work planning process;*
- f) *developing a revised version of the M&E matrix that focuses on outcomes and indicators at Program and Component level.*

Use of funds

While the Review recognizes that expenditure is on track overall, there are differential spending rates across the seven Program Components as shown in Annex I. During the course of the Review several options were identified relating to use of funds over the remainder of the Program term:

⁴ Where the Recommendations cite 'FAME' and 'DFAT' these terms respectively refer to the Director of FAME, and the Officer holding the relevant responsibility in DFAT.

- a) Status quo; i.e. funds should remain as allocated under the funding agreement in terms of quantum and scheduling
- b) Extend term of Phase 1 of Components
 - a. So that all Components run for the expected four years (e.g. compensating for delays in recruitment) or
 - b. Components terminate on the Phase 2 schedule
- c) Review and reallocate funding within Components on the basis of need / priority within the Program (i.e. across different Components)
- d) Review and reallocate funding on the basis of need / priority within FAME (i.e. potentially beyond the Program as currently specified)

The Review's preference is for option c) which offers flexibility to address both expenditure and timing, and proposes that FAME reviews the budget allocations and projections, and discusses any proposed changes with DFAT, in light of the flexibility available with respect to the high level objectives, and the recommendations of this Review.

The Review also makes further comment below on the character of the current Program Components, as an input into the proposed review of fund allocations (These observations draw from the material in Annex F).

Program Component	Character of Contribution to High Level Objectives
1.1 (Science advice)	Ongoing work to underpin management of large scale regional tuna resources; supports livelihoods, and employment on a broad scale.
1.2 (Aquarium Exports)	Provides planning and technical support for sustainability and adding value in a niche industry; supports local employment and livelihoods in a limited number of countries/territories. Good progress should be achieved within the current Program.
1.3 (Mariculture)	Technical and planning support for increasing production in a sector for which there are high aspirations for future development; supports livelihoods and food security, potentially at a medium scale across the region.
1.4 (Export Support)	Provides technical and regulatory advice to gain/retain access to export markets for fisheries products; supports livelihoods and employment among SPC members exporting fishery products (or intending to) i.e. at a medium to large scale sub-regionally.
2.1 (Tuna data)	Provides processes for collection and interpretation of key data for the oceanic tuna fishery; indirectly supports livelihoods and employment as for Component 1.1.
2.2 (Aquaculture)	Technical and planning support for increasing production in a sector for which there are high aspiration for future development; directly targets food security and supports livelihoods, potentially at a medium scale across the region.
2.3 (deepwater snapper)	Provides stock assessments for a group of deepwater snapper species in a limited number of countries/territories; supports livelihoods/food security locally and on a modest scale. Good progress should be achieved within the current Program.

It can be seen that five of the Components support benefits on a potentially medium to large scale (in terms of quantum of fisheries stocks/products or geographic range). As noted earlier, there is likely to be an ongoing requirement for external resources/support to sustain the appropriate level of effort in these fields. The other two Components deal with specific stocks or niche products, and may not need additional resources beyond the current Program.

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.

Thematic areas

Economic / social aspects

A common theme across several Components is promoting enterprises that are economically viable as well as being environmentally and socially sustainable (e.g. mariculture /aquaculture; aquarium exports; deep water snapper). As highlighted in Annex F, in each of these areas the Components are being implemented against a background of limited success and, at times, failure of previous ventures.

The Review acknowledges that the Component staff and FAME management are well aware of these factors, and seek to promote viable activities. However the Review encourages increased emphasis on the economic factors and the social context for these initiatives 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 specialist consultancies) under the Program or partnerships with other projects.

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

Data

It is well recognized that good data is critical for effective fisheries management. The Review was impressed with the various initiatives underway to develop data platforms and encourage data collection. At the same time, the field visits 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. This observation relates largely to the non-tuna databases, and therefore broadly focuses on inshore coastal data collection management and access. The Review therefore encourages specific focus on developing data coverage for inshore coastal stocks, compatibility across different databases, and accessibility for end users.

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

Gender equality

SPC has policies in place relating to gender equality and SPC-FAME reflects these in its undertakings to promote the participation of women and collect gender disaggregated data. However the Review considers that 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.

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.

Future Directions of Support

Funding modalities

The Review agrees that the current Program activities represent, for the most part, FAME core services. In line with SPC's overall approach towards sustainable funding for core services, the review supports a shift from fixed term funding to ongoing budget support for core services.

At the same time, the Review recognises that project based agreements can be an appropriate vehicle for activities that have specific objective and a fixed term, and may be subject to higher levels of scrutiny from a project management perspective. The Review considers that these latter aspects can be incorporated under a core funding model through in-house project management procedures and monitoring.

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.

Future Thematic areas

The priority thematic areas raised through the interview process provide some sense of future priorities in the fisheries sector, noting that the process through which these issues were raised was not systematic or comprehensive, and assumed ongoing focus on management of oceanic tuna resources.

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

List of Acronyms

ACIAR	Australian Centre for International Agricultural Research
AusAID	Australian Agency for International Development (to 31October 2013)
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
FSM	Federated States of Micronesia
FSRDI	Food Security through Regional Development Initiative
HACCP	Hazard Analysis and Critical Control Points
IACT	Increasing Agriculture Commodity Trade: EU – funded Project
IER	Independent External Review
M&E	Monitoring and Evaluation
OFP	Oceanic Fisheries Programme of SPC-FAME
OIE	World Organisation for Animal Health
PFFSP	Pacific Fisheries for Food Security Program
RMI	Republic of the Marshall Islands
SciCoFish	Scientific Support for the Management of Oceanic and Coastal Fisheries in the Pacific Islands Region Project (EU)
SPC	Secretariat of the Pacific Community
SPC-FAME	SPC Division of Fisheries, Aquaculture and Marine Ecosystems

Annex A: Terms of Reference

ANNEX I

TERMS OF REFERENCE

Independent Mid-Term Review of the Fisheries for Food Security Program (the Review)

2013

- **Overview**

Programme Title:	Fisheries for Food Security Program (the Program)
Geographical Scope:	15 Pacific Island States
Programme Start Date:	19 th November 2010
Programme Duration:	5 years (2010 – 2015)
Project Value:	AUD 9,578,105
Implementing Agency:	Secretariat of the Pacific Community's Division of Fisheries Aquaculture and Marine Ecosystems (SPC FAME)
Funding Agency:	The Australian Agency for International Development (AusAID)
Review Start Date:	1 st July 2013
Review Completion Date:	30 th November 2013
Deliverables:	<ul style="list-style-type: none"> a. <i>Final Evaluation Plan / Draft Methodology</i> b. <i>Evaluation Mission Aide Memoire</i> c. <i>Draft Independent Mid Term Evaluation Report</i> d. <i>Final Independent Mid Term Evaluation Report</i>

- **OBJECTIVES OF THE REVIEW**

The Terms of Reference for this Mid-Term Review have been prepared jointly by AusAID and SPC FAME. The two objectives of the review are:

- 3) To assess the Program's progress to date against AusAID's evaluation criteria (including ratings), and to recommend changes to strengthen performance in the second half of the planned Program. This assessment should include consideration of the Program's mid-term impacts, design, management and implementation issues, and any contract variations necessary to give effect to recommended changes.
- 4) To identify options and make recommendations on future directions of support to SPC FAME to inform the development of AusAID's four year *Pacific Fisheries Delivery Strategy*.

- **BACKGROUND**

Pacific Fisheries

Fisheries make a major contribution to food security and economic viability in the Pacific. The region's fishing sector contributes:

- Over \$258 million to the GDP of Pacific countries and over 14 000 formal jobs, principally from tuna;
- Significant employment within the subsistence fishery sector across the region; and
- 70 to 90 per cent of animal protein for many Pacific island populations.

While the Pacific has the largest and healthiest tuna stocks in the world, contributing almost half of the world's annual tuna catch, the long term sustainability and profitability is threatened by overfishing and overcapacity. Furthermore, despite their significance, subsistence and small scale fisheries are largely unmanaged and increasingly overfished. An estimated 75% of Pacific island coastal fisheries will not meet food security needs by 2030 due population growth and the impacts associated with climate change and other environmental factors.

SPC FAME

SPC FAME's goal is to ensure 'the marine resources of the Pacific Islands region are sustainably managed for economic growth, food security and environmental conservation' (SPC FAME Strategic Plan launched in 2010 and revised in 2013). SPC FAME provides important assistance to its 22 Pacific

Island member countries on the management and development of their coastal fisheries and aquaculture opportunities. SPC also works closely with FFA in the provision of scientific and socio-economic advice on oceanic fisheries, building the capacity of national fisheries agencies, updating national fishery legislation and promotion of fisheries industries. In 2012, SPC FAME Division employed 84 staff and had a budget of USD13.3 million.

Australia is a founding member of SPC, providing core program support since its inception. In 2012, approximately 16 per cent of AusAID's core program support to SPC was allocated to the SPC FAME Division (approximately \$1.3 million). AusAID's support to SPC FAME is complemented by AusAID's fisheries assistance to the Pacific Islands Forum Fisheries Agency (FFA), bilateral institutional strengthening programs in Kiribati and Nauru, and a Community Based Fisheries Management program led by the Australian Centre for International Agricultural Research (ACIAR).

Pacific Fisheries for Food Security Program (the Program)

In response to a number of SPC analyses and consultations, including the joint SPC /FFA report on *The Future of Pacific Island Fisheries (2010)*, AusAID commenced support for priority food security projects through the *Pacific Fisheries for Food Security Program (the Program)*. The Program forms part of Australia's commitment to the *Food Security through Rural Development Initiative (2009)* and AusAID's broader Pacific Fisheries Program.

The primary objective of the Program is:

- To engage with and support a sustainable, well governed, effective and efficient regional organisation that works towards improving food security in Pacific Island Countries and Territories through: lifting fisheries productivity, improving rural livelihoods and building community resilience from the sustainable management of fisheries.

The Program contributes to SPC's Strategic Plan objectives and results, AusAID's Pacific Fisheries Framework (2007) objectives and intermediate outcomes, and the following Food Security through Rural Development (FSRD) Initiative outcomes:

- increased productivity for poor households from sustainable fisheries;
- increased food produced from sustainable fisheries;
- increase in net income of poor women and men from sustainable fisheries;
- creation of jobs for poor women and men from sustainable fisheries.

AusAID's assistance to SPC FAME is also intended to support AusAID's objectives for Pacific Regional assistance.

The Fisheries for Food Security project commenced on 19th November 2010. The current completion date is 30 November 2015. The Program includes support for the following 7 projects that commenced in two phases:

Phase 1 (AUD 4,820,350)

- Scientific advice for the development of oceanic fishery management measures – AUD1,027,500
- Management and development of export fisheries for aquarium fish - AUD1,082,500
- Development of mariculture opportunities - AUD1,167,500
- Assistance to meet export requirements for marine products - AUD1,227,500

Phase 2 (AUD 4,757,755)

- Artisanal tuna data and tuna data management – AUD2,036,500
- Inland aquaculture - AUD1,217,500
- Deepwater snapper - AUD1,192,500

• **SCOPE AND METHOD OF THE EVALUATION**

In developing the scope of the review, AusAID and SPC FAME have been mindful of the significant number of reviews that have recently been conducted for SPC as a whole and the work of the Division. In meeting the Review objectives, the MTR will consider and advise on the issues outlined in Annex A. The evaluation mission will be informed by the documents outlined in Annex B (including previous SPC and SPC FAME reviews), discussions with SPC FAME project leaders in Noumea, field visits to Papua New Guinea, Samoa and Kiribati; discussions with relevant FFA and AusAID staff by teleconference (including AusAID's food security advisers and SPC program managers at Suva post), and discussions with senior fisheries staff from Fiji and New Caledonia if time and flight routes permit it. The total budget for the review is approximately AUD55,000 inclusive of all of the Team Leaders' and Pacific fisheries national representative costs (including fees, per diems, travel, communication and other overheads) , but exclusive of AusAID's representative costs.

The evaluation team leader will be responsible for the development of a Draft Evaluation Plan to build on this Terms of Reference for the Review, to be submitted to SPC FAME and AusAID for

approval at least one week prior to the in-country mission. The evaluation will be undertaken according to the approved Final Evaluation Plan. The Draft Evaluation Plan will include:

- the evaluation design that describes an appropriate methodology for assessing the initiative given the time and resources provided.
- inclusion of sub-questions for key evaluation questions and questionnaires
- the proposed data collection and analysis process, including the sampling strategy.
- challenges/limitations in achieving the evaluation objectives
- roles and responsibilities of the team members
- a final itinerary; and
- the final report structure.

• **COMPOSITION OF THE INDEPENDENT REVIEW TEAM**

The evaluation team will consist of:

- a. Team Leader (responsible for finalising the written report) with strong expertise in monitoring and evaluation, extensive experience in the Pacific and a thorough understanding of Australia's aid program;
- b. A national of a Pacific Island country with relevant fisheries expertise; and
- c. Up to two AusAID representatives to be determined by AusAID.

Skill Sets Required by the Team:

- a. extensive monitoring and evaluation experience;
- b. extensive knowledge of aid and development in the Pacific
- c. experience in fisheries management, fisheries issues and food security;
- d. practical design and implementation experience;
- e. thorough understanding of the Australian aid program and experience in aid program development, planning, monitoring and evaluation;
- f. excellent interpersonal and communication skills, including a proven ability to liaise and communicate effectively with Pacific Islanders; and
- g. ability to provide timely delivery of high-quality written reports.

- **REPORTING ROLES AND RESPONSIBILITIES OF THE TEAM**

The Team Leader will:

- a. plan, guide and develop the overall approach and methodology for the evaluation in consultation with other team members;
- b. be responsible for managing and directing the evaluation's activities, representing the evaluation team and leading consultations with government officials and other donor agencies;
- c. be responsible for managing, compiling and editing inputs from other team members to ensure the quality of reporting outputs;
- d. be responsible for producing an aide memoire, synthesising evaluation material into a clear draft evaluation report and a final evaluation report; and
- e. represent the team in a peer review.

Other team members will:

- a. work under the overall direction of the Team Leader;
- b. provide advice, relevant documentation from AusAID, and an understanding of regional partners and AusAID performance policies and processes;
- c. contribute to the required dialogue, analysis and writing of the report, as directed by the Team Leader.

- **TIMING & DURATION**

The independent evaluation will commence by 19th August 2013 and be completed by 30th November 2013. The duration for the scope of services is up to 30 input days from the Team Leader and 18 days from the Pacific national consultant based on the indicative itinerary outlined below. The final itinerary will be negotiated with the Team Leader, in consultation with other team members, and included in the Final Evaluation Plan. The evaluation mission fieldwork will commence after 10 September 2013.

TASK	LOCATION	INPUT (days)		
		TEAM LEADER	Pacific national consultant	AusAID Representative
Document reviews	Desk based	2	1	
Draft Methodology / Evaluation Plan and approval processes		1		1
Preparation for in-country and regional visits		2		
Evaluation mission	Field Work New Caledonia, PNG, Samoa, Kiribati and potentially Fiji.	16	16	12-16
Presentation of aide memoire (during mission) to SPC FAME	Desk based – via phone teleconference	1		1
Draft Evaluation Report		6	1	1
Peer Review and redrafting after feedback from AusAID and other stakeholders		2		1
Presentation to HoF meeting in 2014		0		1
TOTAL		30	18	17-19

- OUTPUTS**

The following reports are to be provided:

- a. *Evaluation Plan / Draft Methodology* – for agreement with AusAID and SPC FAME prior to mission.
- b. *Evaluation Mission Aide Memoire* - to be presented to SPC FAME and AusAID Pacific Fisheries, at the completion of the final in-country mission. The format for the Aide Memoire will follow AusAID’s template (to be provided).
- c. *Draft Independent Evaluation Report* – to be provided to SPC FAME and AusAID Pacific Fisheries, within 15 working days of completion of the final review meeting. Feedback from AusAID and other stakeholders will be provided within three weeks of receiving the draft report, followed by a peer review. The Independent Evaluation Report will be based on AusAID’s template for Evaluation Reports, with amendments made as necessary to reflect the terms of reference of this Review.
- d. *Independent Evaluation Report* - final document within 30 working days of receiving the feedback, incorporating advice from evaluation peer review. The report will be no more than 20 pages (plus annexes). Lessons, recommendations and ratings should be clearly documented in the report.

The Independent Evaluation Report together with AusAID’s and SPC FAME’s management responses will be published on both the AusAID and SCP FAME websites. The documents will be presented by AusAID to SPC FAME’s Members for comment at the Heads of Fisheries Meeting in 2014 and will be disseminated to all those who participated in the evaluation.

- **PEER REVIEW OF DRAFT EVALUATION REPORT**

A peer review examines and contests the findings of the evaluation report to ensure the evaluation results are relevant and applicable to AusAID’s operating environment. The peer review will be organised by AusAID and may be conducted by email or through a review meeting. The Team Leader will be required to participate in the Peer Review. The Peer Review will bring together senior managers, initiative managers, thematic and evaluation specialists within AusAID and external representatives including from other Australian Government agencies, other donors and non-government organisations.

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 anti-corruption)?
- 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?

9. Future Directions to inform the development of AusAID's four year Pacific Fisheries Delivery Strategy and future support to SCP FAME

- Consider how well the revised SPC FAME Strategic Plan, core and non-core priorities, capabilities and capacities reflects emerging challenges facing Pacific fisheries, emerging member priorities

and the projected roles of regional organisations, and recommend re-orientation where necessary.

- How well do SPC FAME’s priorities align with AusAID’s development outcomes for Pacific fisheries and regional assistance.
- Identify options for AusAID’s future funding, quality assurance and risk management approaches; and role in the partnership with SPC FAME.

Attachment B to TOR**DOCUMENTS TO INFORM THE REVIEW**

The list of documents to inform the review includes but is not limited to the following:

Program Documents

- Program Funding Agreement, Concept Notes and Monitoring and Evaluation Framework
- AusAID's Program Quality at Entry Peer Review Comments
- SPC FAME and AusAID Program Quality at Implementation Reports
- SPC FAME Program documents, publications and internal management and financial reports

AusAID Documents

- Valuing Pacific Fish: A Framework for fisheries related development assistance in the Pacific (2007)
- Pacific Fisheries Taskforce internal paper (2012)
- AusAID's Draft Regional Organisations Delivery Strategy (due July 2013)
- AusAID's Regional Situation Analysis (2013) and, if available, AusAID's draft Regional Delivery strategy (due November 2013)
- Draft contributions towards the development of AusAID 's Pacific Fisheries Delivery Strategy
- AusAID's cross cutting policies including with respect to private sector development, gender equity, climate change and disability
- Guidelines and templates -
 - a. Guideline: Manage the Independent Evaluation of an Aid Activity
 - b. Template: Aide Memoire
 - c. Evaluation report template
 - d. Review and Evaluation in AusAID

SPC FAME Strategic Documents

- SPC FAME Strategic Plan 2010, and subsequent amendments in 2013
- Relevant Heads of Fisheries Reports and Minutes
- The Joint FFA/SPC Report on the Future of Pacific Fisheries (2010)
- Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change (2011)

Recent SPC and Fisheries Reviews

- Independent External Review of SPC (2012) and Management Responses
- Evaluation of New Zealand's fisheries sector work in the Pacific 2003-2010 (available June 2013)
- EU (SciCOFish) Review (2013)
- Potentially the EU (DevFish) Review
- Independent Review of FFA (2010)

Other Regional Arrangements and Organisations strategic Documents

- The Pacific Oceanscape Framework (2012)
- Pacific Islands Forum Leaders' Vava'u Declaration on Pacific Fisheries Resources, Tonga, October 2007
- The Apia Policy 2008-2013
- FFA's Strategic Plan (to be reviewed this year)
- The Parties to the Nauru Agreement's Business Plan
- The Te Vaka Moana Business Plan

Annex B: Evaluation Plan

Independent mid-term review of the AusAID-funded Fisheries for food security Program.

Evaluation Plan

Introduction

The Secretariat for Pacific Community (SPC), in partnership with AusAID, has commissioned an independent mid-term review of the AusAID-funded Fisheries for Food Security Program.

This document sets out the way that the review will be conducted, and the project milestones leading to the submission of a final Evaluation Report. The primary intended users of the Report are SPC Fisheries Aquaculture and Marine Ecosystems (FAME) Division and AusAID, to inform Program enhancements, and to inform AusAID's future Pacific fisheries assistance to SPC FAME and, as appropriate, more broadly.

The Plan has been developed in consultation with AusAID and SPC FAME, in the context of the Terms of Reference agreed for the Review and other relevant documents. The Plan represents the first Output specified in the Terms of Reference.

Background

The fisheries sector plays a very significant role in the Pacific Islands in relation to economic development, food security, and livelihoods in the region.

Australia plays a key role in supporting the Pacific fisheries sector through a range of initiatives and funding programs across the region. The current review focuses on the *Pacific Fisheries for Food Security Program* (the Program) and its constituent project activities. The Program, funded by AusAID and implemented by SPC FAME, began in November 2010 and will continue through to 2015. It consists of seven different fisheries projects implemented across 15 Pacific Island States with a total value of AUD 9,578,105.

With respect to the Program, the objectives of the Mid-Term Review are:

- 1) To assess the Program's progress to date against AusAID's evaluation criteria (including ratings), and to recommend changes to strengthen performance in the second half of the planned Program. This assessment should include consideration of the Program's mid-term impacts, design, management and implementation issues, and any contract variations necessary to give effect to recommended changes.
- 2) To identify options and make recommendations on future directions of support to SPC FAME to inform the development of AusAID's four year Pacific Fisheries Delivery Strategy.

Objective 1) is primarily retrospective and Program focussed; involving an assessment of achievements to date, and making recommendations for improved delivery of the remainder of the Program.

Objective 2) is forward-looking, involving recommendations on future support to SPC FAME and the wider strategic context for AusAID.

Evaluation Design / Methodology

Overall approach

In line with the Terms of Reference, the evaluation will be carried out in several phases.

- Background Research

The initial phase of the evaluation will comprise a preliminary desktop review of project documentation, including, but not limited to, the document list incorporated in the Terms of Reference (Annex B to the Terms of Reference).

- Data gathering / evaluation mission

Data/information will be gathered during the evaluation mission to five countries participating in the Program. In each case the Review Team will meet with and interview an agreed selection of national stakeholders,

Data/information will also be gathered from relevant regional and donor partners working in fields relevant to the Fisheries for Food Security program.

An aide memoire will be prepared and will be delivered at the conclusion of the in-country visits (Output b. specified in the Terms of Reference).

- Synthesis and reporting

The data/information gathered during country visits, supplemented by data/information from other sources and stakeholders will be synthesised into a draft Independent Evaluation Report based on the structure and content set out in the AusAID Evaluation Report Template (Output c. specified in the Terms of Reference).

- Peer Review and finalisation

The draft Independent Mid Term Evaluation Report will be submitted to AusAID and SPC FAME for Peer Review to be conducted by AusAID.

The final Independent Mid Term Evaluation Report will be concluded by taking into account the outcome of the Peer Review process (Output d. specified in the Terms of Reference).

Key evaluation parameters

Detailed guidance on the scope and content of the evaluation are provided in the Terms of Reference and associated documentation, including AusAID evaluation templates.

Objective 1: To assess the Program's progress to date

For Objective 1 the key parameters for the evaluation are:

a) Program Objective

The primary objective of the Fisheries for Food Security Program, as stated in the Terms of Reference, is:

To engage with and support a sustainable, well governed, effective and efficient regional organisation that works towards improving food security in Pacific Island Countries and Territories through: lifting fisheries productivity, improving rural livelihoods and building community resilience from the sustainable management of fisheries.

The Program is implemented by SPC FAME through a series of Components as summarised below:

Component		Funding
Phase 1	Scientific advice for the development of oceanic fisheries management measures	AUD 1,027,500
	Management and development of export fisheries for aquarium fish	AUD 1,082,500
	Development of mariculture opportunities	AUD 1,167,500
	Assistance to meet export requirements for marine products	AUD 1,227,500
Phase 2	Artisanal tuna data and tuna data management	AUD 2,036,500
	Inland aquaculture	AUD 1,217,500
	Deepwater snapper	AUD 1,192,500

Objectives, outcomes and outputs are specified for each Component in the respective concept notes for each Phase.

b) Strategic Objectives

The Program is designed to contribute to SPC's Strategic Plan objectives and results, AusAID's Pacific Fisheries Framework (2007), and the following outcomes sought under the *Food Security through Rural Development Initiative*:

- Increased productivity for poor households from sustainable fisheries
- Increased food produced from sustainable fisheries
- Increased net income of poor women and men from sustainable fisheries
- Creation of jobs for poor women and men from sustainable fisheries

c) Evaluation criteria and Rating Scale

The Terms of Reference set out the AusAID's criteria for the evaluation, being the DAC criteria with supplementary considerations specific to this review. The criteria are:

1. Relevance 2. Effectiveness 3. Efficiency 4. Impact 5. Sustainability 6. Gender Equality 7. Monitoring and Evaluation 8. Analysis and Learning

Where appropriate, progress against the criteria will be assigned a rating using the six-point rating scale in the table below. Other criteria will be addressed through the analysis, conclusions and recommendations of the Report.

Rating scale⁵

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 evaluation will involve testing the Program activities to date against the range of objectives set out above, as they relate to each of the assessment criteria. High priority will be given to sustainability, impact and monitoring and evaluation criteria in order to answer the key questions of the Review.

Objective 2: Developing Future Directions to inform the development of AusAID's four year Pacific Fisheries Delivery Strategy and future support to SPC FAME.

Insights on future support / strategy will be developed through a process involving:

- Stakeholder responses to specific questions on future directions and needs;
- Consideration of SPC FAME's institutional capacity / resources, and Program/Component implementation (efficiency, effectiveness etc);
- Consideration of relevant strategic documents and indicative funding priorities looking ahead over the four year timeframe of the Pacific Fisheries Delivery Strategy;
- Scan of external drivers and opportunities over the four year time frame.

The resulting analysis will be consolidated into discussion and recommendations on future directions.

Data collection and analysis

Sources of data and information

The Review will seek to use data-driven quantitative analysis where possible. For many of the criteria a qualitative approach will be used, either because it is the most appropriate method, or due to absence of data.

The field work and stakeholder interviews will be a primary source of information on program and Component delivery. The field work will also provide access to additional documentation on national priorities and, to some extent, community views and needs. The findings, particularly any trends, anomalies or quality concerns will be corroborated as feasible.

The Program provides support to 15 Pacific Island States, but due to budget and practical travel constraints, the Review mission will only visit five countries; New Caledonia, Papua New Guinea, Fiji, Kiribati and Samoa. These countries were chosen as they are an appropriate representation of sub-regional groupings of the countries to which support is provided.. The review will therefore seek information from other participating countries (e.g. by email/telephone) as time and resources permit. Data sources to inform the assessment against each of the AusAID criteria are summarised below.

⁵ AusAID Tool: Evaluation Report Template (Registered number: 155 Version: 2.0)

Evaluation criteria, analysis and data sources		
Criteria	Nature of analysis	Sources of data/information
Relevance	Qualitative assessment of needs and priorities of AusAID, SPC, participating countries, regional agencies, donors in the context	- AusAID and SPC strategies and plans -Regional strategies -Program/Component documentation - stakeholder interviews
Effectiveness	Qualitative assessment of project design, intervention logic, assumptions, risks etc; Qualitative assessment of stakeholder perceptions; Quantitative and qualitative assessment of partner actions	Program/Component design documents -stakeholder interviews
Efficiency	Quantitative assessment of expenditure; Qualitative assessment of budget management, adequacy/use of resources, accountability, risk management, reporting etc.	-Program/Component design and budget documents -stakeholder interviews
Impact	Qualitative and quantitative assessment of the Program's contribution to outcomes, including any unintended outcomes.	-Program/Component products -national documentation on implementation -stakeholder interviews
Sustainability	Qualitative assessment of participating countries' ownership and commitment to Program outcomes. Quantitative assessment of future resource allocations.	-stakeholder interviews -national documentation and budget information -commitments of other donors
Gender equality	Quantitative assessment of participation by men and women in the Program and the sector. Qualitative assessment of initiatives implemented through the Program	-Program/Component and sector data - Stakeholder interviews
Monitoring and Evaluation	Qualitative assessment of Program/Component M&E practices	-Program/Component documents (including M&E matrix)
Analysis and Learning	Qualitative assessment of Program/Component implementation and procedures.	-Program/Component design documents -relevant review/evaluation documents from other Programs
Developing Future Directions	Qualitative assessment of regional, national and community level needs and priorities; indicative donor programming	-stakeholder interviews -regional and national documentation on future priorities -indicative donor programming

Evaluation Questions and Questionnaires

The evaluation itself is designed around the assessment criteria, supplemented by the guidance provided in the Terms of Reference (in particular Annex C to the Terms of Reference).

As noted above, much of the evidence required to draw conclusions will be based on stakeholder interviews.

Some examples of evaluation questions to be answered by the review are listed below, key questions are highlighted.

Criteria	Evaluation question
Relevance	<ul style="list-style-type: none"> - 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? - Does this program implement activities that are the most appropriate at this time, for each country?
Effectiveness	<ul style="list-style-type: none"> - To what extent were the stated objectives and outputs as stated in the Programs' monitoring and evaluation matrix achieved to date?
Efficiency	<ul style="list-style-type: none"> - Has the implementation of the Program delivered value for money? <ul style="list-style-type: none"> o Are the Components well targeted? o Has the Program been responsive to changing needs? o Has the Program had sufficient and appropriate staffing?
Impact	<ul style="list-style-type: none"> - To what extent have development outcomes been achieved to date? <ul style="list-style-type: none"> o Is attribution to this Program clear? - Could anything have been done differently to create more positive change to beneficiaries lives? - What extra data is required to demonstrate the poverty reduction impact this Program has had at the household level?
Sustainability	<ul style="list-style-type: none"> - Do beneficiaries and/or partner country stakeholders have sufficient ownership, capacity and resources to maintain the Program outcomes after the Australian Government funding has ceased? - Are there any areas of the Program that are clearly not sustainable? <ul style="list-style-type: none"> o What can be done during the rest of the Program to improve these areas? o What lessons can be learnt from areas that are unlikely to be sustainable?
Gender equality	<ul style="list-style-type: none"> - 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?
Monitoring and evaluation	<ul style="list-style-type: none"> - 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? - Are more or different indicators required? - Do the indicators chosen adequately demonstrate attribution? - Is there difficulty in collecting any of the data? If so, what would make it easier? - 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?
Analysis and learning	<ul style="list-style-type: none"> - 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?
Future directions to inform the development of AusAID's four year Pacific Fisheries Delivery Strategy and future support to SPC Fame	<ul style="list-style-type: none"> - Consider how well the revised SPC FAME Strategic Plan, core and non-core priorities, capabilities and capacities reflects emerging challenges facing Pacific fisheries, emerging member priorities and the projected roles of regional organisations, and recommend re-orientation where necessary. - How well do SPC FAME's priorities align with AusAID's development outcomes for Pacific fisheries and regional assistance? - Identify options for AusAID's future funding, quality assurance and risk management approaches; and role in the partnership with SPC FAME.

The review will use semi structured interviews based around a limited number of generic questions. The questions are drafted in plain language and designed to be adapted according to the role of the interviewee and the particular field of interest and/or expertise.

A draft set of questions is attached as Annex 1. In each case the primary question can be followed up with supplementary questions from the review team as appropriate

In this way the interviews will also allow for less structured discussion in order to reveal the project narrative, and potential future directions, from the perspective of different stakeholders.

To illustrate; the question: "Has the project benefited both women and men?" could be followed up by supplementary questions such as:

- Can you give some examples?
- Do you have figures on employment of men and women
- Was the involvement of women part of the project design
- Does your national strategy include actions that benefit women and men

Risks and Risk Management

We have identified a number of risks and challenges around delivery of the evaluation. These are summarised below in a risk/response format.

Risk	Response
Limited number of countries visited.	Follow-up with other participating countries by email/telephone as time, availability of counterparts, and resources permit.
Short time in-country means there is limited opportunity to engage with stakeholders, especially outside government (e.g. community, private sector)	Use alternative means such as email; use caution in interpreting information from small samples.

Review Team

The Review Team comprises:

Bruce Chapman: Independent Consultant (Team Leader) (MarineandPacific@gmail.com).

Joe Stanley: Independent Consultant.

Brianna Page: AusAID.

The roles and responsibilities of the Team members are:

Team Leader:

- a. plan, guide and develop the overall approach and methodology for the evaluation in consultation with other team members;
- b. be responsible for managing and directing the evaluation's activities, representing the evaluation team and leading consultations with government officials and other donor agencies;
- c. be responsible for managing, compiling and editing inputs from other team members to ensure the quality of reporting outputs;
- d. be responsible for producing an aide memoire, synthesising evaluation material into a clear draft evaluation report and a final evaluation report; and
- e. represent the team in a peer review.

Other team members:

- a. work under the overall direction of the Team Leader;
- b. provide advice, relevant documentation from AusAID, and an understanding of regional partners and AusAID performance policies and processes;
- c. contribute to the required dialogue, analysis and writing of the report, as directed by the Team Leader.

Timeframe and Itinerary

The overall timeframe and milestones for the review are set out in the table below.

Milestone	Due Dates
Period of field work in Noumea, Port Moresby, Suva, Tarawa and Apia	8 September – 28 September 2013
Delivery of Aide Memoire from fieldwork	7 October 2013
Delivery of draft Evaluation Report	28 October 2013
Delivery of final Evaluation Report	25 November 2013

The following itinerary provides for the Review Team to visit the five sample countries within the timeframe of the review.

Day / Date	Travel / location
Sunday 8 September	15:10 Arrive: TONTOUTA, NOUMEA
Monday 9 September	Noumea
Tuesday 10 September	Noumea

Wednesday 11 September	10:15 Depart TONTOUTA, NOUMEA 12:30 Arrive: KINGSFORD SMITH, SYDNEY 14:05 Depart KINGSFORD SMITH, SYDNEY 15:35 Arrive: BRISBANE 17:40 Depart BRISBANE 20:45 Arrive: JACKSON FLD, PORT MORESBY
Thursday 12 September	Port Moresby
Friday 13 September	Port Moresby
Saturday 14 September	Port Moresby
Sunday 15 September	Port Moresby
Monday 16 September	14:00 Depart JACKSON FLD, PORT MORESBY 17:05 Arrive: BRISBANE 22:55 Depart BRISBANE
Tuesday 17 September	04:25 Arrive: NADI 06:30 Depart NADI 07:00 Arrive: NAUSORI, SUVA
Wednesday 18 September	19:00 Depart NAUSORI, SUVA 19:30 Arrive: NADI
Thursday 19 September	05:00 Depart NADI 08:00 Arrive: BONRIKI, TARAWA
Friday 20 September	Tarawa
Saturday 21 September	Tarawa
Sunday 22 September	12:00 Depart BONRIKI, TARAWA 15:00 Arrive: NADI
Monday 23 September	Nadi [Note: BP returns to home base]
Tuesday 24 September	20:50 Depart NADI 23:40 Arrive: FALEOLO, APIA
Wednesday 25 September	Apia
Thursday 26 September	Apia
Friday 27 September	Apia
Saturday 28 September	01:50 Depart FALEOLO, APIA [Note: BC returns to home base]

Structure of Final Report

The final Evaluation Report will follow the overall structure set out in AusAID Tool Evaluation Report Template (Registered Number: 155 Version 2.0 valid to December 2013), adapted to encompass the scope of the current review.

A draft outline of the Evaluation Report is attached as Annex 2.

Annex 1

Independent mid-term review of the Fisheries for Food Security Program

[Draft] Questions for interviews with in-country stakeholders

Background to the Pacific Fisheries for Food Security Program

The Fisheries for Food Security Program (FSSP) is funded by the Australian Agency for International Development (AusAID) and implemented the Secretariat of the Pacific Community's Division of Fisheries Aquaculture and Marine Ecosystems (SPC FAME).

The program started in late 2012 with a scheduled duration of five years (2010 – 2015)

Total funding is AUD 9,578,105 delivered through seven Components:

	Component	Funding
Phase 1	Scientific advice for the development of oceanic fisheries management measures	AUD 1,027,500
	Management and development of export fisheries for aquarium fish	AUD 1,082,500
	Development of mariculture opportunities	AUD 1,167,500
	Assistance to meet export requirements for marine products	AUD 1,227,500
Phase 2	Artisanal tuna data and tuna data management	AUD 2,036,500
	Inland aquaculture	AUD 1,217,500
	Deepwater snapper	AUD 1,192,500

The Program is designed to contribute to the following outcomes sought under Australia's commitment to the *Food Security through Rural Development Initiative (2009)*:

- Increased productivity for poor households from sustainable fisheries
- Increased food produced from sustainable fisheries
- Increased net income of poor women and men from sustainable fisheries
- Creation of jobs for poor women and men from sustainable fisheries

Purpose of the review

The purpose of the Mid-Term Review is to:

- 1) To assess the Program's progress to date and to recommend changes to strengthen performance in the second half of the planned Program.

2) To identify options and make recommendations on future directions of support to SPC FAME to inform the development of AusAID's four year Pacific Fisheries Delivery Strategy.

For the first objective, the Review Team is to assess the program against AusAID's evaluation criteria: 1. Relevance 2. Effectiveness 3. Efficiency 4. Impact 5. Sustainability 6. Gender Equality 7. Monitoring and Evaluation 8. Analysis and Learning.

For the second objective, the Review Team will gather insights from stakeholders on targeting future funding within and beyond the current program.

Review Team

Bruce Chapman: Independent Consultant (Team Leader) (MarineandPacific@gmail.com).

Joe Stanley: Independent Consultant.

Brianna Page: AusAID.

Questions for Stakeholders

- 1 Which Component or Components contribute to your/your department's work?
- 2 How does the Component contribute to national objectives?
- 3 How does the Component contribute to your work in particular?
- 4 What specific things have been achieved through the Component / program that you are aware of?
- 5 Can you describe anything that has been particularly successful? Or particularly difficult/unsuccessful?
- 6 What other things are in progress or likely to be achieved over the rest of the Component?
- 7 Has the Component benefited both women and men?
- 8 Are there more things that you would like to have support for under the Component?
- 9 Have there been any unexpected results or side effects of the Component?
- 10 What will happen (generally, or in your work area) when this Component finishes?
- 11 What other donor projects are currently operating in this work area. Are any other future projects being planned?
- 12 What do you see as the main issues/difficulties/opportunities for the future?

Annex 2

**Independent mid-term review of the Fisheries for Food Security
Program**

AidWorks Initiative Number

EVALUATION REPORT

Author's Name and Organisation

Date

Initiative Summary

Initiative Name			
AidWorks initiative number			
Commencement date		Completion date	
Total Australian \$			
Total other \$			
Delivery organisation(s)			
Implementing Partner(s)			
Country/Region			
Primary Sector			

Acknowledgments

Author's Details

Disclaimer:

This report reflects the views of the Evaluation team, rather than those of the Government of Australia or of the Government of **xxx**.

Contents

EXECUTIVE SUMMARY	II
INTRODUCTION.....	IV
EVALUATION FINDINGS.....	4
CONCLUSION AND RECOMMENDATIONS	17
ANNEXES	51

Executive Summary

Evaluation Criteria Ratings

Evaluation Criteria ⁶	Rating (1-6)	Explanation
Relevance		
Effectiveness		
Efficiency		
Sustainability		
Gender equality		

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

⁶ If impact is included, a rating is not expected to be applied.

Introduction

Initiative Background

Evaluation Purpose and Questions

Evaluation Scope and Methods

Evaluation Findings

Relevance

Rating:

Effectiveness

Rating:

Efficiency

Rating:

Impact

Note: A rating is not required for assessment of impact.

Sustainability

Rating:

Gender Equality

Rating:

Monitoring and Evaluation

Analysis and Learning

Developing Future Directions to inform the development of AusAID's four year Pacific Fisheries Delivery Strategy and future support to SPC FAME.

Conclusion and Recommendations

Annexes

- Terms of Reference
- Itinerary and Interview Schedule
- Persons and organisations consulted
- Reference Documents

Annex C: People Interviewed

People/agencies consulted⁷

Country	Agencies / persons Consulted
New Caledonia (8-11 September)	<p>SPC-FAME;</p> <p>Jimmie Rogers: SPC Director-General Mike Batty: Director, Fisheries, Aquaculture & Marine Ecosystems Division John Hampton: Oceanic Fisheries Programme Manager Simon Nicol: Principal Fisheries Scientist (Tuna Ecology and Biology) Tim Lawson: Principal Fisheries Scientist (Fisheries Monitoring) Shelton Harley: Principal Fisheries Scientist (Stock Assessment and Modelling) Peter Williams: Principal Fisheries Scientist (Data Management) Paul Judd: Mei Lin Harley: Planning Advisor (Monitoring and Evaluation) Lindsay Chapman: Manager, Coastal Fisheries Programme Michel Blanc: Nearshore Fisheries Development Adviser Aymeric Desurmont: Fisheries Information Officer Marie-Therese Bui: Project Administrator Brigitte Leduc: Gender Equality Adviser Johann Bell: Principal Fisheries Scientist (Climate Change) Deirdre Brogan: Fisheries Monitoring Supervisor Colin Millar: Fisheries Database Analyst/Developer (National) Ashley Williams: Fisheries Scientist (National Level Support)</p> <p>New Caledonia Government Agencies:</p> <p>Service des Affaires maritimes - Service de la marine marchande et des peches maritimes: Mikael Quimbert; Chef du service Regis Etaix-Bonin; Statisticien des peches. Hugues Gossuin;</p> <p>Northern Province: Clair Marty Southern Province; Thomas Tiburzio; Bernard Fao ADECAL: Manuel Ducrocq: Fisheries and Aquaculture – ZoNeCo programme</p> <p>Private Sector: Antoine Teitelbaum</p>
Papua New Guinea (11-16 September)	<p>National Fisheries Authority; Jacob Wani; Executive Manager, Aquaculture and Inland Fisheries Ludwig Kumoru Brian Kumasi; Fisheries Management Officer, Tuna Fishery Thomas Aquina Kango; Team Leader, Audit and Certification Unit, Monitoring, Control Surveillance Group Leban Gisawa; Manager, Inshore Fishery Lorel Dandava</p> <p>National Fisheries College; Jeff Kinch; Principal</p> <p>Private Sector: Alex Bernadino International Food Corporation Ltd</p>

⁷ The Review Team has endeavoured to ensure that names are correct, but apologises for any inaccuracies.

	Australian High Commission: Pakwasi Nyamekye
Fiji (17-18 September)	Ministry of Fisheries and Forests (Fisheries Division); Netani Tavaga (offshore tuna) Shalen (aquaculture) Jope Karoa (seaweed) George Madden (PFO -West) Sailosi (FAD/inshore) Pretica (aquarium)
	Ministry of Health: Dip Chand: SHI – Head of Food Unit / Competent Authority Alapate Momoka: Manager Operations - Competent Authority
	Private Sector: Radhika Kumar; General Manager, Solander
	SPC-FAME: Tim Pickering
Kiribati (19-22 September)	Ministry of Fisheries and Marine Resources development; Tereere Tioti (Principal verification Officer - CA) Toaa Tolani (offshore analyst) Veronica Taake (Senior Assistant Secretary) Aketa Taanga (Senior Fisheries Officer) Karibanang Tamuera (Principal Fisheries Officer) Naomi Biribo (Seabed mining)
	Ministry of Environment, Land and Agriculture Development; Manikaoti Timeon (Secretary MELAD) Acting Director – ECD MELAD Biodiversity Officer – ECD MELAD
	Ministry of Internal and Social Affairs; Secretary – Ministry of Internal and Social Affairs
	Private sector; Li Changhong – Kiribati Fish Ltd
	SPC-FAME: Ruth Garcia Gomez (SPC Mariculture Officer on duty travel in Tarawa) Masahiro Ito (SPC Mariculture Consultant in Tarawa)
	Australian High Commission; Alison George; Evaluations Officer, Pacific Division AusAID Nuntaake
Samoa (24-27 September)	Ministry of Fisheries and Forests; Joyce Ah Leong – Assistant Chief Executive Officer, Fisheries Division Joyce Samuelu – Senior Fisheries Officer Sesilia Luamanuvae – Aquaculture Section Leader Dimary Stowers – Fishery Officer – offshore section
	Australian High Commission: Frances Sutherland; Second Secretary – Development Cooperation – Apia Post, AusAID.
Follow-up discussions to supplement the field-work	PNA Office: Maurice Brownjohn
	SPC-FAME: Timothy Numilengi
	Australian High Commission Suva: Rebecca McClean, Second Secretary
	SPC-FAME: Graham Pilling
	SPC-FAME: Colette Wabnitz
	SPC-FAME: Lindsay Chapman
SPC-FAME: Ashley Williams	

Annex D: PHASE 1 CONCEPT NOTES



Australian Government
AusAID

Partner-Led Design Summary and Implementation Secretariat of the Pacific Community Supplementary Funding 2010-11 to 2012-13

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

1. 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.

FISHERIES FOR FOOD SECURITY PROGRAMME

Project Proposal

to AusAID

by

Secretariat for the Pacific Community

4 June 2010

Table of Contents

INTRODUCTION.....	61
Figure 1. Fisheries For Food Security Logic Model.....	63
COMPONENT 1 - SCIENTIFIC ADVICE FOR THE DEVELOPMENT OF OCEANIC FISHERY MANAGEMENT MEASURES.....	64
Objective:	64
Strategy:.....	64
Table 1: Outputs and outcomes for Component 1	24
Risks and Risk Management:	67
Budget.....	67
COMPONENT 2: MANAGEMENT AND DEVELOPMENT OF EXPORT FISHERIES FOR AQUARIUM FISH	69
Objective	69
Strategy	69
Table 2: Outputs and outcomes for Component 2	112
Risks and risk management	71
Budget.....	73
COMPONENT 3 – DEVELOPMENT OF MARICULTURE OPPORTUNITIES	74
Objective:	74
Strategy	74
Table 3: Outputs and outcomes for Component 3	113
Risk and risk management:.....	76
Budget.....	77
COMPONENT 4: ASSISTANCE TO MEET EXPORT REQUIREMENTS FOR MARINE PRODUCTS	78
Objective	78
Strategy	78
Table 4: Component 4 outputs and outcomes	115
Risks and risk management	80
Budget.....	80
EFFECTIVENESS.....	81
EFFICIENCY	81
MONITORING AND EVALUATION	82
GENDER EQUALITY.....	83
SUSTAINABILITY	84

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 territories⁸. 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.

⁸ 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
- Component 2: Management and development of export fisheries for aquarium fish
- Component 3: Development of mariculture opportunities
- Component 4: Assistance to meet export requirements for marine products

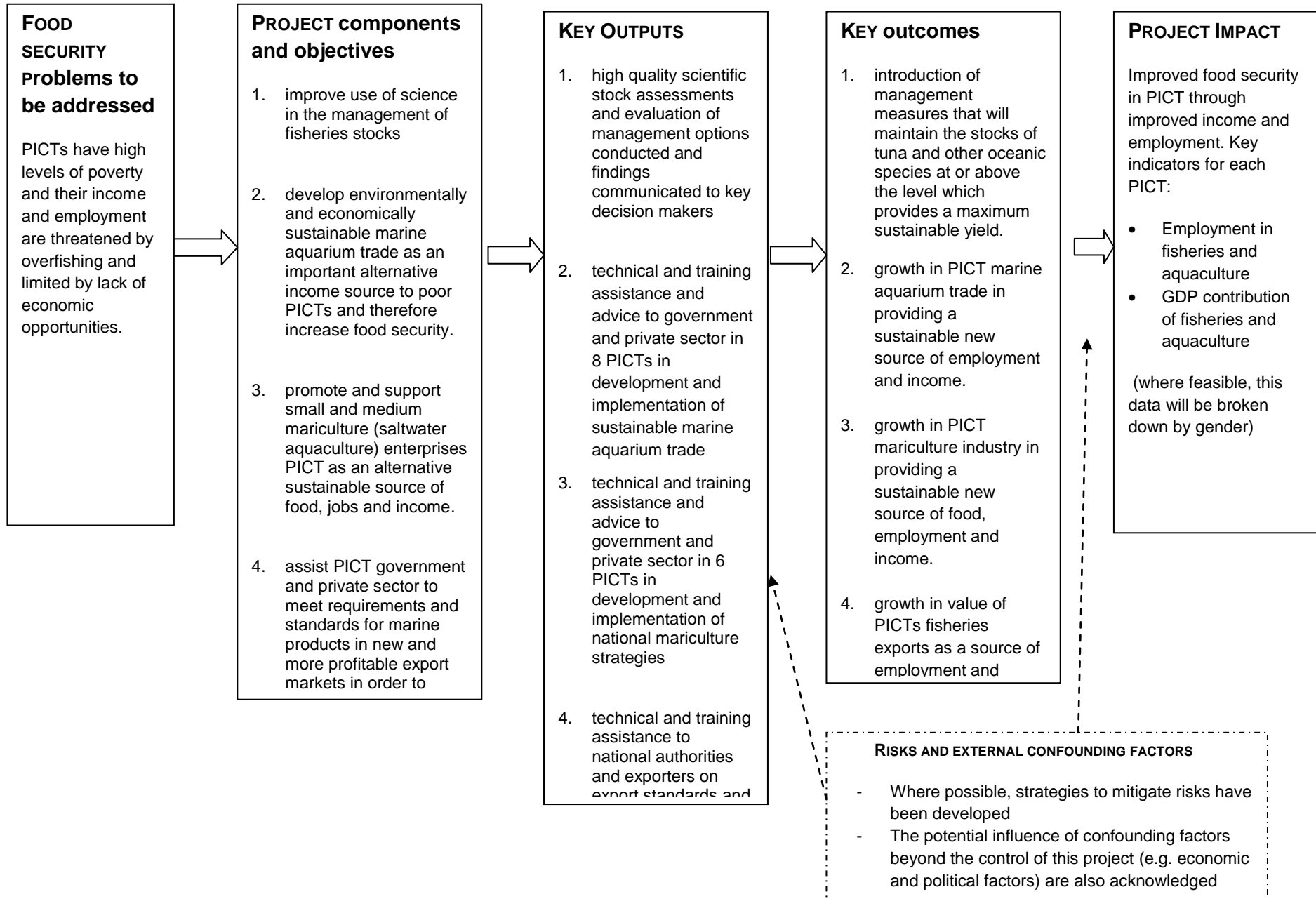
These address strategies developed by the recent Pacific Food Summit (April 2010) described in *Towards a Food Secure Pacific: Framework for Action on Food Security, 2011-2015*:

- i. 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.

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

<p>Objective:</p> <p>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.</p>	
<p>Overall outcome</p> <p>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:</p> <ul style="list-style-type: none"> ○ 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 	
<p>Specific Outputs</p>	<p>Specific Outcomes expected by end of Y4</p>
<p>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 meetings attended per year]</p> <p>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</p>	<p>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;</p>

<p>Effort and allocations within the Parties (annually- Years 1, 2, 3, 4) [minimum one paper produced and two meetings attended per year]</p>	
<p>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]</p>	<p>Appropriate catch or effort limits in national fisheries targeting albacore that result in both profitable fishing operations and sustainable utilization of the resource</p>
<p>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]</p>	<p>The introduction of a Vessel Day Scheme that will constrain effort in the equatorial longline fishery;</p>
<p>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]</p> <p>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]</p>	<p>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</p>

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

Budget

	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

Communications – drafting and publication of non-technical material	12,500	12,500	12,500	12,500	50,000
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.

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

<p>Objectives</p> <p>To develop environmentally and economically sustainable marine aquarium trade as an important alternative income source to poor PICTs and therefore increase food security.</p>	
<p>Overall outcome</p> <p>Delivery of sustainable economic benefits to the PICTs from the development and management of the marine aquarium trade.</p> <p>General measures:</p> <ul style="list-style-type: none"> • Growth in PICT marine aquarium industry as measured by: <ul style="list-style-type: none"> ○ 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 	
Specific Outputs	Specific Outcomes expected by end of Y4
<ul style="list-style-type: none"> • 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) • Provide advice, resources assessment services, to PICT governments to build capacity in monitoring, fisheries resources assessment and managing aquarium fisheries (2 PICTs a year) 	<p>Appropriate management plans implemented and operating effectively in 8 countries.</p>
<ul style="list-style-type: none"> • 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) • Sub regional workshop for training in database management for participants from 	<p>Database being used effectively to regularly and reliably monitor exports, resources assessment, and economics of the fishery.</p>

<p>at least 6 countries (Year 2)</p> <ul style="list-style-type: none"> • 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). 	
<ul style="list-style-type: none"> • Work with 2 to 3 countries to promote the development of the trade where it does not exist at present. • Financial assessment/economic appraisal completed on potential new operations and promoting opportunities to the private sector. (Year 1) 	Sustainable aquarium export business established in at least 1 PICT which does not currently have aquarium export business
<ul style="list-style-type: none"> • 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.
<ul style="list-style-type: none"> • 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

Item	Cost AUD\$				
	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

<p>Objectives</p> <p>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.</p>	
<p>Overall outcome</p> <p>An increase in the number and production of sustainable mariculture enterprises in the region, providing more employment and income earning opportunities.</p> <p>Growth in PICT mariculture industry as measured by:</p> <ul style="list-style-type: none"> ○ number of new mariculture enterprises ○ number of jobs created 	
Specific Outputs	Specific Outcomes expected by end of Y4
<ul style="list-style-type: none"> • Updated analysis of opportunities and constraints to mariculture development in PICTs (Year 1) • 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) 	<p>Mariculture component of 6 national aquaculture strategies or legislation endorsed and implemented</p>
<ul style="list-style-type: none"> • 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) 	<p>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</p>
<ul style="list-style-type: none"> • Advice and technical assistance to facilitate uptake within a rural or peri-urban community of wild capture-based 	<p>Uptake within a rural or peri-urban community in at least 2 countries of sustainable techniques developed by the project for wild capture-based</p>

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
<ul style="list-style-type: none"> • In partnership with PICTs, produce and implement a plan for developing skilled aquaculture scientists/technicians at the national level. • 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) 	4 Pacific Island nationals obtain MSc qualifications from applied research projects supervised by the SPC mariculture officer

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

Item	Cost AUD\$				
	Y1	Y2	Y3	Y4	TOTAL
Personnel – mariculture officer for 4 years	164,375	164,375	164,375	164,375	657,500
Consultancy – analysis of opportunities and constraints	20,000	20,000	20,000	20,000	80,000
Travel – to PICTs for fieldwork and strategy development	25,000	25,000	25,000	25,000	100,000
Regional mariculture workshop (Government & private sector)	100,000				100,000
Training and study visits	15,000	15,000	15,000	15,000	60,000
Specialist consultancies – legal, economic	33,333	33,333	33,333		100,000
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 @ 7%	26,440	19,265	18,915	17,106	81,725
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 short-term inputs to address obstacles to tuna industry development, as well as the other components of this programme.

Table 4: Component 4 outputs and outcomes

<p>Objectives</p> <p>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.</p>	
<p>Overall outcome</p> <p>An increased value of fishery exports from the PICTs, through the ability to target markets which provide optimum returns. Measured by:</p> <ul style="list-style-type: none"> - value of fisheries exports from PICTs - new jobs created in fish processing for export 	
<p>Specific Outputs</p> <ul style="list-style-type: none"> • Advice and mentoring provided to at least 4 national authorities and 8 exporters (yearly) • In-country technical assistance and training provided to national authorities and exporters in at least 4 countries (yearly) • One sub-regional training course on standards for sanitary inspection and documentation organized (Year 1, 2, and 3) • At least 4 individual training attachments organized (yearly) • Small grants for laboratory and other technical equipment provided to at least 4 national authorities and/or exporters (yearly) 	<p>Specific Outcomes expected by end of Y4</p> <ul style="list-style-type: none"> • PNG and Solomon Islands remain listed for export of fishery products to the EU and at least 2 other Pacific Island countries graduate to the list and can comply with IUU documentation requirements; • The number of listed processing establishments in PICs approved for export to the EU doubles from 5 to 10; • OIE reporting by countries is maintained and PICs are able to export marine aquarium products to Europe; • At least 5 private sector suppliers are able to export to new markets (other than EU) as a result of advice and assistance provided by the project.

Risks and risk management

This project component is designed to address the risk, already experienced, that sanitary requirements will become increasingly 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.

Budget

Item	Cost AUD\$				
	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

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 fora include: 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:

- 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.

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 Oceania⁹ by providing full time sustainable jobs and income.

⁹ 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 advise 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 environmental sustainability 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 sustainable jobs and income, 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 environmental 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 sustainability of benefits/change 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:

- 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

Item	Cost AUD\$				
	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 coastal and oceanic fisheries to food security. (http://www.spc.int/DigitalLibrary/Doc/FAME/Brochures/Policy_Brief1_08.pdf)

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 coastal fisheries management in 11 countries and territories;
http://www.spc.int/coastfish/doc/coastfish_docs/technical_rep/Ropeti_10_YapMngmtPlan.pdf
http://www.spc.int/coastfish/doc/coastfish_docs/technical_rep/Anon_10_EAFguidelines.pdf
- Support the introduction small-pond aquaculture (tilapia) and mariculture (rabbit fish) in Vanuatu, the Cook Islands, Samoa, Nauru and the Solomon Islands;
http://www.spc.int/coastfish/news/Fish_News/130/Pickering_130.pdf
- Provision of technical assistance and training for the introduction of inshore FAD programmes in Nauru, Kiribati, Tokelau, Samoa and the Marshall Islands;
http://www2008.spc.int/DigitalLibrary/Doc/FAME/InfoBull/FishNews/Blanc_121.pdf
http://www.spc.int/coastfish/news/Fish_News/124/Feature_Nauru_124.pdf
- 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
http://www.spc.int/coastfish/News/Fish_News/128/FishNews_128_14_NFDTS.pdf

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_summary_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)

Annex E: Phase 2 Concept Notes

FISHERIES FOR FOOD SECURITY PROGRAMME *PART 2*

Final Project Proposal

to AusAID

by

Secretariat for the Pacific Community

August 2011

Table of Contents

Contents

INTRODUCTION.....	92
Figure 1. Fisheries For Food Security (part 2) Logic Model.....	94
COMPONENT 1 - ENHANCING NATIONAL TUNA FISHERY MONITORING AND DATA MANAGEMENT INCLUDING ARTISANAL TUNA FISHERIES.....	95
Table 1: Outputs and outcomes for Component 1	116
COMPONENT 2 – SUPPORT FOR THE DEVELOPMENT OF INLAND AQUACULTURE ..	99
Table 2: Outputs and outcomes for Component 2	118
COMPONENT 3 – IMPROVING THE MANAGEMENT OF DEEPWATER SNAPPER RESOURCES IN PACIFIC ISLAND COUNTRIES	103
TABLE 3: OUTPUTS AND OUTCOMES FOR COMPONENT 3.....	104
EFFECTIVENESS.....	106
EFFICIENCY	106
MONITORING AND EVALUATION	107
GENDER EQUALITY.....	108
SUSTAINABILITY	109
BUDGET SUMMARY	109

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 territories¹⁰. 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*:

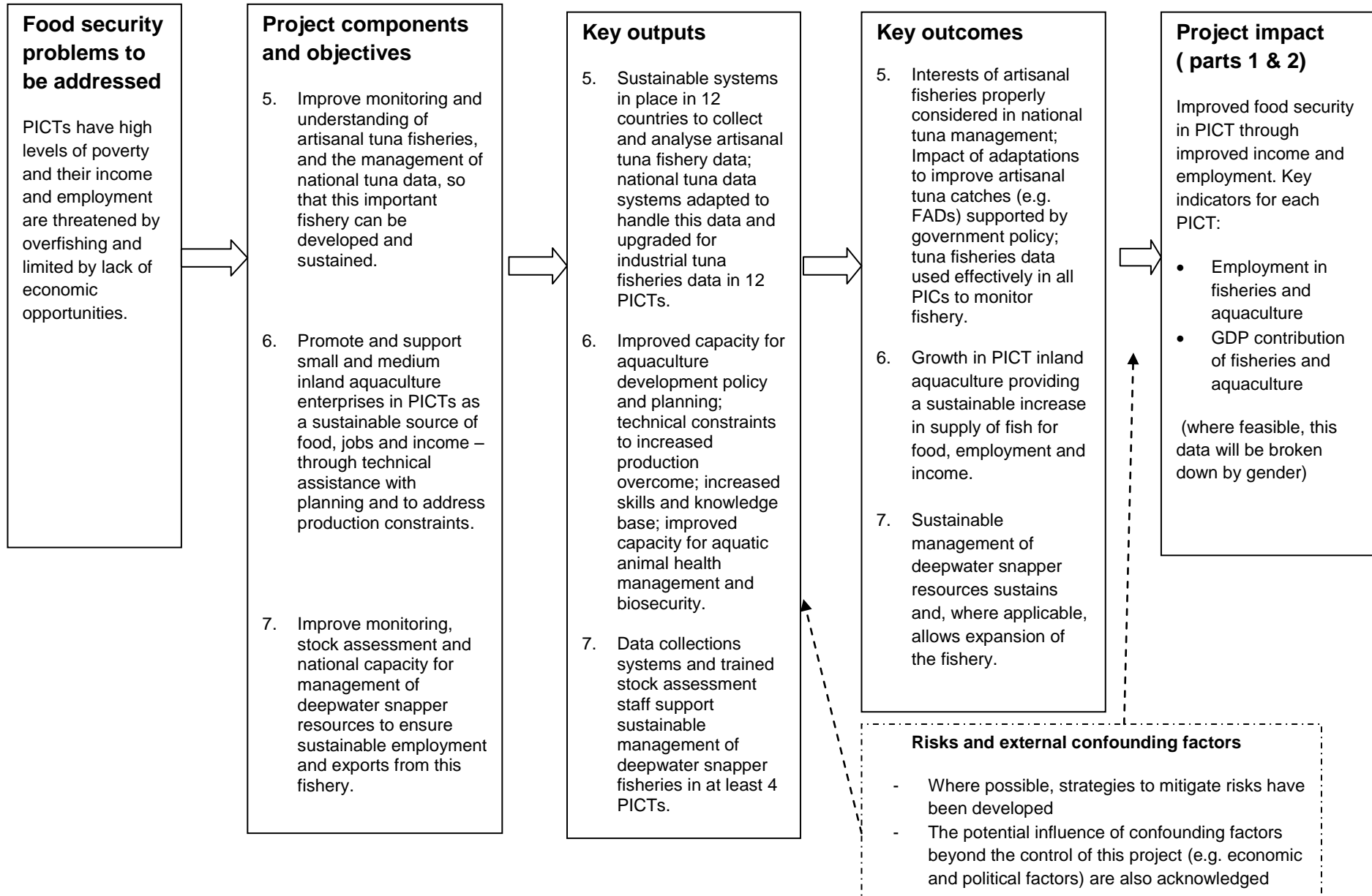
- vii. Develop and strengthen policy, legal and regulatory frameworks for sustainable production and trade of agriculture, aquaculture, forestry and fisheries’ products: (Components 1, 2, 3,).
- viii. Increase the production, productivity and resilience of agriculture and fisheries’ systems. (Components 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’.

¹⁰ Notably the 7th Heads of Fisheries (HOF) meeting, the Forum Fisheries Committee (FFC), and each PICT’s Joint Country Strategy process with SPC.

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



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 for subsistence/artisanal tuna fisheries in a regionally consistent way to inform 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

<p>Objective:</p> <p>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.</p>	
<p>Overall outcome</p> <p>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:</p> <ul style="list-style-type: none"> ○ 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. (<i>Indicator – report of the biennial SPC/FFA Tuna Fishery Data Collection Committee circulated and data forms and supporting resource material available on line</i>)
Enhanced national tuna fisheries data management systems (TUFMAN) implemented and in-country advanced TUFMAN training delivered in 12 PICTs. The specific enhancements will include: <ul style="list-style-type: none"> - 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 (<i>Indicator – documentation of tuna fisheries in WCPFC Part 1 Annual Reports; duty travel reports</i>)
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 procedures documents, which include procedures for monitoring artisanal</i>

	<i>fisheries)</i>
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 Plans of Action for Fishery Monitoring 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 (<i>Indicator - Number of Fisheries departments with budget to support FAD deployment</i>)
TUFART (subsistence/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 of countries submitting artisanal data as part of their annual reports to WCPFC</i>)
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 - improved data coverage following audit 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 and evaluation of workshops by participants available</i>)

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

Item	Cost AUD\$				
	Y1	Y2	Y3	Y4	TOTAL
Personnel – fisheries monitoring supervisor	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, fieldwork costs, forms, in-country workshops	150,000	150,000	50,000	50,000	400,000
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 departments	25,000	25,000	25,000	25,000	100,000
Information development and dissemination	2,500	2,500	2,500	2,500	10,000
Evaluation		5,000		7,500	12,500
Subtotal – operation costs	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 2009¹¹ 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: <ul style="list-style-type: none"> ○ increased supplies of cultured fish for food; ○ increased employment and income-earning opportunities in aquaculture enterprises. <i>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.</i>	
Specific Outputs	Specific Outcomes expected by end of Y4
4 national aquaculture plans developed or updated; 4 biosecurity risk or environmental impact assessments	Plans defining policies and roles of Government and private sector in place to

¹¹ See http://www.spc.int/aquaculture/index.php?option=com_docman&task=cat_view&gid=54&Itemid=32

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 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 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 (<i>Indicator – requests to network for diagnostic services</i>)

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.

Budget

Item	Cost AUD\$				
	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

* 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 PICTs¹² 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.

¹² 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: <ul style="list-style-type: none"> ○ Management of the national snapper fishery; and ○ 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 (<i>Indicator – data supplied for backup at SPC HQ</i>)
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 (<i>Indicator – as above</i>)
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 (<i>Indicator – Resource profile report to country</i>)
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 (<i>Indicator – SPC publication of results</i>)
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 – 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:

Item	Cost AUD\$				
	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:

- 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 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:

- 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 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 management¹³ 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

¹³ 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.

Budget Summary

Item	Cost AUD\$				
	Y1	Y2	Y3	Y4	TOTAL
Component 1: Artisanal tuna data & tuna data management	518,500	598,500	418,500	501,000	2,036,500
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

Annex F: Summary of Component Status

Introduction

This Annex presents summary information on each Component of the Fisheries for Food Security Program. For each component a table presents progress towards the 'specific outcomes expected at the end of Y4' as established in the concept notes that described the Components at the outset. This is followed by a brief assessment of the overall progress and future direction for work under the component.

The information presented here comes from several sources:

- Content of annual Program reports.
- Content of the Monitoring and Evaluation matrix (as updated to 2012); noting that there is not a one-to-one alignment between the matrix and the 'specific outcomes' for each Component.
- Interviews with relevant SPC FAME Program and Component staff.
- Duty Travel reports where available (Components 1.2, 1.3, 1.4, 2.2).
- Corroboration through interviews with SPC member counterparts where possible.

The Monitoring and Evaluation Matrix identifies multiple instances where the mid-term review is one of the nominated data collection points. Such data as was made available was presented to the Review primarily through interviews with SPC-FAME staff.

This summary does not attempt to elaborate in detail on Component outputs/activities. Nor does it discuss the 'Overall outcomes' as it is more appropriate to consider these during the end of Program review.

Component 1.1: Scientific advice for the development of oceanic fishery management measures

Table 6: Progress towards specific outcomes for Component 1.1

Concept Note: Specific Outcomes expected by end of Y4	Reported status as at mid-term review
1.1:1 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;	Work in progress. Working with FFA etc on management measures for tropical tunas. Outcome depends on how fishery managers deal with decision-making, especially in situations where cuts may be required.
1.1:2 Appropriate catch or effort limits in national fisheries targeting albacore that result in both profitable fishing operations and sustainable utilization of the resource	Working with sub-committee of FFA and Te Vaka Moana. Work has started on the development of limit reference points for these fisheries, looking at catch-based limits and maximum Economic Yield. Niue, Samoa and French Polynesia in discussion of setting national catch limits. Possible proposal for regional management measure 2013.
1.1:3 The introduction of a Vessel Day Scheme that will constrain effort in the equatorial longline fishery;	Role is to provide best scientific advice – countries decide on management decisions. Longline VDS now on trial – requires five countries to sign-up for full implementation.
1.1:4 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	Stock assessment 2013; Conservation and Management Measure under WCPFC potentially reviewed 2013-14.
1.1:5 Key decision makers have the information and understanding needed to make management decisions that support sustainable fisheries, contributing to food security and economic growth.	Considerable interest of all stakeholders in improving management in Fiji, driven by desire for MSC certification; Interest in Samoa in improving national management measures; PNA office strongly supportive of science based conservation measures.

Component 1.1 Overall Summary Assessment

This Component is targeted at a niche in the system linking science with management decisions for tuna fisheries across the Pacific Islands region. Specific Outcome 1.1.5 above encapsulates the key rationale for the work. The Component provides an input into the regional, sub-regional and

national management decisions, so it is difficult to quantify the Component contribution to high level outcomes. The work is multi-country or regional in character.

The Review considers that this Component represents a key ongoing input into improving management of the tropical tuna fisheries, underpinning sustainability and supporting and economic and social returns to SPC members.

Component 1.2: Management and development of export fisheries for aquarium fish.

Table 7: Progress towards specific outcomes for component 1.2

Specific Outcomes expected by end of Y4	Reported status as at mid-term review
1.2:1 Appropriate management plans implemented and operating effectively in 8 countries.	Approved plans in Vanuatu and Tonga (being reviewed). Plans or regulations in various stages of progress in Kiribati, Marshall Islands, Federated States of Micronesia, Solomon Islands, Papua New Guinea, and French Polynesia.
1.2:2 Database being used effectively to regularly and reliably monitor exports, resources assessment, and economics of the fishery.	Database focuses on exports. Database is being used effectively in Vanuatu and Kiribati; in progress in Marshall Islands and Federated States of Micronesia. Confidentiality of information is an issue.
1.2:3 Sustainable aquarium export business established in at least 1 PICT which does not currently have aquarium export business	Working with two countries; Nauru and Samoa. Viability is a key issue.
1.2:4 Reduced mortality of collected aquarium fish in several enterprises in at least 2 PICT, increased profitability for established business.	Improved practices in Kiritimati Island and Tonga, supported by links with importers to monitor quality.
1.2:5 Improved awareness of sustainable aquarium fisheries in at least 8 PICT	Awareness promoted through code of conduct, fish identification cards, DVD. Proposal for internships with importing companies.

Component 1.2 Overall Summary Assessment

This Component experienced a delay in recruitment, during which time response to member country requests was provided by other SPC staff.

The export of aquarium fish from Pacific Island countries and territories is in a sense a mature business in that it has been operating for a number of years and provides a significant proportion of global supply.

There have been mis-steps in terms of sustainability, operator safety and product quality; these are being addressed under this Component through the development of management plans, codes of conduct, improved data, and improved understanding of market requirements.

There have been notable attempts to enter the trade which have proven to be non-viable economically, and there is a need for realism with respect to this aspect. Freight access and costs appear as the main barrier to economic viability.

The overall contribution of the trade to employment and livelihoods may be modest, but is significant for specific localities (e.g. Kiritimati Island).

There is scope for improved returns, particularly through improved product quality and decreased mortality rates; SPC's role should be at the level of generic assistance on these issues.

The Review notes that a significant proportion of duty travel under this Component (46 days as indicated in Annex 4) was to support work under the Coral Reef Initiatives for the Pacific (CRISP) project. CRISP was described in the report of the Expert Reference Group on assessment of SPC's core business in 2012 as the 'one area that the FAME Division might consider disengaging from'. This is an instance where the skills made available through the Program are also useful in supporting the wider SPC-FAME work programme.

The Review considers that good progress on key underpinning requirements for sustainable exports of aquarium fish should be achievable within the term of the Program.

Component 1.3: Development of Mariculture Opportunities

Table 8: Specific outcomes for Component 1.3

Specific Outcomes expected by end of Y4	Reported status as at mid-term review
1.3:1 Mariculture component of 6 national aquaculture strategies or legislation endorsed and implemented	Strategies and legal instruments supported in Samoa (being edited), Nauru (being edited), Guam (being finalized), Federated States of Micronesia (being edited/finalized), Fiji (being finalized).
1.3:2 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	New enterprises for: spiny lobster – New Caledonia; Pangasius – Vanuatu; red tilapia – Samoa; sandfish – FSM; cobia – PNG.
1.3:3 Uptake within a rural or peri-urban community in at least 2 countries of sustainable	Initiatives at initial stage for: sandfish – New Caledonia and PNG; sea grapes – Samoa; giant

techniques developed by the project for wild capture-based mariculture of finfish, which contributes towards local fish food security	clams – Vanuatu; mullet – Solomon Islands; seaweed introductions – Fiji.
1.3:4 Pacific Island nationals obtain MSc qualifications from applied research projects supervised by the SPC mariculture officer	Working with 1 student in Fiji.

Common issues between Mariculture and Aquaculture Components

There are strong linkages between Component 1.3 (Mariculture) and Component 2.2 (Freshwater Aquaculture).

Of all the Program Components, these two are the most directly focussed on increasing fisheries production for food and livelihoods at community level. There are high expectations that aquaculture/mariculture can make a significant contribution towards addressing future food security and providing sustainable livelihoods.

At the same time there has been a history of attempts at aquaculture/mariculture development with some limited success, and other examples of facilities underutilised or fallen into disrepair. To add to this, as was pointed out in the Program concept notes, it is ‘almost a certainty ... that aquaculture products from the Pacific Islands will be unable to compete on international markets with efficient low-cost producers in Asia’.

The Review also heard of other barriers including:

- In some countries tilapia is yet to be readily accepted for eating;
- The economic and production viability of aquaponics is yet to be demonstrated, and where operational there have been examples of produce disrupting the local vegetable market (in terms of supply and price for local growers).

The Review put the question to Program staff; what will make the difference that will make aquaculture initiatives successful? Understandably there is no straightforward answer to this; the essence of the response was to:

- a) Move beyond technical aspects to focus on what will work in ‘real world’ situations; i.e. bring more attention to socio-economic aspects, not just technical ones.
- b) Work with situations that show promise, rather than putting more effort into situations that will clearly not succeed.

The range and scope of requirements to support aquaculture/mariculture across the whole Pacific Islands region is huge, and the Review recognises that there is a limit on what can be achieved within the term and resources of the current Program. The review therefore considers that there is an ongoing, or greater, requirement for support in this important area.

In terms of implementing the two Program Components, the Review heard that staff work closely together and apply their respective skills as needed across the two fields. It is also evident that

partnerships with other projects drive a significant proportion of the work (for example, projects run by ACIAR and the European Union).

Component 1.3 Overall Summary Assessment

In the initial stage of this component the work was done under a short term contract before a permanent officer was appointed. This has contributed to some discontinuity in delivery.

In-country work for SPC members has been provided in New Caledonia, FSM, Guam and PNG and Kiribati; additional work is scheduled in Samoa. 40-50% of personnel time under this Component has gone to biosecurity issues (e.g. Import Risk Analysis and animal disease regulations under OIE) that are at the periphery of the Component's focus as initially envisaged in the Concept Notes (refer comment on planning in the body of this Report). However, this again demonstrates that the skills supported under the Program can be deployed to support broader objectives.

COMPONENT 1.4: ASSISTANCE TO MEET EXPORT REQUIREMENTS FOR MARINE PRODUCTS

Table 9: Progress towards specific outcomes for Component 1.4

Specific Outcomes expected by end of Y4	Reported status as at mid-term review
1.4:1 PNG and Solomon Islands remain listed for export of fishery products to the EU and at least 2 other Pacific Island countries graduate to the list and can comply with IUU documentation requirements	PNG and Solomon Islands' status positive. Fiji seems on track for reinstatement. Other possibilities; Cook Islands, Vanuatu, Federated States of Micronesia.
1.4:2 The number of listed processing establishments in PICs approved for export to the EU doubles from 5 to 10	10 processing plants listed. Establishments and vessels seeking listing in PNG, Solomon Islands, Fiji.
1.4:3 OIE reporting by countries is maintained and PICs are able to export marine aquarium products to Europe	Not reported (relates to export of aquarium products and therefore falls between different Components for reporting purposes.)
1.4:4 At least 5 private sector suppliers are able to export to new markets (other than EU) as a result of advice and assistance provided by the project.	Markets accessed other than the EU: U.S., Japan, Australia, New Zealand, China. Working on Canada. Intra-regional trade: Fiji to PNG.

Component 1.4 overall summary assessment

This Component supports access to markets for fisheries products, ultimately contributing to the value obtained from Pacific fisheries resources (supporting employment and livelihoods). The main element targets achieving and maintaining capacity and listing of Competent Authorities, necessary for exports to the European Union. Duty travel under this component predominantly relates to countries with, or seeking to establish Competent Authorities.

Significant effort has gone into HACCP training, and training related to post-harvest processing (thermal processing).

The Review considers that this Component represents an ongoing area of work. Although the immediate need to gain listing for Competent Authorities may be achieved (within the term of the Program for some, later for others) this is a field where changes in both technology and in the regulatory requirements applied by importing countries requires continuing upgrade of skills and capacity in the medium term.

Component 2.1: Enhancing national tuna fisheries monitoring and data management including artisanal tuna fisheries

Table 5: Progress towards specific outcomes for Component 2.1

Specific Outcomes expected by end of Y4	Reported status as at mid-term review
2.1:1 Countries are using up-to-date and WCPFC compatible tuna data collection forms. (<i>Indicator – report of the biennial SPC/FFA Tuna Fishery Data Collection Committee circulated and data forms and supporting resource material available on line</i>)	SPC produces standard forms; data reviewed every two years. SPC can identify if/when out of date forms are being used by the format of data received.
2.1:2 Countries have comprehensive information for all aspects of national tuna fisheries management and staff trained in systems use (<i>Indicator – documentation of tuna fisheries in WCPFC Part 1 Annual Reports; duty travel reports</i>)	Focus on national systems: Vessel Monitoring System, Vessel Day Scheme
2.1: 3 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 procedures documents, which include procedures for monitoring artisanal</i>	SPC develops procedures document with detailed guidance for countries.

<i>fisheries)</i>	
2.1: 4 The short and medium term resource requirements required to sustain the national tuna fishery monitoring systems have been identified. (<i>Indicator - National Plans of Action for Fishery Monitoring available for 12 countries.</i>)	SPC can develop document for each country on resources required; countries have not actively sought this.
2.1: 5 Impact of inshore FADs is analysed for 3 countries and results used to demonstrate value of national FAD programmes (<i>Indicator – Number of Fisheries departments with budget to support FAD deployment</i>)	Starting to get data – only some minor analysis so far.
2.1: 6 Countries can manage, retrieve and analyse data to support national management planning (<i>Indicator – Number of countries submitting artisanal data as part of their annual reports to WCPFC</i>)	Challenging area to address as some national offices are remote and poorly equipped. Database finalised.
2.1: 7 Action taken by countries to remedy weaknesses and gaps in tuna fishery monitoring shown by audits (<i>Indicator – improved data coverage following audit reports</i>)	Some gaps identified through audit (e.g. of logsheets against database.
2.1: 8 Monitoring team trained in 8 countries and skills of tuna data coordinators in 12 PICTS enhanced (<i>Indicator – workshop reports and evaluation of workshops by participants available</i>)	National data workshops held. On track.

Component 2.1 Overall Summary Assessment

This Component provides for improved data collection for artisanal tuna catches, underpinning sustainability and use of resources.

While the Component work appears on track, the field work raised some issues relating to the role and interaction between different databases and processes relating to FAME's work. During the review, attention was drawn to a number of different databases, including:

- TUFMAN – tuna fisheries management
- TUF-ART – data on the artisanal tuna fishery
- SNAPMAN – ‘a new system developed for deepwater snapper’
- UVC – underwater visual data
- Market and creel surveys
- Aquarium fish / Export database(s)

These databases cover a number of different parameters (catch, effort, fishing method, market and socio-economic data etc) for different purposes. SPC advised the Review that the main focus has been on integrating these sorts of data into Information Management Systems, of which SPC's TUFMAN product is a key component. TUFMAN has been the main SPC focus for national tuna fisheries data management and associated training.

The Review is interested in ensuring that there is good understanding about the role and functioning of these databases, and that there is compatibility between them that is appropriate for their primary purpose and for sharing of data for management purposes (for example between coastal and oceanic fisheries).

The Review was encouraged to hear of the development of a portal¹⁴ to enable access across different databases. The Review supports this and further initiatives to promote compatibility of databases and sharing of data.

Component 2.2: Support for the development of inland aquaculture

Table 6: Progress towards specific outcomes for Component 2.2

Specific Outcomes expected by end of Y4	Reported status as at mid-term review
Plans defining policies and roles of Government and private sector in place to support development; risk assessments and EIAs needed before development can take place are completed and provide appropriate safeguards (<i>Indicator – Project progress reports</i>)	Plans in place in Cook Islands and Samoa.
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 reports</i>)	Support for hatchery development in PNG and Vanuatu.
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>)	Students supervised/in training.
Countries using regional network to monitor and control disease (<i>Indicator – requests to network for diagnostic services</i>)	Request received from Cook Islands.

¹⁴ This is informally known as the '12 Fish Portal'; unfortunately the officer employed under the Program for this work left SPC in October 2013, after completing initial work on the Portal.

Component 2.2 Overall Summary Assessment

[See also the general comments under Component 1.3]

This component is designed to focus freshwater aquaculture in Melanesia, but it has included significant work elsewhere, and on novel techniques. A notable example has been assisting with raising the profile of aquaponics in the margins of Forum Leaders' meetings in 2012 (Cook Islands) and 2013 (Marshall Islands)

As noted under Component 1.3, there is significant crossover between Components with work on mariculture (seaweeds) being contributed from this Component.

In addition to key technical issues ('feed and seed') effort has been put into developing farmer/grower clusters. These focus on improving performance in terms of both production and quality. This has proven most effective where the growers are already doing well.

This Component has also contributed to the development of aquaculture plans.

Component 2.3: Improving the management of deepwater snapper resources in pacific island countries

Table 7: Progress towards specific outcomes for Component 2.3

Specific Outcomes expected by end of Y4	Reported status as at mid-term review
2.3:1 3 functional data management systems (Indicator – data supplied for backup at SPC HQ)	Systems in development in Samoa, Tonga and Vanuatu.
2.3:2 At least 2 full years' data for three countries collected during the course of the project (Indicator – as above)	No specific report.
2.3:3 Growth rate information analysed and documented (Indicator – SPC publication of the results)	Biological sampling in Samoa, Tonga and New Caledonia.
2.3:4 Habitat analysis and potential yield estimated for at least 1 PICT (Indicator – Resource profile report to country)	Draft manuscript ready for submission for publication.
2.3:5 Unexploited population size and natural mortality estimated for three target species (Indicator – SPC publication of results)	Data has been collected to conduct the required analysis.
2.3:6 Three national fisheries administrations have qualified snapper stock assessment scientists working for them (Indicator – trace on supervised graduates)	Support for students from Tonga, Vanuatu, Tuvalu and Samoa.

Component 2.1 Overall Summary Assessment

This Component focuses on a selected group of species in response to member requests. It picks up on previous work on these species. One interviewee noted that the stock assessment work is useful, as there are limits on the resource and stocks are easily overfished.

The Review heard of additional interest in harvesting this stock from private sector representatives in Kiribati (Tarawa).

Work under this Component includes management of a complementary project in New Caledonia.

The Review considers that good progress on stock assessments should be achievable within the term of the Program.

Annex G: Duty Travel Sample Data

Duty travel under the Pacific Fisheries for Good Security Program

This annex presents data on duty travel for SPC officers employed under Fisheries for Food Security Program. Its purpose is to offer a sense of the distribution of effort across the SPC Membership.

The data comes from information provided by SPC FAME to the Review, being:

- For staff under the Oceanic Fisheries Programme, a consolidated spreadsheet of travel information;
- For staff under the Coastal Fisheries Programme, Duty Travel Reports.

The Review presumes that the information is indicative of Program travel from inception through to mid-2013. For a number of reasons it does not reflect total effort going to each SPC member; for example much work can be delivered from the home office (e.g. through drafting reports and advice, email, telephone, internet etc).

Explanatory notes:

1. Days are counted from entering and leaving the country/territory concerned, where this information is available. It does not represent total elapsed time between leaving and returning to home station (i.e. in general it excludes transit times). Where this level of detail was not available an estimate was made.
2. Where it is clear that travel relates to activities that benefit multiple SPC members (e.g. regional workshops, meetings, training etc) these are classified as 'regional'.
3. Activities in Fiji and New Caledonia are likely to be underestimated as Program staff are based at these two locations.
4. The body of the report notes that close to half the travel has been to countries visited as part of the Review; this figure refers to the total number of travel days excluding those classified as 'regional'

The pattern of travel for several of the components reflect their specific areas of focus:

- Component 1.1 (scientific advice): travel is all classified as 'regional'
- Component 1.4 (export requirements): travel is mostly to countries with, or looking to establish Competent Authorities (PNG, Fiji, Solomon Islands, Kiribati)
- Component 2.3 (deepwater snapper): travel is to countries/territories with a specific interest in these stocks.

Program Officer days spent in each Country / Territory x Program Component								
	1.1	1.2	1.3	1.4	2.1	2.2	2.3	Total
American Samoa								0
Cook Islands		13		5	24	7		49
FSM			5		38			43
Fiji				66				66
French Polynesia		46						46
Guam			4					4
Kiribati		32		3	8			43
Marshall Islands		8			30			38
Nauru		21			34			55
New Caledonia		1	8				1	10
Niue								0
CNMI								0
Palau								0
PNG		17	25	106	11	11		170
Pitcairn								0
Samoa					6			6
Solomon Islands				30	7			37
Tokelau								0
Tonga		24					21	45
Tuvalu					9			9
Vanuatu		5		5	4		15	29
Wallis and Futuna							18	18
Regional	244	3	25	19	13	14	10	328
Total	244	170	67	234	184	32	65	

Annex H: Summary of Goals and Objectives for the Pacific Fisheries for Food Security Program

AusAID Food Security through Rural Development (FSRD) Initiative outcomes:

- increased productivity for poor households from sustainable fisheries;
- increased food produced from sustainable fisheries;
- increase in net income of poor women and men from sustainable fisheries;
- creation of jobs for poor women and men from sustainable fisheries.

AusAID: Valuing Pacific Fish

A FRAMEWORK FOR FISHERIES-RELATED DEVELOPMENT ASSISTANCE IN THE PACIFIC (NOVEMBER 2007)

Strategic Objective 1

Maximising the flow of benefits to Pacific island peoples from sustainable commercial and subsistence fisheries

Outcome 1.1 Improved fisheries governance

Outcome 1.2: Sustainable fisheries businesses (emphasis on private sector development)

Outcome 1.3: Increased benefits from oceanic and deep-water fisheries

Outcome 1.4: Enhanced livelihoods from aquaculture, small scale commercial, and fresh water and marine subsistence fisheries

Strategic Objective 2

Implementing effective ecosystem-based fisheries management

Outcome 2.1 Strengthened national and regional fisheries management frameworks for ecosystem-based management

Outcome 2.2 Increased capacity in fisheries management

Outcome 2.3 Improved information on needs and contribution of fisheries to food security

Outcome 2.4 Improved knowledge and understanding for sustainable fisheries: resources, status and economic and social components

SPC-FAME Goal: The fisheries resources of the Pacific Islands region are sustainably managed for economic growth, food security and environmental conservation.

Oceanic Fisheries

Goal: Fisheries exploiting the region's resources of tuna, billfish and related species are managed for economic and ecological sustainability using the best available scientific information

Objective 1: To provide high-quality scientific information and advice for regional, subregional and national fisheries management authorities on the status of, and fishery impacts on, stocks targeted or otherwise impacted by regional oceanic fisheries

Objective 2: To provide high-quality fishery monitoring services, analysis services and capacity development to support the management of oceanic fisheries by regional, subregional and national fisheries management authorities

Objective 3: To provide high-quality data management services and capacity development to support the management of oceanic fisheries by regional, subregional and national fisheries management authorities

Objective 4: To improve understanding of pelagic ecosystems in the western and central Pacific Ocean.

Coastal Fisheries

Goal: Coastal Fisheries, nearshore fisheries and aquaculture in PICTs are managed and developed sustainably

Objective 1: To assist governments and administrations in the development of scientifically informed and socially achievable coastal fisheries management policies and systems in line with the guiding principles of the 'Apia Policy'

Objective 2: To provide a regional framework for sustainable aquaculture, in the areas of planning, research, development and trade, for Pacific Island governments, private enterprises and other stakeholders.

Objective 3: To develop sustainable nearshore fisheries in PICTs to provide food security, livelihoods, economic growth and climate change adaptation.

Pacific Fisheries for Food Security Program

The objective of the Pacific Fisheries for Food Security Program, as stated in the Terms of Reference, is:

To engage with and support a sustainable, well governed, effective and efficient regional organisation that works towards improving food security in Pacific Island Countries and Territories through: lifting fisheries productivity, improving rural livelihoods and building community resilience from the sustainable management of fisheries.

Annex I: Assessment of Financial Arrangements

Independent Mid-Term Review of the Fisheries for Food Security Program

1. Introduction

This Annex provides a brief outline of the financial arrangements for the FFSP as a program within the SPC. It gives details that are not afforded in the main body of the review report. However, it is also not intended to be a complete and comprehensive review of the financial and accounting mechanisms utilised by the SPC for such purposes, but rather to provide more background on the basis of the reviewers' discussion and conclusions in the body of the report they may reflect on financial issues appropriate to the FFSP.

2. Organisation and Management Arrangements

The FFSP as a program within the SPC is treated in a similar fashion to other programs and projects implemented by the Secretariat; subject to specific monitoring and reporting requirements of the donor agency, AusAID. Organisationally, it sits within the SPC Division of Fisheries, Aquaculture and Marine Ecosystems (FAME). Personnel employed by the program for all practical purposes are employees of the SPC under the various work components of FAME, and report to and are responsible through the prevailing management structure of the Division.

The FFSP's seven Components were allocated a total of AUD9,578,104 for the following Components: **Phase I** – (1) Scientific advice for the development of oceanic fishery management measures; (2) Management and development of export fisheries for aquarium fish; (3) Development of mariculture opportunities; (4) Assistance to meet export requirements for marine products; **Phase II** – (5) Artisanal tuna data and tuna data management; (6) Inland aquaculture; and (7) Deepwater snapper.

The following table lists the allocated amounts in AUD for the seven FFSP Components:

Component	Total Allocation (AUD)	Share of Program Total (%)
Scientific Advice to FFA	1099424	11.5
Export Aquarium Fish	1158274	12.1
Mariculture Development	1249226	13
Assistance to Marine Exports	1313425	13.7
Artisanal Tuna Data	2179055	22.8
Inland Aquaculture	1302725	13.6
Deepwater Snapper	1275975	13.3
FFSP Total	9578104	100

Source: SPC Finance and FAME

Note: The amounts already received are recorded in XFP in SPC financial records at the exchange rate at time of receipt

The institutional arrangements for the FFSP, sitting as it were within SPC, adds value to the AusAID assistance. It provides support to related ongoing fisheries programmes and projects of the Secretariat, in particular affording backstopping technical services that fill in gaps where they existed, and in some cases extended such services to PICTs. By the same token, invariably by its very nature the program has limited “visibility” as a stand-alone initiative and direct attribution of its outputs and outcomes has been difficult, although this may not be considered material as the case may be.

3. Program Financial Management

The SPC has extensive experience in implementing and managing regional projects and programs. It has financial management systems and processes in place that are accepted and accredited by a number of international agencies and donors. The FFSP, therefore, as a program of the SPC, has been able to benefit from and take advantage of these proven basic support services, in addition to the advantages accruing from the Secretariat's overall institutional and management structure discussed above.

Subject to its ongoing financial monitoring and internal controls, and its annual external audits, there is good reason to believe that the financial management arrangements in place for the FFSP within the SPC are adequate and appropriate, similar to other activities of the Secretariat. What may be lacking, and related to the issue of attribution of program outputs and outcomes mentioned above, is demarcation of what is achieved by the program from other activities and achievements of SPC/FAME overall. Again this may be difficult or unnecessary given the overwhelmingly “backstopping” and interrelated nature of the FFSP with other FAME activities.

The following table lists program funding allocations and amounts used and budgeted to be used by the various Components for the period 01/10/2010 – 31/12/2013 in XFP, as at 9/9/2013:

Component	Period Allocation	Allocation Used	Unused Balance	Unused %
Scientific Advice to FFA	73,589,001	53,108,337	20,480,664	27.8
Export Aquarium Fish	81,047,660	43,476,814	37,570,846	46.4
Mariculture Development	88,392,294	76,661,176	11,731,118	13.3
Assistance to Marine Exports	87,963,535	60,107,491	27,856,044	31.7
Artisanal Tuna Data	109,063,266	75,564,729	33,498,537	30.7
Inland Aquaculture	59,573,437	42,452,339	17,121,098	28.7
Deepwater Snapper	63,441,166	60,738,365	2,702,801	4.3

Source: SPC Finance and FAME

Note: Funds received are recorded in SPC financial records as XFP at the going exchange

rate and all expenditure therefrom are recorded in XFP

The above table highlights the difference in spending rates by the different Components. Although it is not an exact and perfect measure of delivering on Component objectives it is part of the budgeting process that is based on anticipated activities that contribute and achieve such objectives. A more detailed analysis of individual expenditure items, for example, shows that some Components spend proportionately more on transport and travel, and on conferences, trainings and workshops, than others.

All Components still have funding for Component implementation through to November 2015 yet to be received as follows (source: SPC Finance and FAME):

1. Scientific advice to FFA – AUD277,531
2. Export aquarium fish – AUD250,781
3. Mariculture development – AUD261,481
4. Assistance to marine exports – AUD331,031
5. Artisanal tuna data – AUD983,865 (including AUD447,795 for year 3 to be received)
6. Inland aquaculture – AUD650,025 (including AUD294,250 for year 3 to be received)
7. Deepwater snapper – AUD580,475 (including AUD275,525 for year 3 to be received)

Given the historical spending patterns of the different Components, it is opportune at this mid point to review and reprioritise the overall apportionment of the FFSP remaining allocation.

4. Program contribution to overall FAME Budget

The contribution of the Program to the overall FAME Division budget is set out in the table below. This shows that the PFFSP represented approximately 15% of the overall Divisional budget. Note that this does not include any other sources of Australian Government funding to SPC FAME.

For comparison, the mid-term evaluation of the EU funded SCICOFISH project estimated that EU-funding represented 26% of the FAME budget in 2011.

PFFSP Program Funds per annum	FAME annual Budget (average 2011-12)	Proportion of FAME Budget from PFFSP Program
AUD 2237875	AUD 14654889	15.3%
Note: Total funds pro-rated over 4 years	Note: figures from FAME 2012 Annual Report; using currency conversion rate of CFP Units: AUD 90:1.	

5. Other Related Issues

The issue of project versus program budgeting was raised occasionally. Compounding the issue is the related definition of certain terms used in the discussion. For example, what constitutes a program, and is any cluster of projects for convenience be bundled and labeled a program. How will institutional terminology such as “core” funding and other funding such as “extrabudgetary” to be uniformly defined given the range of both implementing/recipient agencies and donor agencies concerned?

For budgetary purposes, there is an established consensus on the costs and benefits of appropriate term planning, including planning the inflow and outflow of cash resources. It makes for better planning and plan execution to have some idea of the magnitude and timing of these flows for the short and longer term. It also makes for better and more effective and efficient work coordination, monitoring and control to package related work activities into the compounds of a project or program.

The downside of the project approach, often espoused, is its time limits: when the project period comes to an end most activities carried out by the project also often tend to end. This can also be true of programs, as most also have lives, often dictated by funding sources. The underpinning assurance for desired sustainability often comes down essentially to the project and program objectives and targeted outcomes. However, many responsibilities tasked to organisations such as SPC are very long term, and are particularly so given the geopolitical nature of the PICTs.

For some organisations, once its core business and work programs to address and conduct that business are established, then it might be more practically refined to a discussion of budget cycles that may be conveniently caged in programming language. In the end, it is the close-to-certainty and more effective planning that longer term funding arrangements, and the economies they bring, that contribute to improved organisational resources management.

Ends.