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1. Summary description

The fisheries resources of the Pacific ACP countries are central in efforts to improve the lives of their people. The oceanic resources provide around a quarter of the world's tuna catch and support both small and large fishing enterprises; provide government revenue; and, in many countries, represent the main opportunity for economic development. Coastal fisheries contribute to food security and the livelihoods of hundreds of thousands of people across the region. Both oceanic and coastal resources are at risk of overfishing however. In the oceanic fishery, a rapid growth in industrial fishing effort threatens two important commercial species of tuna. In coastal fisheries, food fish resources are over-exploited around major population centres, while certain invertebrate species harvested for export are severely depleted across much of the region. Well-informed management action is needed to halt and reverse these trends.

The **objective** of this project is therefore the conservation and sustainable use of oceanic and coastal fisheries resources in the Pacific Islands region. The project **purpose** is to improve the management of oceanic and coastal fisheries by Pacific ACP (and OCT) Governments and by relevant regional fisheries management authorities, through the provision of a reliable scientific basis for decision-making. Project results are envisaged in two areas:

- Pacific ACP (and OCT) governments, the Forum Fisheries Agency (FFA) and the Western and Central Pacific Fisheries Commission (WCPFC) are provided with scientific data, modelling, and advice on oceanic fisheries to underpin their management decision making and strategic positioning; and
- Pacific ACP (and OCT) governments, private sector and communities are better equipped to monitor coastal fisheries to provide scientific advice in support of sustainable management of these resources.

The project builds on earlier interventions, supported by EDF and other funding, to develop reliable estimates of the status of fisheries resources across the region, as well as the impact of management measures. The project concept was selected for funding by a committee representing Pacific ACP governments in a competitive process, and was considered by a meeting of heads of ACP and OCT fisheries administrations in February 2009.

2. Consistency with EC policy, programming framework and aid effectiveness agenda

The European Union's strategy for a strengthened partnership with the Pacific Islands emphasizes a 'blue/green' theme, recognising that the conservation of marine resources of the Pacific Ocean is not only essential to the well-being of the populations of the countries themselves, but also represents a greater global good. The strategy concludes that sustainable management of fisheries resources deserves the close attention of the EU.

This priority is reflected in the agreed Regional Indicative Programme for the 10th EDF, in which '**sustainable management of natural resources and the environment**' is a focal area, and '*the development of cost-effective solutions for the sustainable management of marine and land-based resources*' is a key result. Activities identified in the RIP and addressed by this project will be:

- improving the sustainable use of resources, planning and management systems at all levels;
- promoting ecosystem based management, emphasizing ecological, social and economic linkages;
- improving collection and quality of data on fishing stocks;
- promoting and supporting initiatives to ensure food security and small scale livelihoods; and
- strengthening the region's capabilities to fight IUU fishing, including stock assessment, a more comprehensive monitoring, control and surveillance strategy and certification procedures aimed at attesting the legality of catches harvested and processed in the region.

The project will be implemented by SPC, an international organisation, and will complement its funding, which is derived from member country contributions; programme funding provided by Australia, New Zealand and France; and coordinated project inputs from these and other donors. SPC reports to its stakeholders in a transparent manner, including an annual meeting of senior officials and a biennial conference of heads of governments and administrations. An institutional audit has already been completed, allowing the organisation to use its own procedures for implementation. There will therefore be no need for a special implementing unit.

3. Consistency with Regional policies and strategies

The regional development and reform agenda is articulated in the Pacific Plan, as refined by subsequent meetings of the Pacific Islands heads of state. Sustainable development is one of the pillars of the Pacific Plan. At the 2007 Forum meeting, leaders issued the Vava'u Declaration 'our fish, our future' which committed their Governments to the conservation and management of highly migratory tuna resources; as well as the development and management of inshore coastal fisheries for food security and sustainable livelihoods.

At the most recent 2008 Forum meeting in Niue, Fisheries was again on the agenda with leaders calling for comprehensive fisheries conservation measures, both in their EEZs and on the high seas; and supporting the sustainable and effective management of national coastal fisheries. This project will provide the basis for rational decision making in the ongoing development and refinement of management measures for tuna; while enhancing national capacity to manage coastal fisheries. Although outside the SPC membership, Timor Leste will be involved in project activities appropriate to the country's needs.

4. Problem analysis

The core problem that this project is designed to address is the problem of overfishing, both where it is already occurring and where it is threatened in future. The consequences of overfishing around the world are well known, with depleted fish stocks leading to reduced catches, uneconomic fisheries, the collapse of not only fishing businesses but also the range of suppliers and processors that rely on them, higher prices and shortages of food in poor coastal countries, and more general damage to the ecosystems and marine environment.

In the **oceanic fishery**, the threat of overfishing has been mainly caused by the growth in numbers and efficiency of the tuna purse seine fleet, and their catches of bigeye and yellowfin tuna. The management of this fishery is not simple, involving multiple distant-water and locally-based fleets, which fish over an extensive area under different national jurisdictions. The main target species, skipjack tuna, is not fully exploited and overfishing is occurring mainly on juvenile bigeye. This species is of little interest to the purse seiners but supports a valuable fishery when adult fish are taken by longlining, often in other areas, for the sashimi market in Japan and elsewhere.

Tuna stock assessments are technically complex, requiring data from a range of sources, and reliable estimates of many biological parameters. The fishery and the resource base are also influenced by oceanographic conditions and potentially by climate change. Because of the wide distribution and migratory nature of tuna stocks, fishery monitoring, scientific research, stock assessment and supporting data management are most effectively coordinated at the regional level. However, there is also a critical need for the bioeconomic effects of management measures, as well as external drivers such as environmental variability and climate change, to be assessed at the national level.

Commitments to management action are made at three levels:

- by the Western and Central Pacific Fisheries Commission for the fishery as a whole, including the high seas;
- collectively by the member states of the Forum Fisheries Agency, particularly the eight FFA members which make up the Parties to the Nauru Agreement from whose EEZs some 80% of the surface tuna are harvested; and
- at a national level, to control fishing and particularly domestic fleets inside the EEZs of individual member countries, as well as implementing regionally agreed measures.

The project will provide the scientific advice to support management at all three levels. The Oceanic Fisheries Programme is already the scientific services provider for the WCPFC; works closely with the FFA; and devotes considerable resources to providing advice to members on an individual basis.

This project will provide Pacific ACP countries as well as the French Territories (subject to confirmation of complementary EDF funding) with scientific and bioeconomic advice on the impacts of environmental variability and management measures on tuna fisheries, and will conduct fishery monitoring and data management capacity building and biological research on the stocks that will underpin these analyses. Information on the tuna resources of Timor Leste will also be provided to that ACP where possible.

For the region's **coastal fisheries**, the problems are more diverse but share some common themes. Traditionally these resources have been harvested mainly for subsistence, and they remain essential for food security in many rural coastal areas and small islands. Growing urban populations and development of a cash economy have seen an increase in small-scale commercial fishing, however, with depletion of resources around areas that have access to markets.

A special case is provided by beche-de-mer, an invertebrate found in shallow lagoons, which is harvested, dried and sold to an insatiable export market in China. The high value of this product, the ease with which it can be collected, and the fact that the dried product can be stored and transported without refrigeration, means that it has been widely overfished, even in some of the most remote areas. The situation for some valuable mother of pearl shell species, also harvested for export, is similar. Population growth, estimated to increase the region's population by 50% over the next 25 years, clearly adds to the problem.

Management of coastal fisheries is complicated by: the wide range of species harvested; the lack of stock assessments or even basic biological data on some of them; extensive fishing areas; the large numbers of fishers involved; their distribution over a huge length of coastline in some countries; and the very limited resources and staffing of national fisheries administrations. Some successes have been achieved through the development of community-based management, in which the community themselves regulate fishing activity. Export-oriented fisheries can also be managed through nationally imposed measures – size limits, fishery closures –, which are relatively easily enforced at the few ports used for export. Establishing the need for such measures, and monitoring their impact, is more challenging.

To achieve sustainable management of coastal resources, a basic understanding of resource dynamics and productivity, and the effects of human activities and environmental factors, is needed on an on-going basis. This can be achieved through a range of standardised monitoring activities including in-water assessments, socioeconomic surveys, creel or market surveys and landing or export data. The coastal component of the project will develop national capacity in the development of these monitoring methods, and the interpretation of the results for development of management measures.

5. Stakeholders analysis

The final beneficiaries of the project will be a wide cross-section of the Pacific population. Improved livelihoods and food security can be expected for coastal communities that are assisted through better information and management of inshore resources. Sustainable tuna fisheries will impact widely, as Government revenue that supports social services in some of the smallest and most vulnerable countries in the region depends heavily on licensing foreign vessels. In other countries, development of tuna processing – similarly dependent on a healthy resource – is creating thousands of new jobs.

Target groups will include fisheries departments, other government departments (environment, planning, finance, foreign affairs) with an interest in coastal and oceanic fisheries, coastal communities, fishing industries and NGOs. In the case of oceanic fisheries, the WCPFC, its subsidiary bodies (particularly the Scientific Committee) and members (including the European Union) will be an additional target group. At the start of the project, Timor Leste will be visited at the start of the project to determine national priorities. Pacific OCTs are expected to be stakeholders under a parallel project funded from the OCT EDF10 envelope.

The need to build capacity in Government fisheries departments is recognised in the project design, which features a number of training activities. The project will continue to supplement capacity by providing specialised services at a regional level. The project concept was considered at a meeting of Head of Fisheries in February 2009.

6. Strategy analysis, lessons learned and link with complementary actions

In the case of oceanic fisheries, the response proposed is not a new solution to the problem. Effective management of the fishery must be underpinned by reliable scientific information on the status of the resource, and the ability to provide this has been developed over many years with funding support (including some under earlier EDF interventions). Two factors make the need for this work more urgent: the problem of overfishing on key stocks, which was not an issue when SPC's programme in this area was initiated; and the largely unpredicted impact of external environmental factors, especially climate change.

The programme has developed the linkages needed to ensure that the scientific results are transformed into management action, and have developed the tools to model the impact of different management measures. A new feature of this programme will be the emphasis on bio-economic analysis. This work is expected to provide clearer evidence of the economic benefits of effective management, and typically provides arguments for further limiting fishing effort (as maximum economic yields are normally achieved with a catch below that which maximises the biological yield).

In the area of coastal fisheries, again SPC's coastal programme has provided resource assessments and management advice in the past; but the major EDF9 initiative (the PROCFish project) was over-ambitious in its design. The baseline data collected, although valuable for future work, has not had much impact on management, and the development of local capacity was neglected. The coastal component of this project will address these weaknesses, and will operate in a responsive manner to the needs and requests of the P-ACP countries, recognising that these can be very different from one country to another.

Lessons learned in the implementation of regional projects in the Pacific have emphasized the efficiency and effectiveness of working through the existing regional organisations. The experience of the PROCFish project has been absorbed in the project design as mentioned above.

The project complements a number of EC-funded initiatives, notably the EDF9 SciFish project which is focused on oceanic fisheries management, and the DevFish project based at FFA which aims to improve economic returns to the PACP states from tuna resources. It is expected that SCICOfish will establish links with the ACP Fish II project, an all-ACP initiative to promote improved fisheries management, which will have a regional office based in Fiji. The Project funding complements SPC's programme funding from Australia, New Zealand and France, which supports a number of the staff positions in the fisheries programmes. Support for the Oceanic Programme is also received from GEF, as well as other bilateral donors (particularly for the tuna tagging project). A small, but significant, contribution to the cost of tuna stock assessments is also made by the WCPFC.

Donor coordination of regional programmes for the P-ACP countries is undertaken by the Forum Secretariat, and particularly the post-forum dialogue in which donor representatives meet directly with all P-ACP officials. SPC also maintains close links with all donors involved in supporting its programmes to avoid duplication.

7. Proposed project description

Objective, purpose and results

The overall objective of this project is the conservation and sustainable use of coastal and oceanic fisheries resources in the Pacific Islands region. The project purpose is improved management of coastal and oceanic fisheries by Pacific ACP (and OCT) Governments and by relevant regional fisheries management authorities, through the provision of a reliable scientific basis for decision-making. Results of the project link directly to the sustainable management result sought in Focal Area 2 of the RIP. Performance indicators for the project objective and purpose would include: fisheries continue to produce catches consistent with sustainable exploitation; all stocks are exploited within sustainable limits; and the best scientific evidence is considered in management decision-making. Results will be in the following areas:

Result 1: Pacific ACP (and OCT) governments, the Forum Fisheries Agency and the Western and Central Pacific Fisheries Commission are provided with scientific data, modelling, and advice on oceanic fisheries to underpin their management decision making and strategic positioning.

Result 2: Pacific ACP (and OCT) governments, private sector and communities are equipped to monitor coastal fisheries to provide scientific advice in support of sustainable management of these resources.

Crosscutting issues

Governance – The project contributes to addressing governance issues identified as priorities for transparent and accountable resource management, specifically enhanced institutional capacity for planning and implementing resource use. Because the results of stock assessment work are made widely available, the project will also contribute to enhanced transparency.

Gender – SPC specialists will conduct a gender analysis of the project during the inception phase, and identify some specific activities to integrate gender issues into its implementation. These may include an enhanced role for women in data analysis and stock assessment work, as well as greater involvement of women in decision-making in coastal fisheries management.

Environment – The project has a strong emphasis on combating fishery-induced damage to the marine environment. Although based initially on fishery-based measures, the project will also support efforts to incorporate more of an ecosystem-based approach to fisheries management. Work on the impacts of climate change should assist adaptation to this pervasive threat in the context of the marine environment.

Activities

Activities to achieve Result 1 include:

- Develop national tuna fisheries databases in Pacific ACPs (and OCTs) tailored to their WCPFC reporting obligations, conduct data audits at regular intervals and undertake associated capacity building;

- Conduct national, sub-regional and regional-level observer/port sampling training, observer debriefing and debriefing training, and develop competency-based training standards and documentation for these activities;
- Develop the large-scale Spatial Ecosystem and Population Dynamics Model (SEAPODYM) to estimate the response of Pacific tuna stocks at the regional and national levels to exploitation, management intervention and environmental variability, including climate change;
- Develop and use a regional bioeconomic model of Pacific tuna fisheries to guide regional tuna development and management strategies, to estimate of the economic impacts on Pacific ACPs of potential tuna fisheries management measures and to evaluate and predict the economic impacts of environmental variation and climate change at both the regional and national levels;
- Conduct biological research on regional tuna stocks to underpin stock assessment, ecosystem and bioeconomic modelling.

Activities to achieve Result 2 include:

- Prioritise individual country needs on coastal fisheries science and monitoring through in-country stakeholder consultations;
- Develop and implement standardised monitoring protocols through capacity building at the community, private sector and fisheries department level in selected countries;
- Develop appropriate modules (monitoring data, creel and market survey data, landing and export data, etc) with standardised monitoring protocols, national databases, a regional data repository; and in-country capacity building in data entry, database management and data analysis;
- Develop management advice, based on the results of monitoring and assessments, for major fisheries at the request of P-ACP countries.

Performance indicators for the results include collection and analysis of national fisheries data, increased numbers of trained observers, increases in observer coverage rates, production of regional stock assessments and national reports, and the contribution of national data to regional databases or repositories.

8. Resource and cost implications (includes proposal for scope of ECOFIN analysis)

This is a technical assistance project, comprising long term TA of twelve experts providing technical services as well one administrative position. The project includes a number of subcontracts for more specialised inputs, as well as substantial funds for training and capacity building activities. The project will have a duration of four years.

The anticipated project expenditure, broken down by budget head and result area, is as follows. All values are in Euros (€).

Budget lines of direct eligible costs	Oceanic component	Coastal component	Project total
• Staff costs (long-term TA)	2,800,000	1,255,000	4,055,000
• Travel and subsistence costs	390,000	560,000	950,000
• Training costs	232,500	440,000	672,500
• Equipment and services	95,000	175,000	270,000
• Consumables and other supplies	80,000	80,000	160,000
• Subcontracts/consultancies	300,000	280,000	580,000
• Fieldwork costs	750,000	280,000	1,030,000
• Dissemination of Project results	Administered jointly for both components. Common costs total 1,282,500		360,000
• Monitoring and evaluation			104,000
Total direct costs			8,181,500
Eligible indirect costs (overheads)			572,700
Contingency Reserve			245,500
TOTAL	4,647,500	3,070,000	8,999,700

The current work programme of the Coastal and Oceanic Fisheries Programmes will directly complement the activities described in the project. In 2007 and 2008, the budgets for the Coastal and Oceanic Fisheries Programmes were each around €3-4 million (excluding EDF funding) and at least this level of funding is expected to continue in 2009 and 2010. The majority of this funding is from the governments of Australia, France, New Zealand, WCPFC and member contributions, with smaller amounts coming from the Commonwealth Secretariat, ACIAR, Taiwan/ROC, MacArthur Foundation and others.

Ecofin guidelines indicate that economic analysis is not appropriate for projects which have intangible results such as improved resource management and conservation of the environment, and where the cost of the intervention is small relative to the economic contribution of the sector. SCICOFish annual expenditure will be 0.7% of the GDP contribution of marine fisheries to the economies of PACP countries, which is currently estimated at €16 million (excluding Timor Leste). A small increase in the ability to retain or enhance this contribution would repay the investment in the project.

9. Implementation issues

SCICOFish will be implemented by joint management. Overall authority will rest with the Regional Authorising Officer, who will execute a contribution agreement with the Secretariat of the Pacific Community as lead implementing agency. An institutional audit of SPC has been completed.

Day to day management will be the responsibility of Programme Managers of the Oceanic and Coastal Fisheries Programmes. A project coordinator will have principal responsibility for project administration and reporting. An advisory committee, comprising senior fisheries officials of the P-ACP countries (and OCT territories), will meet annually to review progress and provide input into the work programmes. Project activities and outcomes will also be covered in the SPC annual report, which is presented to all stakeholders.

Project monitoring mechanisms will include annual and six-monthly reports prepared by the project management, annual ROM missions, and a mid-term review by independent consultants. Performance indicators, including current baseline data, will be specified in the TAP. Key indicators at the Objectives level are:

- fisheries continue to produce catches consistent with sustainable exploitation;
- all stocks are exploited within sustainable limits; and
- the best scientific evidence is considered in management decision-making.

The possibility of integrating project reporting requirements into the normal periodic reports to members and other major donors through the Strategic Plan annual reports will be explored with the Regional Authorising Officer and EC Delegation, but this may not be possible due to EDF10 requirements.

10. Assumptions and risks

Risks applicable to both results: National fishery departments must be receptive to and can commit staff to capacity-building activities of the project. This risk will be minimized by obtaining buy-in on project activities through SPC consultative processes, including SPC Heads of Fisheries and Joint Country Strategies, and the Project Steering Committee. An additional strategy will be to fund new staff in-country to undertake national counterpart activities and receive training on the agreement that such positions are absorbed into the fisheries establishment post-project. An additional human resource risk is that suitably qualified and experienced scientific staff can be recruited by SPC to undertake the project. This risk is mitigated by internationally competitive CROP employment conditions. As an additional contingency measure, we will maintain flexibility to replace long-term TA with consultancy contracts if necessary.

Risks to achieve result 1: Regional oceanic fishery research activities are subject to the usual variables such as weather, availability of fish for tagging and the cooperation of the fishing industry and regional observer programmes. SPC has good contacts in industry and observer programmes to promote cooperation and has extensive experience in conducting field-based research of this nature. Publicity and incentives such as tag rewards will also be used to encourage cooperation of industry and others in these aspects of the project.

Risks to achieve result 2: Current staff in fisheries departments may not have the skills or equipment necessary to undertake their chosen priority coastal fisheries monitoring activities, manage the resulting data, or analyse, interpret and document the results. This risk will be addressed through capacity building in the identified priority areas to ensure maximum uptake of in-country activities. Appropriate equipment, including computer equipment and maintenance support will be provided to countries as required to implement project activities. SPC will provide a backup facility for all national data in a centralised database at SPC to mitigate the risk of data loss through computer failure.

11. Sustainability

The project activities will be well integrated into and supported by the overall work programmes of the Coastal and Oceanic Fisheries Programmes. Commitments of longer-term funding through the SPC core and programme funding budgets will ensure that project outcomes are sustainable. Increased funding support from the WCPFC is also envisaged.

12. Next steps, work-plan and time schedule for the formulation phase

This project identification fiche has been prepared following a screening of concept notes submitted by the various regional organisations and evaluated by a technical committee comprising representatives of the Pacific ACP countries. Due to some delays in finalisation of the Regional Indicative Programme, there is now some urgency to ensure that priority EDF10 regional projects can be initiated during 2010.

Consideration of this fiche by the QSG has been scheduled for March 2009. A draft action fiche and Project Proposal (forming the basis of draft Technical and Administrative Provisions for a financing agreement) will be prepared in line with comments from the QSG. It is intended to have these ready for approval by June, with a view to starting project activities in the first half of 2010.

ANNEX

LOGICAL FRAMEWORK

<i>Narrative Summary</i>	<i>Performance/Success Indicators</i>	<i>Means of Verification</i>	<i>Assumptions</i>
Project Objective			
The conservation and sustainable use of coastal and oceanic fisheries resources in the Pacific Islands region	<ul style="list-style-type: none"> Regional tuna fishery produces catches at appropriate levels All tuna stocks exploited within sustainable limits 	<ul style="list-style-type: none"> SPC catch statistics Stock status reports to WCPFC 	
Project Purpose			
To provide a scientific basis for the management of coastal and oceanic fisheries by Pacific ACP (and OCT) Governments and by relevant regional fisheries management authorities	<ul style="list-style-type: none"> The best scientific evidence used to manage fisheries 	<ul style="list-style-type: none"> Fishery management plans WCPFC Conservation and Management Measures 	<ul style="list-style-type: none"> Pacific ACP (and OCT) Governments have the political will to take management decisions based on the best scientific information
Project Results			
Result 1: Pacific ACP (and OCT) governments, the Forum Fisheries Agency and the Western and Central Pacific Fisheries Commission are provided with scientific data, modelling, and advice to underpin their management decision making and strategic positioning.	<ul style="list-style-type: none"> National tuna fisheries databases operational in 10 P-ACPs (and OCTs) Tuna data audits conducted for 10 P-ACPs (and OCTs) Number of observers trained, number of observer trainers and debriefers operational P-ACP's (and OCTs) report data to WCPFC as per their obligations Observer overage rates reach regionally-agreed levels by 2012 10 Stock assessments for key tuna species, incorporating new data collected, are provided to WCPFC during 2010-2013 1 regional and 10 national reports providing bioeconomic modelling advice 1 regional and 10 national reports (including Timor Leste) providing advice on tuna resource vulnerability to environmental variability including climate change 	<ul style="list-style-type: none"> SPC/WCPFC databases Data audit reports WCPFC SC and TCC reports Regional/national bioeconomic reports Regional/national tuna resource profiles 	<ul style="list-style-type: none"> Pacific ACP (and OCT) Governments and industry will cooperate with capacity building and tuna fisheries research
Result 2: Pacific ACP (and OCT) governments, private sector and communities are equipped to monitor coastal fisheries to provide scientific advice in support of sustainable management of these resources	<ul style="list-style-type: none"> Country specific needs prioritised for all P-ACPs (OCTs) Standard monitoring protocols implemented in at least 5 P-ACPs National database modules operational with trained national personnel doing data entry, database management and data analysis in at least 5 P-ACPs Regional data repository maintained and national data provided 	<ul style="list-style-type: none"> Project reports National databases SPC repository database 	<ul style="list-style-type: none"> Pacific ACP (and OCT) Governments will commit the human resources for capacity building in fishery monitoring
Project Activities			
1.1 National tuna fisheries databases and data auditing 1.2 Observer/port sampling capacity building 1.3 Model tuna stocks at national and regional levels 1.4 Estimate bioeconomic impacts of management and environment 1.5 Biological research on regional tuna stocks 2.1 Coastal fisheries needs assessment 2.2 Coastal fisheries monitoring 2.3 National coastal fisheries databases	Resources Staff costs Travel and subsistence Training Equipment and services Consumables Sub-contracts/consultancies Fieldwork costs Dissemination of results Monitoring and evaluation Total direct costs Eligible indirect costs Contingency reserve TOTAL	Cost € 4,055,000 950,000 672,500 270,000 160,000 580,000 1,030,000 360,000 104,000 8,181,500 572,700 245,500 8,999,700	<ul style="list-style-type: none"> Fishing industries cooperate in biological and bioeconomic research Tuna stocks remain sufficiently abundant to facilitate biological research, e.g. tagging P-ACP (and OCT) Governments can commit human resources for training activities