



Project Identification Form (PIF) entry – Full Sized Project – GEF - 7

Mainstreaming climate change and ecosystem-based approaches into the sustainable management of the living marine resources of the WCPFC

Part I: Project Information

GEF ID

10394

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

☐ CBIT

☐ NGI

Project Title

Mainstreaming climate change and ecosystem-based approaches into the sustainable management of the living marine resources of the WCPFC

Countries

Regional, Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

Agency(ies)

UNDP

Other Executing Partner(s)

Pacific Islands Forum Fisheries Agency

Executing Partner Type

Others

GEF Focal Area

International Waters

Taxonomy

Strengthen institutional capacity and decision-making, Influencing models, Demonstrate innovative approach, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Indigenous Peoples, Stakeholders, Private Sector, Large corporations, Individuals/Entrepreneurs, International Waters, Focal Areas, Climate Change, Climate Change Adaptation, Communications, Type of Engagement, Gender Equality, Capacity, Knowledge and Research, Small Island Developing States, Community-based adaptation, Least Developed Countries, Livelihoods, Strategic Action Plan Implementation, Fisheries, SIDS : Small Island Dev States, Large Marine Ecosystems, Local Communities, Beneficiaries, Information Dissemination, Partnership, Consultation, Participation, Awareness Raising, Education, Public Campaigns, Behavior change, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Women groups, Gender results areas, Knowledge Generation and Exchange, Access to benefits and services, Access and control over natural resources, Participation and leadership, Capacity Development, Knowledge Generation, Learning, Theory of change, Adaptive management, Indicators to measure change, Knowledge Exchange, Targeted Research, Innovation

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 1

Duration

60 In Months

Agency Fee(\$)

950,000

Submission Date

10/10/2019

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
IW-1-2	GET	10,000,000	82,800,000
Total Project Cost (\$)		10,000,000	82,800,000

B. Indicative Project description summary

Project Objective

Implementing the 2019 Strategic Action Programme for the Sustainable Management of Living Oceanic Resources by the Pacific SIDS to address the primary and emerging threats, particularly climate change.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: Implementation of a proactive and adaptive ecosystem-based approach to regional fisheries management	Technical Assistance	Outcome 1.1	Output 1.1.1	GET	3,750,000	31,050,000
		Adaptive and sustainable ecosystem-based management of fisheries and associated natural resources with an emphasis on response to climate change impacts and focusing on the benefit to the PICs.	Improvements in long-line and purse seine management both 'in-zone' and on high seas through adoption and implementation of mechanisms for enhanced monitoring and reporting, traceability, incorporation of improved port state measures into legislation, and expansion of zone-based (VDS) management			
		Outcome 1.2	Output 1.1.2			
		Improved capacity and expertise for overall fisheries management at both the national and regional level	More timely and effective implementation of National Tuna Management Plans along with Eco-Labeling and offloading requirements			
			Output 1.1.3			
			Adaptive management measures strengthened at regional and national levels with prioritization given to A.			

as well as to expand opportunities for PICs engagement in fisheries markets.

adaptation to climate change and its impacts, B. Adoption of harvest strategies with associated targets/triggers.

Output 1.2.1

Implement a 'rolling' training programme for fisheries and ecosystem management staff (to account for staff turnover) with strong emphasis on general regional training on key fisheries management principles, particularly in the context of MCS, adoption of reference points, implementation of harvest controls and identifying and adapting to climate change impacts on the fisheries

Output 1.2.2

Provide technical and business level assistance to PICs in promoting domestic fishery development and establishing local value-added fishing ventures (game fishing, processing, management of domestic fleets and exports)

Output 1.2.3

An operational Stakeholder and Partnership Engagement Strategy adopting partnerships with international-recognised institutions that are providing tertiary level fisheries management courses (including

supervision of post-graduate students and mentoring).

Component 2: Innovative technology development and implementation to support the adaptive ecosystem-based approach to regional fisheries management.	Technical Assistance	Outcome 2.1	Output 2.1.1	GET	3,000,000	24,840,000
		Improved monitoring of catch, bycatch and movement of catch (transshipping, landing and marketing), MCS and data analysis to significantly reduce IUU fishing.	Strengthened on-board monitoring (observers and electronic monitoring and electronic reporting systems) and established and adopted Standards for Catch Documentation Schemes. Baseline for Electronic monitoring (Dec, 2018) Source - WCPFC EMER IWG, 2018			
		Outcome 2.2				
		Greater monitoring and control of FADs to optimise returns from target stocks and reduce bycatch and other ecological impacts.	Trials on 74 vessels in 7 countries – Palau (7) FSM (5) RMI (6) Fiji (45) Cooks Islands (2) Solomon Islands (7) Vanuatu (3) Target – 200 vessels in 10 countries – all carrier vessels Output 2.1.2 Improved frequency/accuracy of monitoring and reporting at port state level (including catch documentation) emphasizing the objective of reducing and eliminating IUU through PSMA, electronic surveillance and subsequent interdiction.			

Signatories to PSMA or equivalent -Current
Baseline = 5 countries; Target 12 countries.

Number of countries with adopted Catch
Documentation Scheme. Current Baseline
zero; Target= 8 countries (key
transshipment ports) have adopted
standards and compliance systems

Output 2.1.3

Develop enhanced mechanisms and
improved technology for catch
documentation and tracking and
traceability of vessels and associated
catch products. This will include A. closer
vessel tracking using state-of-the-art
satellite/remote sensing technologies as
well as B. requirements for 'chain-of-
custody' and tracking of catches and
shipment of products through to final
markets (e.g. Blockchain technologies).

Output 2.2.1

Improved FAD management including
control of deployment, and tracking and
other mechanisms to optimise sustainable
target stock catches, reduce bycatch and
reduce ecological impacts from loss of
FADs (e.g. Through use of LED lights)

Output 2.2.2

Collaborate with relevant stakeholders
(including Private sector) to promote the
design, manufacture and marketing/use of

bio-degradable FADs and FADs that minimize impacts on non-target species (e.g. through avoiding entanglement).

Component 3: A regional strategy for improved community subsistence and resilience to climate change effects on the ecology and fisheries of the region	Technical Assistance	Outcome 3.1 Strengthened data capture, modelling and assessment feeding into management responses to climate-induced impacts on fisheries and marine ecosystems. Outcome 3.2 New strategies in place to respond to socioeconomic changes and food security issues related to climate change (i.e. improving community subsistence and small-scale commercial fisheries).	Output 3.1.1 Implementation of a Regional Programme to improve/expand the knowledge base and to identify changes in the ecosystem and their effects on tuna stock distribution including climate change impacts and connectivity across high seas and EEZ Output 3.1.2 Improved input and output from ecosystem and socioeconomic modelling, particularly of climate-induced changes, feeding into a peer-review process for identifying impacts on PICS at the socioeconomic level (including adaptive management guidelines and policy briefs). Output 3.2.1 Improved access to pelagic food resources for local communities (nearshore FAD deployment, offloading of small tuna and non-target by-catch food-fish, cheaper access to canned tuna) Output 3.2.2	GET	1,500,000	12,420,000
--	----------------------	---	---	-----	-----------	------------

Assessment of alternative income generating activities both within fisheries and other sectors that can identify the need for adaptive responses to climate change and its predicted impacts on the fisheries sector. This would also look at the requirement for appropriate training in new skills and technologies with an emphasis on gender empowerment and youth job creation.

Component 4: Knowledge Management and Sharing	Technical Assistance	Outcome 4.1	Output 4.1.1	GET	1,273,810	10,540,000
		Knowledge Management, Communication and Awareness implemented and outreaching to WCPFC stakeholders as well as the global community.	Promote consumer awareness and Eco-labelling of fish and seafood products from certified fisheries, along with robust systems for tracing fish products to ensure they originate from certified fisheries (Including through partnerships with international bodies e.g. MSC and others). Focus will be given to expanding the successful model that has been developed within the Parties to the Nauru Agreement as an important consumer-based sustainable management strategy.			
			<u>Albacore</u>			
			Baseline @ 15,392 tons certified @15.5%			
			Target - 40%			
			<u>Yellowfin</u>			
			Baseline @250,153 tons @39%			
			Target – 70%			

Skipjack

Baseline @ 628,331 tons @ 38%

Target – 70%

Bigeye

Baseline @ 862 tons @0.2%

Target – 40%

Source – MSC, 2019

Output 4.1.2

Strengthen the 'clearing house' role of the newly-formed Pacific Community Centre for Ocean Science in coordinating research activities to

provide a strong foundation for an adaptive management process which would proactively review knowledge and information coming in with a view to advising and guiding management alignment and policy considerations

Output 4.1.3

Capture of overall Best Lessons and Practices from the OFM Projects over the last two decades for transfer to other

regions and RFMOs; allocation of 1% of
grant for IWLEARN activities

	Sub Total (\$)	9,523,810	78,850,000
Project Management Cost (PMC)			
	GET	476,190	3,950,000
	Sub Total(\$)	476,190	3,950,000
	Total Project Cost(\$)	10,000,000	82,800,000

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Government	Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Republic of Marshal Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu	In-kind	Recurrent expenditures	26,000,000
Government	Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Republic of Marshal Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu	Grant	Investment mobilized	6,000,000
Others	Forum Fisheries Agency	In-kind	Recurrent expenditures	34,425,000
Others	Forum Fisheries Agency	Grant	Investment mobilized	6,075,000
Others	Secretariat of the Pacific Community	In-kind	Recurrent expenditures	6,000,000
Others	Secretariat of the Pacific Community	Grant	Investment mobilized	1,000,000
Others	Parties to the Nauru Agreement Office	In-kind	Recurrent expenditures	2,000,000
GEF Agency	UNDP	In-kind	Recurrent expenditures	600,000
Others	PITIA	In-kind	Recurrent expenditures	150,000

Others	PITIA	Grant	Investment mobilized	50,000
CSO	WWF	In-kind	Recurrent expenditures	350,000
CSO	WWF	Grant	Investment mobilized	150,000
Total Project Cost(\$)				82,800,000

Describe how any "Investment Mobilized" was identified

Investment mobilized: "The GEF project is supported by a wider framework of FFA donor projects which cover related and parallel technical work. " Recurrent expenditures – The GEF project requires technical input support from wider FFA sources including corporate services and financial management, Executive level inputs and technical inputs across fisheries management and fisheries operations (Monitoring, Control and Surveillance).

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Regional	International Waters	International Waters	10,000,000	950,000	10,950,000
Total GEF Resources(\$)					10,000,000	950,000	10,950,000

E. Project Preparation Grant (PPG)

PPG Amount (\$)

200,000

PPG Agency Fee (\$)

19,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Regional	International Waters	International Waters	200,000	19,000	219,000
Total Project Costs(\$)					200,000	19,000	219,000

Core Indicators

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
3,600,000.00			

Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
3,600,000			

Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)

0	0	0	0
---	---	---	---

LME at PIF

LME at CEO Endorsement

LME at MTR

LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at
PIF)

Metric Tons (expected at CEO Endorsement)

Metric Tons (Achieved at MTR)


Metric Tons (Achieved at TE)

--	--	--	--


Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem	Area 71 (Pacific, Western Central)			
Count	1	0	0	0

Indicator 7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)	
Area 71 (Pacific, Western Central)	3				


Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)	
Area 71 (Pacific, Western Central)	4				

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)	
Area 71 (Pacific, Western Central)	3				

Indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Area 71 (Pacific, Western Central)	2			

Indicator 8 Globally over-exploited fisheries moved to more sustainable levels

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Fishery Details

Not Applicable. Core Indicator 8. Globally over-exploited marine fisheries moved to more sustainable levels (metric tons) The primary requirement here is a strategy to keep stocks out of the over-exploited and non-sustainable status. According to the most recent Majuro plots for the 4 fished species, the long-term GEF support to WCPFC and the Pacific SIDS and LDCs so far has managed (just) to achieve this so this core indicator is not currently applicable. However, with increasing impacts and demands and the expected impacts from climate change, maintaining this status quo represents a continued and immediate concern requiring ongoing support. The focus of the fisheries management now needs to be management in the face of climate change effects and impacts. Annual sustainable catch is currently placed at 2,539,950 mt. (based on the August 2018 Overview of Tuna Fisheries in the WCPO by its Technical Compliance Committee).

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Female	10,853			
Male	11,404			
Total	22257	0	0	0

Part II. Project Justification

1a. Project Description

1a. *Project Description.*

1. THE GLOBAL ENVIRONMENTAL PROBLEMS THAT NEED TO BE ADDRESSED

Currently it is estimated that 31 % of marine fish stocks are considered overfished and 58 % are considered fully-fished, meaning that 90 % of stocks have limited or no potential for increasing production. Unsustainable fishing is further compounded by high levels of illegal, underreported and unregulated fishing with economic losses ranging from USD 10 to 25 billion annually^[1]. The oceans are an essential source of protein for 3.1 billion people that depend on the oceans as their primary source of protein. The GEF, in recognition of the vital role fisheries and fisheries practices play in impacting ecosystems integrity, eliminating hunger, promoting health, and reducing poverty, has committed to support investments targeting sustainable fishing practices and associated policy processes both at the national and regional levels.

Highly migratory marine species are becoming among the world's most threatened marine species due to the diverse range of pressures they encounter and as a result of the high commercial value of many of these species. Highly migratory species have a wide geographic distribution, both inside and outside countries' 200 nautical mile zones, and undertake migrations of significant but variable distances across oceans for feeding or reproduction. They are pelagic species, which means they do not live near the sea floor, and mostly live in the open ocean, although they may spend part of their life cycle in nearshore waters. They are legally defined as those listed in Annex 1 of UNCLOS. They include tuna and tuna-like species, oceanic sharks, pomfrets, sauries and dolphinfish. They are large, open-ocean, predatory fishes that swim across great distances, transiting country boundaries and, in some cases, entire oceans. Cooperation among coastal countries is therefore necessary to manage these fisheries. Regional fisheries management organizations govern highly migratory fisheries for ocean basins.

Tuna underpin the ecosystems and economies where they live. They are an apex predator and consume a wide variety of other fish, from squid to herring to sardines. This keeps the populations of other species healthy and balanced. Tuna are also among the most commercially valuable fish on the planet and support artisanal and industrial fishing alike. They are a plentiful and affordable source of protein for people around the world. Driven by this demand and high prices in sushi markets, fishers use even more refined techniques to catch tuna^[2].

Tuna are fished, traded, processed and consumed globally. The industrial fleets often transfer their operations from one ocean to another in response to changing conditions either in fish availability, markets, and/or fishing regulations, which makes it difficult to manage fishing capacity solely on a regional scale. In addition, the fish caught are frequently transported to other parts of the world for processing. Also, substantial IUU fishing, which occurs in all oceans in spite of recent efforts to control it, significantly complicates the management of the fisheries for tunas. Globally, 21% of highly migratory tuna and tuna-like species are moderately exploited, 50% fully exploited, 21% overexploited and 8% depleted [3].

2. The Baseline Scenario and associated projects in the Western and Central Pacific Fisheries Convention Area

The Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC Convention) entered into force on 19 June 2004. This further established the Western and Central Pacific Fisheries Commission (WCPFC). The WCPFC Convention draws on many of the provisions of the UN Fish Stocks Agreement (UNFSA) while, at the same time, reflecting the special political, socio-economic, geographical and environmental characteristics of the WCPO region. GEF funding support through UNDP was instrumental in assisting the negotiations that brought this Convention into being.

This Convention was the first international fisheries agreement to be adopted since the 1995 adoption of the United Nations Fish Stocks Agreement. As such, it incorporates key provisions of the Fish Stocks Agreement, including the principle of compatibility and the need to take into consideration the special requirements of developing States. The Convention was also the first to adopt its own specific High Seas Boarding and Inspection procedures, based on the UN Fish Stocks Agreement, and was also the first to adopt the Precautionary Approach. It also recognised and developed a mechanism to support the participation of Territories in the Commission, in their own right.

The 2018 Summary Report to the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific notes that the Commission's monitoring, control and surveillance tools are effectively established and monitoring both by individual Members at the national level and by the Commission Secretariat in its MCS programs is ongoing. However, the Summary Report also noted that the absence at that time of a Strategic Plan for the Commission made reporting on the accomplishment of strategic priorities of the Commission difficult. The Report further noted the combined challenges of collapsing fisheries resulting from increasing fishing effort, environmental impacts, and climate change and stated that these challenges threaten the integrity of the oceans and marine ecosystems, and potentially the survival of Pacific Islanders. Projected environmental changes in the tropical Pacific are considered to be some of the most severe in the global ocean according to the IPCC, especially when these changes are considered in the context of the low natural climate variability in this region[4]

Several of the Commission Members stated that climate change is the greatest challenge facing all of them, and particularly WCPFC's SIDS members, both with respect to the future of their fisheries and their long-term survival. For many FFA member countries, it was agreed that the impacts of climate change are all too real, and it is essential that the Commission does everything it can, both to reduce its own carbon footprint and to factor climate change impacts into the ongoing and future management of the key tuna stocks that are so critical to the future wellbeing of FFA members.

GEF has supported a number of initiatives within the region over the last two decades. In 1997, UNDP and GEF undertook the South Pacific International Waters Strategic Action Programme formulation pilot project. This included the preparation of a Strategic Action Programme (SAP) and the formulation of a project document covering the Oceanic Fisheries Management (OFM) and the Integrated Coastal and Watershed Management (ICWM) components. The original SAP and its implementation focused on the entire LME on a ridge-to-reef basis and out to (and including) the high seas. Targeted actions within the South Pacific were carried out under two complementary consultative project approaches i) An Integrated Coastal and Watershed Management (ICWM) Component and ii) an Oceanic Fisheries Management (OFM) Component. The latter focused predominantly on preparation for and participation in the MHLCS (Multilateral High-Level Conference) for development of a Tuna Convention and the PrepCons together with scientific research for management.

A follow-up project then focused on two important objectives to support the newly-adopted Convention An Information and Knowledge objective - to improve understanding of the transboundary oceanic fish resources and related features of the Western and Central Pacific Warm Pool Large Marine Ecosystem and a Governance objective - to create new regional institutional arrangements and reform, realign and strengthen national arrangements for conservation and management of transboundary oceanic fishery resources.

The Terminal Evaluation of this Project noted that the Project's two greatest achievements were A. facilitating the establishment of the WCPFC and ensuring that Pacific Small Island Developing States are able to contribute fully to the deliberations of the Commission and to meet their membership obligations (in terms of legislation, fishery policies, and monitoring, control and surveillance systems) and B. the capacity building elements of the project which have helped to give Pacific SIDS' fishery representatives the enhanced confidence to present and negotiate their positions at Commission meetings, to be actively involved in the technical meetings of the Commission, and to sit as equals at the same table as Distant Water Fishing Nations (DWFNs).

The latest Ocean Fisheries Management Project (funded by GEF and jointly implemented by UNDP and FAO through the Forum Fisheries Agency) has been focusing on implementation of global and regional oceanic fisheries conventions and related instruments in the Pacific small island developing states (SIDS) with the overall aim of providing support to Pacific SIDS in meeting their obligations to implement and effectively enforce global, regional and sub-regional arrangements for the conservation and management of transboundary oceanic fisheries thereby increasing sustainable benefits derived from these fisheries. This went through a Mid-Term Review (MTR) in 2018. One of the major recommendations of this review was "that the IAs and executing partners commence a discussion towards development of a successor project targeting emerging issues/risks to Pacific fisheries. The Review specifically notes the emerging high priority that now needs to be placed on work addressing climate change impacts on fisheries. This is one of a number of issues that are emerging with greater prominence in the fisheries sector and includes the importance of MCS for maintaining sustainability and value in Pacific fisheries.

Following the MTR, the Ocean Fisheries Management Project II commissioned a Transboundary Diagnostic Analysis to replace and update the somewhat superficial work undertaken in the 1990s. This highly detailed TDA^[5] followed the now widely accepted approach of defining the root causes of the main environmental and socioeconomic impacts throughout the western and central Pacific ocean area and its offshore fishery. This TDA was then translated into a policy document, the **Strategic Action Programme for the Sustainable Management of Living Oceanic Resources by the Small Island Developing States of the Western and Central Pacific** (SAP)⁵. This document constitutes a declaration of commitment by the signatory countries (the Small Island Developing States and Forum Fisheries Agency Member States of the Western and Central Pacific Fisheries Convention Area) to participate in the implementation of a Strategic

Action Programme for the Sustainable Management of Living Oceanic Resources by the Small Island Developing States of the Western and Central Pacific and to cooperate between themselves and with other relevant agencies and bodies in delivering the Objectives and Outcomes defined in the Strategic Action Programme as they apply to each of the SIDS and LDCs in the region.

The TDA and SAP have sequentially identified and updated the outstanding areas of concern in the region and have further identified the various strategies, outcomes and actions to address these. The TDA notes that the main Tuna Fishery in WCPF Area is currently deemed sustainable and within acceptable catch limits. However, this could alter significantly into an (economically) unsustainable scenario A. if current management practices are not further improved in line with current (and predicted) fishing pressures and B. through recognition of and adaptation to the impacts already being felt from climate change.

The TDA lists the priority actions necessary to address the causes of threats and impacts on these transboundary oceanic fisheries. The top three priority areas that were required to be addressed through a Strategic Action Programme included:

1. Remaining weaknesses in management and compliance, both 'in-zone' and on the high seas
2. Impacts from climate change and associated concerns due to excessive carbon emissions and lack of adopted global mitigation procedures
3. Inadequate application of an ecosystem-based management approach

The Vision Statement from the SAP aims for "A healthy, well-managed and valued ecosystem supporting the sustainable use of living marine resources which provide food and economic security, resilience and benefits to the SIDS in the WCPF Convention Area" while the overall goals of this SAP that would aim to deliver on this vision statement include:

1. Sustainability of living marine resources through an ecosystem-based management approach
2. Food Security for the region through a well-managed and sustainable fishery
3. Economic Security for the region through maintaining and improving the value of living marine resources and the associated long-term assurance of employment and livelihoods within the community
4. Pursuit and realisation of the relevant targets and indicators for the UN Sustainable Development Goal 14 which support 1-3 above

This vision and the subsequent goals can only be realised if the Priority Actions identified through the TDA can be delivered through the SAP. Consequently, the SAP lists all of these priority areas within its Strategies, Outcomes and Actions

The goals identified in the SAP align with the goals of the Regional Road Map for Sustainable Pacific Fisheries which was endorsed by Pacific Leaders in 2015 and which are used as a basis of an annual briefing to the Pacific Island Forum on the status of the Pacific Islands tuna fishery.

In 26 June 2019, this new Strategic Action Programme was formally adopted by the Fisheries Ministers attending the 16th Forum Fisheries Committee Ministerial Meeting in Pohnpei, Federated States of Micronesia with the aim of implementing this clear road-map for taking action to address the shared transboundary threats (and their causes) to the oceanic living resources, most specifically, the fisheries of the Western and Central Pacific Fisheries Convention Area.

One other major initiative that also relates directly to fisheries management in this region include the FAO GEF Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the Areas Beyond National Jurisdiction (ABNJ) Project. This project started Implementation in 2013. Its overall objective is to achieve efficiency and sustainability in tuna production and biodiversity conservation in the ABNJ (i.e. outside national jurisdictions /EEZs), through the systematic application of an ecosystem approach in tuna fisheries for: (i) supporting the use of sustainable and efficient fisheries management and fishing practices by the stakeholders of the tuna resources, (ii) reducing illegal, unreported and unregulated [IUU] fishing, and (iii) mitigating adverse impacts of bycatch on biodiversity. WCPFC, FFA and SPC are all Executing Agencies for this project (along with other bodies and institutions) as well as providing co-funding and 'partnership' input for a number of the activities being undertaken by the Project.

The objectives of Pew's Global Tuna Conservation Programme are to promote the sustainability of tuna fisheries in the Atlantic and Pacific, improve international and regional agreements, and increase the sustainability of the oceans' tuna stocks. Pew's goals for tuna in the Pacific include to:

- Conserve bigeye, yellowfin, skipjack, and Pacific bluefin tuna through strong conservation and management measures adopted and implemented by WCPFC and IATTC.
- Agree and implement harvest strategies for each tuna stock managed by WCPFC and IATTC, which include science-based catch limits or equally effective fishing effort controls.
- Minimize the impacts of destructive fishing gears by:
 - Ensuring the use of Fish Aggregation Devices (FADs) by industrial fishing fleets is regulated and managed to support the long-term sustainability of the tropical tunas and the marine ecosystem.
 - Strengthening the management and monitoring of longline vessel and transshipment operations to improve scientific data collection and ensure compliance with WCPFC and IATTC regulations, including by increasing the level of observer coverage, through a combination of human observers and electronic monitoring,
- Improve transparency and accountability of the WCPFC and IATTC

Pew also runs a Global Campaign to End Illegal Fishing the object of which is to is to work with stakeholders to build and implement a global system to detect, deter and combat illegal fishing. We do this through advocating for the adoption and implementation of regulations, policies, and tools to improve information sharing, monitoring activity, and prosecuting illicit operators. Pew has been closely involved with the OFMP II project and with the work of FFA and SPC.

The WWF Pacific Programme Office focuses on three main activities related to OFM, FFA and the work of SPC through three separate projects:

1. Sustainable Fisheries

- Promoting fishery certification, namely Marine Stewardship Council (MSC), to ensure that wild fisheries are implementing high standards of management.
- Raising consumer awareness of oceanic fishery conservation issues and promoting sustainable sourcing by major purchasers.
- Securing commitments from major retailers to sustainably source their seafood.

2. WCPFC Advocacy

WWF was given the responsibility by the Oceanic Fisheries Management Programme and the Forum Fisheries Agency (FFA) to carry out awareness and advocacy on the Western and Central Pacific Fisheries Commission and tuna fisheries issues in the Pacific Islands region by:

- Increasing the number of environmental NGOs who include oceanic fisheries in their mandate and participate in oceanic fisheries management processes.
- Engaging civil society organisations and environmental NGOs with oceanic fisheries management issues.
- Raising awareness of the link between developmental and economic priorities and sustainable fisheries management.

3. Bycatch Reduction

The bycatch project aims to support the implementation of fishing best practices to reduce bycatch in Fiji's long line and purse seine tuna fishing industries through the cultivation of strategic working partnerships with the fishing industry and policy advocacy and engagement on bycatch mitigation with the Fiji Department of Fisheries. The focal bycatch species are juvenile bigeye and yellowfin tunas in purse seine fishing, as well as turtles and sharks in longline fishing.

One of the continuous and closest collaborators with the GEF OFM projects and their implementing agencies over the years has been the Secretariat of the Pacific Community (SPC) and its Oceanic Fisheries Programme (OFP) which is part of the Fisheries, Aquaculture and Marine Ecosystems (FAME) Division of SPC. The SPC is a non-political, technical assistance and research body and performs a consultative and advisory role. All 22 island countries and territories, with varying political status from colony to sovereign republic, are full members, along with the four remaining founder members: Australia, France, New Zealand and the United States of America (see further below under Coordination)

3. THE OUTSTANDING ISSUES AND CAUSAL CHAIN ANALYSIS

Some 55-60% of the world's annual tuna harvest comes from the Western and Central Pacific Ocean region. The tuna fisheries of the WCPO are based on four key species– skipjack (*Katsuwonus pelamis*), yellowfin (*Thunnus albacares*), bigeye (*Thunnus obesus*) and albacore (*Thunnus alalunga*) tuna. The most productive area in the WCPO for tuna lies in the equatorial zone (10°N-10°S) where around 80% of all tuna landed in 2014 from the WCPO were caught (SPC data) and which is also where most of the Pacific Small Islands Developing States and Least Developed Countries lie. The health of these International Waters is critical to the communities and economies of the Pacific Islands. Almost all of the land area of the Pacific SIDS is coastal in character and almost all of the people of the region live and work in ways that are dependent on healthy International Waters.

Figures from the Seas Around Us suggest that the percentage of stocks that are over-exploited in this region was 31% in 2014. However, this only captures the data for skipjack (*Katsuwonus pelamis*) and not the other three *Thunnus* species. It also includes other species such as squid, jellyfish, mackerel, sardine, jacks and pompano, so this cannot be considered a true reflection of the status of the main pelagic commercial stocks and other highly migratory species and would certainly not be accurate for 2019.

The Forum Fisheries Agency which facilitates regional cooperation and coordination on fisheries policies within the Pacific Islands produces an annual Tuna Report Card. The 2018 Report Card and its Majuro plot shows that all four major tuna stocks remain just inside the healthy and sustainable area but warns that there is a continuing need for current management arrangements to be strengthened or supplemented to maintain this positive stock status. It recommends that this situation is unlikely to continue for albacore tuna without the implementation of measures to control effort and catch in the fishery and that other species that will require further management include southwest Pacific striped marlin and western and central pacific striped marlin.

The RFMO (Western and Central Pacific Fisheries Commission) for this region produces annual reports on various aspects of the fisheries. The Summary Report from the December 2018 meeting of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the WCP Ocean gives an overview of stock status. It notes that spawning biomass depletion was the metric for denoting stock status, and that there had been a long-term declining trend for all species. Three stocks are not near the 20% Limit Reference Point (LRP), while yellowfin is starting to approach that LRP and will need close monitoring skipjack is trending close to a 50% interim Target Reference Point (TRP).

TRP and LRP are reference points used in an overall Harvest Strategy which the WCPFC are attempting to adopt throughout the region. The LRP defines the danger zone, the point beyond which fishing is no longer considered sustainable. The TRP defines the ideal fishery state and management measures should be designed in such a manner as to consistently achieve this state. These are pre-adopted reference points and are supposed to trigger immediate and previously negotiated and agreed management responses when reached.

Taken as a whole, the above information strongly supports the evidence that interventions in this region over the last two decades have thinly managed to maintain a sustainable fishery for these highly migratory species, the only fishery so far displaying such a trend. However, with the growing demand for these resources with population growth alongside the increasing threats from climate change impacts, the region will need to commit ever more resources and political will to maintaining this and the SIDS and LDCS within this region in particular will need increased support to ensure that the resources in their waters and their food security are not jeopardized by the more developed commercial fishing nations. As the only RFMO showing a just-sustainable fishery for highly migratory species it is imperative to try to maintain this and to use the lessons from this area for addressing climate change impacts on fisheries, food security, livelihoods and the need for greater capacity and skills within the regional fisheries to maintain and protect such stocks.

The TDA has identified what the root causes and concerns are that need to be addressed and these have been confirmed formally through the SAP along with proposed strategies, outcomes and activities required to mitigate or remove such causes and drivers. Annex 4 provides the Causal Chain Analysis arising from the TDA which will be used to develop the Theory of Change in the Full Project Document. The Causal Chain Analysis identified the principle root causes of environmental and socioeconomic impacts related to the oceanic fisheries in the WCPFC region as:

A. Weaknesses in management and compliance, both 'in-zone' and on the high seas

The adoption of the Western and Central Pacific Fisheries Convention, its Commission and the various organs and technical bodies supporting the Commission has provided an enormous step forward in maintaining a close-to-sustainable fishery in the region. Although the fisheries management strategies have improved significantly under the Convention and the Commission, they are still perceived to be too *ad hoc*, involving almost annual renegotiations which can be vulnerable to failure to reach agreement among competing interests. This situation could easily deteriorate into a lack of economic sustainability while threatening food security and livelihoods. To confirm and ensure future sustainability there needs to be substantially more development and adoption of strategies and controls/rules of how fishing patterns will be adjusted to respond to changes in stock status. WCPFC has recently begun to implement a "Harvest Strategy Approach" to management, which in effect implements an agreed and scientifically tested rule-based procedure whereby pre-programmed management responses to new scientific data and assessments are agreed in advance and implemented to achieve management objectives. If successful, this approach will provide the sort of adaptive management strategy called for in the 2018 TDA. However, there have been on-going delays in the adoption of such strategies due to challenges in building consensus between all parties on longer term management targets and decision rules.

In the context of the different fishing approaches and associated gear, the purse seine fisheries management is in relatively good shape with more rigorous controls having been introduced at the sub-regional level including the successful vessel-day schemes. But sustainability within this fishery and in the context of its impacts on other components of the ecosystem (e.g. bycatch and non-target species) needs more effort through improvements in the management and tracking of fish aggregating devices (FADs). Longline management is a major concern and priority. This is much harder to achieve than in the purse seine fishery as the latter are highly dependent on access to EEZs while longline fishing can exist within the high seas areas. Furthermore, there is very limited observer presence on the longline fleets or on the carrier vessels into which they tranship. This consequently means that there is inadequate information and reporting to support effective stock assessment and subsequent management decisions. Improvements in monitoring are essential to improving the management of this fishery through enabling better accounting of catch and effort to support harvest strategy process. Modern technology may well be a central part of the solution by way of E-Monitoring and E-Reporting

The tuna fisheries of the WCPO also catch a range of other species in association with the four main target species. Some of the associated species (bycatch) such as billfishes and sharks are of commercial value (by-products), while many others are discarded. There are also incidents of the capture of species of ecological and/or social significance (protected species), including marine mammals, sea birds, sea turtles and some species of shark (e.g. whale sharks). Information concerning the catch composition of the main tuna fisheries in the WCPO comes largely from the various observer programmes operating in the region. Non-target species composition varies between purse-seine and longline with higher observations of sharks and a higher proportion of non-target species being taken on longline sets in comparison to purse-seine sets (the latter being dominated by surface teleosts such as rainbow runner, silky shark, oceanic triggerfish, mackerel scad and mahi mahi). Non-target species account for just under 1% of the observed purse-seine catch, whereas for the longline fleets, the available data show that non-target species account for about half of the observed catch, with sharks accounting for close to 30%. One important concern is that discarded bycatch (e.g. from longliners) frequently goes unrecorded although there are almost certainly high mortality rates. The Western and Central Pacific Fisheries Commission (WCPFC) is responsible not just for managing the catch of target species but also non-target species. There are measures in place that support monitoring and reporting in relevant areas such as catch size and species, bycatch, etc. but these are far from effective across the region (both in-zone and high seas) and for the different fishing efforts (longline and purse seine primarily).

Other issues that need to be addressed throughout the region include the incidence of IUU fishing. It is extremely difficult to accurately estimate the level of IUU fishing in the region and IUU on the high seas is a major problem. It is fair to note that illegal fishing has decreased significantly within the region but misreporting of catches remains a very real issue. In 2019, FFA was announced as the winner of the MCS Network Stop IUU Fishing Awards and has also recently commenced implementation of its new MCS strategy. The FFA Integrated Monitoring, Control and Surveillance (MCS) Framework is an innovative model that uses a foundation of regional cooperation across 17 Pacific nations for combatting IUU fishing in the Convention region. This Framework is effectively using regional cooperation and high-tech support from partners in Australia, New Zealand, United States and France to prevent and deter IUU fishing within the world's largest tuna fishery. Unlike anywhere else in the world, it has successfully reduced illegal fishing to where it now only a minor issue, and our MCS efforts are now effectively focussing on the remaining concerns related to reducing unreported or misreported fishing.

B. Impacts from climate change and associated concerns due to excessive carbon emissions and lack of adopted global mitigation procedures

The region is also growing continually more concerned about the effects of climate change on the distribution and resilience of tuna stocks. The various species of tuna are expected to react in different manners to the various threats from climate change such as sea temperature changes, acidification, upwelling and alterations in productivity and even ocean currents. Scientific partners to the WCPF Commission and its main management and scientific support bodies (SPC and FFA) have used the SEAPODYM model to attempt to understand the impacts of both climate change and associated acidification on Pacific yellowfin, skipjack, bigeye and albacore tuna. Tuna fisheries in the Western Central Pacific Ocean (WCPO) are currently affected by inter-annual and decadal variability in ocean conditions and are increasingly expected to be affected by rising ocean temperatures and reduced primary and secondary production due to weakening of currents and nutrient transport. These long-term climate changes are expected to reduce the suitability of tuna spawning and forage habitats over vast areas of the tropical Pacific Ocean. The response of the four target tuna species in the WCPO to these changes vary depending on species and life stage. Concentrations of skipjack, bigeye and albacore tuna are likely to be located further eastward than in the past and yellowfin and skipjack will also move poleward due to the warming of surface waters and the decline in primary productivity in the western Pacific with the potential disappearance of these species altogether from the western warm pool region where novel climatic conditions emerge. Associated sea level rise threatens the jurisdictional boundaries for the PCITs which in turn would disrupt fisheries and ecosystem management arrangements and mechanisms, potentially creating more high seas areas while reducing the area of exclusive economic control for individual SIDS. All of this will greatly affect small PICs that are heavily reliant on tuna for economic and food security potentially leading to a number of serious socioeconomic impacts on the PCITs and the potential collapse of a US\$4 billion fishing industry.

C. Inadequate application of ecosystem-based management

The management strategies still continue to focus too heavily on single-species assessment and management. Not only are the various target species assessed and considered independently but non-target bycatch species are not integrated into the management assessment and decision-making process. There is a clear need for a more enhanced ecosystem approach to the fisheries and ecosystem-based management that not only considers all of the relevant biological components of the ecosystem but also coordinates more closely with other scientific inputs in terms of oceanographic and socioeconomic data. To understand the effect of environmental conditions (such as El Niño), climate change and the impact of fisheries on the different components of the ecosystem, it is necessary to acquire a better understanding of the functioning of the ecosystem. On a positive note, a spatial ecosystem and population dynamics model (SEAPODYM), which was initially developed for investigating physical-biological interactions between tuna populations and the pelagic ecosystem of the Pacific Ocean, is now being used to explore the underlying mechanisms by which climate and environmental variability affect the pelagic ecosystem and tuna populations. Ecopath with Ecosim, is a complementary, biodynamic trophic modelling approach, based on the requirement that the biomass of the ecosystem is balanced and consequently the effects of altered biomass production or harvest on the entire ecosystem assemblage can be explored. However, these models are only as good as the accuracy and coverage of the data that is input and the conclusions arising need to be put into the context of management options and proactive and adaptive management guidelines, including advising the Harvest Strategies.

D. Effects of coastal impacts on the offshore oceanic ecosystem

Although the fishery itself may be primarily oceanic in terms of the economic value, the linkage and connectivity back to inshore and coastal activities and impacts is also an important component to be considered within an adaptive ecosystem-based management approach. Land-based and coastal activities may have negative impacts on reef organisms and nearshore prey species that form part of the food-chain as tuna forage. Also, the loss of food security at the coastal level as a result of coastal habitat degradation now means that the offshore fisheries component will become increasingly more important to the island communities. The importance of connectivity between the high seas and the EEZ is becoming an area of concern and targeted research globally. It is becoming scientifically obvious that these water bodies do not exist in isolation and that marine ecosystems are interconnected by ocean currents and the movement of migratory species. What happens in the high seas can therefore cause impacts in EEZs and territorial waters. The LDCs and SIDS of the Pacific Ocean depend heavily on marine resources. By highlighting which regions of the high sea are most connected to coastal LDCs and other developing coastal states via ocean currents, management processes for and in the high seas can be developed and designed to protect the countries' interests and rights.

E. Discharges and waste disposal at sea and from land-based sources

Despite the various international treaties and conventions relating to waste discharges at sea, the impact from waste materials continues to grow (discarded fishing gear, lost FADs, etc.) other pollutants such as methyl mercury and micro-plastics are also presenting a threat to the ecosystem and associated fishery. There is a need for a more detailed assessment of the impacts from waste material and discharges on the oceanic ecosystem leading to recommendations for mitigation. A strategy for preventing the loss of FADs and other fishing gear and mitigating/reducing the impacts where such losses may occur would also be a significant step toward reducing the impacts from these lost fishing gear, through accurate and long-lasting tracking that remains active. Improvements in compliance with international, legally-binding agreements to prevent pollution in the oceans that can impact on the WPWP LME and its fisheries would also alleviate the impacts from pollution throughout the region

4. The Proposed Alternative Scenario

Based upon the root causes identified, three priority actionable areas were identified by the TDA in order to address the causes of the threats and impacts on the transboundary oceanic fisheries in the WCPFC area and the associated livelihoods and well-being of its SIDS and LDCs.

1. Weaknesses in management and compliance, both 'in-zone' and on the high seas
2. Impacts from climate change on ecosystem health and distribution of the target stocks in this part of the ocean resulting from warming, stratification, nutrient reduction, acidification and deoxygenation
3. Inadequate application of ecosystem-based management

The SAP itself summarises the proposed Objectives and Strategies to be adopted by the countries and the region for addressing these as:

OBJECTIVE A:

Improvements and Strengthening of Management Strategies and Mechanisms for the Ecosystem and Its Living Marine Resources

Strategy A.1 Improvements in existing management approaches

Strategy A.2: New management approaches

OBJECTIVE B:

Strengthening and expanding the scientific knowledge base to support improved understanding and management of the ecosystem and its living marine resources in the WCPFC area

Strategy B.1: improvements in existing approaches and methodologies to enhance the existing scientific knowledge base, especially in the context of climate-induced changes and impacts

Strategy B.2: new data collection, interpretation and handling strategies to support adaptive management

OBJECTIVE C: Capacity Building and Training for Improved Management of the Ecosystem and its Living Marine Resources in the WCPFC Area

Strategy C.1: capacity building and training to support improved regional and national management and administration

Strategy C.2: capacity building and training for improved monitoring, enforcement and compliance

In order to address the root causes of the threats and potential impacts as identified by the TDA and to translate the proposed SAP strategies more specifically into an appropriate set of GEF Project Components, the following approach is proposed for further development by FFA, the WCPF Commission and its members and partners.

Component 1: Implementation of a proactive and adaptive ecosystem-based approach to regional fisheries management

Component 1 will focus one of its Outcomes on the need for further improvement and strengthening of management, both 'in-zone' (within the EEZ) and on the high seas. This applies to both purse-seining and long-lining but with a strong emphasis on the latter for which management strategies and controls in particular need to be strengthened, adopted, implemented and enforced. This will include adopting mechanisms for enhanced monitoring and reporting, tracking shipments, expansion of zone-based (VDS) management and adoption of improved port state measures into legislation. In the context of the latter, actions agreed and endorsed through the SAP include i) stricter regulation and enforcement over transshipment on high seas including more rigorous 'policing' of the exemption clause, and ii) mandatory offloading in ports. At the national level, member SIDS and LDCs will be supported in more timely

development and early implementation of their national Tuna Management Plans. Improvements in eco-labeling and more stringent controls over offloading and transshipment as well as other port measures will be promoted. Adaptive management measures generally will be strengthened at regional and national levels with prioritization given to A. adaptation to climate change and its impacts on fisheries and ecosystems, B. Adoption of harvest strategies with associated targets/triggers. A further Outcome under Component 1 will be the implementation of training programmes for fisheries and ecosystem management staff. These will be 'rolling' (i.e. repeated) programmes to account for staff turn-over and promotion. The emphasis of this training will be on supporting and sustaining the delivery in Outcome 1 for improved management. Furthermore, training and assistance will be provided for the development and promotion of domestic fisheries development and establishing local business ventures related to the offshore fishery with an emphasis on adapting livelihoods to climate change impacts on fisheries. The final Output in this Component will support an operational Stakeholder and Partnership Engagement Strategy for the project lifetime and will define the long-term support for this process beyond the project lifetime. Through this, partnerships will be developed or enhanced with international-recognised institutions providing tertiary level fisheries management courses to include supervision of students and trainees as well as longer term mentoring. A primary cross-cutting focus for all of these outcomes and their outputs will be on using improved knowledge and developing resilience toward climate change impacts on the fisheries.

Outcome 1.1

Adaptive and sustainable ecosystem-based management of fisheries and associated natural resources with an emphasis on response to climate change impacts and focusing on the benefit to the PICs

Outcome 1.2

Improved capacity and expertise for overall fisheries management at both the national and regional level as well as to expand opportunities for PICs engagement in fisheries markets

Component 2: Innovative technology development and implementation to support the adaptive ecosystem-based approach to regional fisheries management

Component 2 will support two main Outcomes that make use of improved or advanced technologies to support better management and MCS practices. The first Outcome will address the need for strengthening and expanding effective on-board and port state level monitoring, particularly through the use of electronic monitoring and reporting systems. It will further promote more effective on-board catch documentation through the establishment of workable and pragmatic Standards and Operational Procedures and electronic surveillance and subsequent interdiction. The primary objective of this Outcome will be the reduction/elimination of IUU within the WCPFC region. The second Outcome will focus on improving the management of FADs through better control of

deployment and tracking and through more effective use of acoustic data to assist in more efficient sets with less by-catch and fewer immature target species. Improved tracking will also reduce the loss of such fishing gear with otherwise consequent impacts from ghost-fishing, entanglement and potential introduction of plastic waste into the marine environment. This Outcome will also explore other possible financial incentives such as FAD 'deposit' schemes.

Outcome 2.1

Improved on-board monitoring of catch, bycatch and movement of catch (transshipping and landing), MCS and data analysis to significantly reduce IUU fishing

Outcome 2.2

Greater monitoring and control of FADs to optimise returns from target stocks and reduce bycatch and other ecological impacts. The activities and outputs from this Outcome will prioritise producing bio-degradable FADs and eliminating bycatch at the FAD through the use of emerging technologies and alternative methodologies such as the use of LED lights on FADs. Generally, this Outcome will aim to enhance collaboration with relevant stakeholders (including Private sector) in order to promote the design, manufacture and marketing/use of FADs that minimize impacts on non-target species (e.g. through avoiding entanglement)

Component 3: A regional strategy for improved community subsistence and resilience to climate change effects on the ecology and fisheries of the region

A first Outcome from this Component will support and promote the implementation of a Regional Programme to expand the knowledge base and identify changes in the ecosystem and their effects on tuna stock distribution including climate change impacts and connectivity across high seas and EEZ. This will be linked into Component 4 and its knowledge management outcome, particularly in the context of a possible future Pacific Community Centre for Ocean Science. It will also support improvements in data modelling (particularly in relation to measuring and tracking climate-induced changes) and develop mechanisms to feed this information into a peer-review process for identifying and providing advice and guidance on the impacts on PICs at the socioeconomic level (including adaptive management guidelines and policy briefs). Outcome 2 under this Component will explore and support/promote the feasible options for improving access to pelagic food resources for local communities and strengthening food security in relation to climate change impacts, such as nearshore FAD deployment, offloading of small tuna and non-target by-catch food-fish, cheaper access to canned tuna, etc.

Outcome 3.1

Strengthened data capture, modelling and assessment feeding into management responses to climate-induced impacts on fisheries

Outcome 3.2

New strategies in place to respond to socioeconomic changes and food security issues related to climate change (i.e. improving community subsistence and small-scale commercial fisheries)

Component 4: Knowledge Management, Project Monitoring and Evaluation

This Component will focus on the need to both manage the project delivery itself and to manage the knowledge, best lessons and practices and to get this information out to a broader audience of stakeholders for better advantage. The Component will expressly deal with knowledge management and communications awareness. This will aim to promote consumer awareness of the status of fisheries and eco-labelling of fish and seafood products from certified fisheries, along with robust systems for tracing fish products to ensure they originate from certified fisheries and the need for more selective marketing and purchase in relation to sustainability of the stocks and the ecosystem. The success of the model used by the PNA will be captured and replicated where appropriate. This Outcome will also provide support to strengthen the 'clearing house' role of the newly-formed Pacific Community Centre for Ocean Science in coordinating research activities to provide a strong foundation for an adaptive management process which would proactively review knowledge and information coming in with a view to advising and guiding management alignment and policy considerations. Inputs from the PCCOS and from FAME-SPC and other technical and scientific institutes which will be fundamental to making adaptive management decisions and for monitoring the harvest strategies and their targets. It will further assist with strengthening the coordination with related global institutions. It will also aim to capture the Best Lessons and Practice, not only from this current project as it progresses but also from the previous OFM projects and GEF supported initiatives with a view to recommending replication as appropriate in other RFMOs. An allocation of the funding will be focused on interacting with IW:LEARN and supporting related activities.

Outcome 4.1

Knowledge Management, Communication and Awareness implemented and outreaching to WCPFC stakeholders as well as the global community

N.B. An additional Outcome in the final ProDoc will define the Project Management, Monitoring and Evaluation and will aim to ensure effective management and monitoring of deliverables and evaluation of effectiveness and efficiency (as well as sustainability) through standard M&E project procedures

5. Alignment with the GEF Focal Area

The GEF 7 Programming Directions for International Water have identified three main objectives

Objective 1 - Strengthening the Blue Economy. Three areas of strategic action are identified as:

- 1) sustaining healthy coastal and marine ecosystems;
- 2) catalyzing sustainable fisheries management; and,
- 3) addressing pollution reduction in marine environments.

This project will address Strategic Action 1 through the following types of investment support:

- Develop and implement environmentally sustainable Blue Economy strategies;
- Mainstream marine area-based management and spatial tools in regional entities;
- Formulate and formalize cooperative legal and institutional frameworks built on TDAs/SAPs approach, towards addressing the multiple anthropogenic pressures, including climate related effects in the Large Marine Ecosystems;
- Foster collaboration among LMEs, Regional Seas conventions and Regional Fisheries Management Organizations (RFMOs) to protect and restore these key habitats.
- Engage with national, regional and global stakeholders to increase collaboration and cross support to investments and processes, including through IW-LEARN; and,

It will address Strategic Action 2 as follows:

- Policy reforms to end IUU, overfishing and sustainably manage marine capture fisheries.
- Implementation of market mechanisms to support sustainable fisheries value chains.
- Strengthening and creating policy frameworks, including working with countries to eliminate harmful incentive structures;

Objective 2. Improve management in the Areas Beyond National Jurisdiction (ABNJ)

By incorporating selected West & Central Pacific high seas areas in the overall WCP sustainable tuna management effort, the project will support GEF7 Objective 2, but will not be formally part of the anticipated GEF7 ABNJ program currently under discussion.

By incorporating selected pockets of high seas in the overall WCP tuna management effort, the project will support GEF7 Objective 2, although it would not in itself be formally part of the anticipated GEF7 ABNJ program currently under development.

The project also supports and links to several Sustainable Development Goals (SDG), including:

Under the Sustainable Development Goal 13: Take Urgent Action to Combat Climate Change and its Impacts

Target 13.b states 'Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

Indicator 13.b.1: Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities

Under the Sustainable Development Goal 14: - To Conserve and Sustainably Use the oceans, Seas and Marine Resources:

Target 4 states that 'By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

The indicator for that Target is a 'Proportion of fish stocks are brought back within biologically sustainable levels'.

Target 7 states that 'By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.

The indicator for that Target includes 'Sustainable fisheries as a percentage of GDP in Small Island Developing States and Least Developed Countries'.

Since the WCPFC and therefore the project is directly supporting implementation of the UN FSA, the project also supports Target 14.c 'Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want"'.

The indicator for 14.c is 'Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources'

6. Incremental Cost Reasoning and Expected Contributions and Co-Financing

The Strategic Action Programme provides a solid, long-term commitment toward the sustainable management of highly transboundary living oceanic resources by the Small Island Developing States of the Western and Central Pacific. This now needs to be implemented in a timely and effective manner in order to deliver on this sustainability. If the vision and objectives of this SAP cannot be delivered through the proposed activities and through the aforementioned Outcomes, then there is a very strong possibility that this currently sustainable oceanic fishery could slide inexorably into overexploitation and potential long-term collapse, particularly in the absence of concerted efforts to fully incorporate climate change into medium and long-term fisheries management.

The SIDS and LDCs of this WCPFC region are hugely dependent on the income from these fisheries. In 2016, the contribution of this fishery to these countries was greater than \$230 million p.a. and constituted an average of 5% of their GDP (reaching as high as 14% for the Marshall Islands)[6]. Historically, the FFA SIDS and LDC member countries have been unable to maximize these benefits in the face of more powerful DWFN. However, the Vessel Day Scheme introduced by the Parties to the Palau Agreement (and which alone netted the members some \$350 million in 2015) has helped in improving this situation over the last decade and the 2019 Tuna Fisheries Report Card states that the share taken by FFA fleets (includes flagged and chartered vessels). has increased significantly in recent years, with the value share rising from 31% in 2013 to 49% in 2018 to exceed the 2020 target. In 2018 the proportions of the value of the catch taken by FFA longline and purse seine fleets were 56% and 47% respectively. If the recent trend continues the value of the catch taken by FFA fleets will exceed that of foreign fleets for the first time in 2019.

VDS is only currently effective within the purse-seine fishery. Zone-based scheme(s) need to be applied to longliners as well which is more difficult as explained in the baseline text. In the absence of improvements to management both in-zone and on the high seas and in the absence of more effective harvest strategies, the fishery will be unlikely to remain sustainable and the livelihoods of individuals and communities will be at serious risk across the region as GDPs start to deteriorate.

The impacts from over-fishing will be exacerbated by the effects of climate-induced changes in ranges and stock distribution as well as potential reduction in numbers as a result of declines in productivity. The SIDS and LDCs of the region need to confront these inevitable changes through a process of adaptation and realignment. Without adequate support for this process these communities and cultures will suffer enormously and their livelihoods and well-being will almost certainly deteriorate,

The incidence of IUU in the world's oceans are threatening global food security generally. The implementation of a number of SAP activities as captured by this project will help to address this, particularly the 'unreported' component which threatens to directly interfere with and undermine long-term management strategies.

Globally, bycatch and discards have become a serious concern both in the context of unnecessary mortality of non-target species (which are important to the food web and to the ecosystem as a whole) and in the context of loss of potential protein to poor communities. Continuation and increase in non-commercial bycatch along with continued discards of potential food sources will threaten the ecosystem while failing to establish food security throughout the region.

GEF support will contribute significantly to deliver the objectives and vision of the SAP and the signature countries along with their other partners. It will assist the SIDS and LDCs of the WCPFC to develop and adopt a more adaptive and proactive ecosystem-focused management approach to ensure sustainability of their oceanic fisheries. It will support them in testing and adopting more innovative approaches to monitoring, control and surveillance which will aim to reduce IUU fishing in the region and support a sustainable adaptive ecosystem-based approach. The GEF project will promote regional strategies that can be delivered at the national level for community wellbeing and resilience in the face of climate-induced threats to food security, livelihoods and other national socioeconomic impacts.

This project will build on the many experiences, examples and precedents within this region over the past two decades that have finally led to establishing a sustainable fishery within this region. In this context, the project will also have a specific focus on capturing lessons and best practices that have evolved throughout the lifetime of the WCPF Convention and through previous GEF support with a view to transfer and replication within other regions and RFMOs.

The project will take advantage of the many partnerships created through previous GEF supported initiatives in this region and brokered through the WCPF Commission and the FFA. The SAP itself confirms the fact that partnership arrangements will be very important to the SAP Implementation process and will be encouraged, established and maintained through various means ranging from the more formal MoUs and legal agreements through to more informal Aides

Memoire and similar notes on cooperation. Partnerships will be needed to reflect a number of collaborative needs for delivery on the Outcomes, including:

- The adoption of Catch Documentation Scheme standards and systems
- Data capture and analysis (especially using the most up-to-date techniques in, for example, modelling, remote sensing and GPS, DNA analysis, etc.)
- Monitoring, Control and Surveillance of activities both within EEZ and on the high seas
- Eco-Labeling of fish and seafood products (including chain-of-custody)
- Negotiation and agreement on regulations with the shipping industry and management on the high seas
- Effective awareness campaigns and outreach
- Training and capacity building

As such, further Partnerships will be needed with the private sector, academic institutions, scientific institutions, NGOs. The SAP also provides a list of some of the existing partnership agreements and collaboration within the Convention and between its Members (Annex 2 of the SAP).

The participating governments have agreed to provide the shown indicative co-financing for the present project. During PPG these amounts will be further refined and other parties interested in supporting to the project will be identified and their contributions negotiated. In particular, during the Project Preparation process, strong emphasis will be places on securing private sector co-financing.

7. Global Environmental Benefits

The Transboundary Diagnostic Analysis for the WCPFC Area has identified the threats and root causes to oceanic fisheries and the associated socioeconomic well-being of the SIDS and LDCs. The SAP has been developed, negotiated with the appropriate stakeholders and formally adopted by the Ministers from each of the PDCs and SIDS in the WCPFC area. This will now be followed up by the implementation of this regionally agreed Strategic Action Program. In doing so, the SAP will deliver benefits and advantages not just at the regional level but also at the global level through enhancing its sustainable fisheries given the outsize impact of a fishery that represents more than half of global tuna catch. Effective implementation of the SAP will help to catalyze and demonstrate sustainable fisheries management within a fishery that has a worldwide market and upon which global food security is dependent. It will further demonstrate blue economy opportunities by enhancing SIDS economies, livelihoods and government revenue, and the maintenance of a sustainable healthy marine ecosystem, and it will assist in addressing the global concern regarding marine plastics and lost fishing gear. Finally, it will explore mechanisms for improving management within those areas beyond national jurisdiction that fall within the WCPC Area. The SAP will directly address many of the SDG 14 Targets and their respective Indicators.

The implementation of the SAP will strengthen sustainable fishing practices at both the national and regional level within the WCPFC Area alongside integrating those fisheries within an overall ecosystem-based management and governance strategy. This approach will help to ensure that the growing anthropogenic pressures within this region are mitigated within the large marine ecosystem and the convention area, both of this have interactive transboundary linkages to other regions and ecosystems.

Finally, the implementation of the SAP will serve to strengthen and encourage collaboration among major regional stakeholders such as the Regional Seas Programme(s) and Convention(s), other overlapping and neighbouring Regional Fisheries Management Organizations (RFMOs) and the private sector in order to protect the ecosystem and its living marine resources from further degradation and impact.

8. Innovation, Sustainability and Potential for Scaling Up

This Project is innovative in that it is aiming to secure a sustainable yet very vulnerable major world fishery. Most other fisheries projects are concentrating on trying to pull national or regional fisheries back from their status of over-exploited or collapsed into a manageable level of sustainability. It is also innovative in having developed and successfully tested already new approaches to effective and adaptable management in specific areas (e.g. VDS-style zone-based management, FAD tracking, E-Monitoring, E-Reporting, etc.) and now aims to replicate those throughout the Convention area. The project will also directly assist the LDCs and SIDS to increase and secure their national benefits from their fisheries which have previously been to the advantage of DWFNs

Sustainability is the keystone to the entire project which aims to maintain sustainability within the fishery. Furthermore, the SAP recognises that *"in order for the SAP to be implemented efficiently and the various activities to be delivered in a timely manner as well as to monitor the overall implementation of the SAP, there will need to be some administrative and management processes put in place or modified and expanded from existing arrangements in the region"*. Developing and ensuring the long-term sustainability of these institutional and administrative processes will be an important focus of the project. In this context, the SAP has a requirement to develop an Implementation and Sustainability Plan and Road-Map. An overall Implementation Plan will be developed and adopted alongside a supporting Sustainability Plan as an 'inception' activity for the start of the implementation process and the project itself. These two planning processes will constitute the road-map for the SAP implementation and delivery of Outcomes and Targets.

The Implementation Plan will identify:

- Ø How the targets are being prioritised and sequenced
- Ø What the timeline is for delivering the individual targets
- Ø The indicators that will confirm that the targets have been achieved

The Sustainability Plan will identify:

- Ø Which parties are addressing which targets?
- Ø How the delivery on specific Outcomes/Targets will be funded?
- Ø Which targets will need repeated attention and over what period (e.g. capacity building and training)

This Sustainability Plan will further identify and road-map for financial and institutional sustainability of the key national and regional bodies that underpin the WCPF Convention mechanism and the overall regional sustainability of the tuna fishery. All Pacific Island countries collect access fees for foreign fishing in their waters and all have aspirations to develop their own fishing and/or processing industries. The TDA identifies that the various considerations and trade-offs involved in balancing these two opportunities have been a major issue in the region for many years. Yet significant advances have already been made in this context through the Vessel Day Schemes and the SIDS/LDC FFA members are also realising great value from the fishery through their growing share of the value of the catch of the past 5 years, increasing their economic returns and thereby strengthening the ability for coastal State control of the fishery. Economic returns to FFA member countries are measured through two components: government revenues from license and access fees and the contribution of the harvest sector to GDP[7]. The 5-year goal is to increase each factor by 25% from its baseline in 2015 into 2020 and to continue this trend beyond. Nevertheless, this growth has been achieved from purse seine vessels operating under the Vessel Day Scheme and this has slowed in recent years. The stagnant and low level of returns from the longline fishery indicates the challenges still faced in achieving the economic potential of this sector and underlines the need for improved management measures in that sector. It is, however, becoming apparent from the Tuna Fisheries Report Cards over the last few years that the fishery, and its management mechanisms (both regional and national), are moving in a positive direction towards sustainability, which, in turn, is reflected in the continuing sustainability of the fishery itself. Maintaining this positive trend is the main challenge for this project in the face of expected and predicted impacts, particularly from climate change.

The potential for scaling up is mainly appropriate in the sense that the project itself will be taking tested management approaches from parts of the region and expanding them (such as the zone-based management as mentioned above). What will be really valuable will be the opportunity created within the Project to scale across (replicate) into other regions and RFMOs. The Project aims to build on the success of the past 15- 20 years of funding and support in the region specifically by capturing the Best Lessons and Practice, not only from this current project as it progresses but also from the previous OFM projects and GEF supported initiatives with a view to recommending replication as appropriate in other RFMOs. This would be realised 'on-the-ground' through exchange programmes that bring pertinent bodies and representation to the region but also through the possibility of orchestrating a more global meeting specifically on tuna fisheries lessons and practices.

[1] Taken from the GEF-7 Replenishment Programming Directions and Policy Agenda. See <https://www.thegef.org/council-meeting-documents/gef-7-programming-directions>

[2] <https://www.worldwildlife.org/species/tuna> accessed 11th July 2019

[3] <http://www.fao.org/3/a0653e/a0653e05.htm> accessed 11th July 2019

[4] T.F. Stocker, D. Qin, G.K. Plattner, M. Tignor, S.K. Allen, J. Boschung, et al., Climate Change 2013: the Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, 2013.

[5] The TDA is available at <https://www.ffa.int/node/2108> and the SAP can be found at <https://www.ffa.int/node/1732>

[6] Gillett, R. D. Fisheries in the Economies of Pacific Island Countries and Territories (2016). Pacific Community Cataloguing-in-publication data. Second Edition. Pp. 688.

[7] FFA/SPC Tuna Fishery Report Card 2019

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

Annex A provides a map and coordinates for the WCPFC area which is the system boundary for this project. Within that system boundary, project support will be provided primarily to the PICs, particularly the SIDS and LDCs of the region

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

The following Table identifies the key stakeholders that were involved during the development of this PIF. These same stakeholder will be A. involved further in the development of the full project and B. will be asked to advise on further stakeholders who should be engaged. Further to this the Full Project will also have the usual detailed Stakeholder Engagement Plan

STAKEHOLDER	INPUT AT PIF	EXPECTED ENGAGEMENT IN DEVELOPING FULL PROJECT
All SPC Forum Fisheries Agency Members	The TDA and SAP process went through considerable discussion and adoption processes at a number of FFA meetings at the technical, management and ministerial level with the contents of the PIF also being part of these discussions.	FFA members have been supporting the TDA and SAP process and have been kept fully informed of developments including giving their full support to the SAP through formal endorsement and signature. The members will remain engaged through steering committee meetings and will be directly involved in many of the in-country deliverables and regional decisions on harvest strategies, FAD tracking etc.
Large proportion of other WCPFC Members	The TDA and SAP were circulated to all members of the WCPFC Convention and Commission for comment and confirmation. The Convention members and Commission have reviewed the documents so far including this PIF and provided input where required.	The Commission and its various organs will be fully involved in the project via the steering committee and other technical committees and through the provision of feedback on management strategies

SPC staff	All relevant SPC staff were involved in the TDA process and a number of their senior management in the development of the SAP as well as advising on the PIF. FAME (the Division of Fisheries, Aquaculture and Marine Ecosystems) have provided input and guidance to the TDA, the SAP and this PIF	SPC will be directly involved both in the final development of the Project and in its implementation. FAME will play an important and central role in reviewing and guiding the final ProDoc. They will also take a significant role during the project itself, particularly in providing data and information on stock assessment, ecosystem wellbeing and the results from modelling of the ecosystem
FFA staff	Similarly, a number of FFA staff right up to their senior management were directly involved in this process. FFA have been executing the various GEF-financed OFM project(s) and commissioned the TDA and SAP with view to developing this PIF and the subsequent ProDoc	FFA will be directly engaged as the UNDP Implementing Partner and has a major role in MCS and Surveillance throughout the region
Parties to the Nauru Agreement	Senior scientific and technical personnel within the PNA had on-going and considerable input to the entire process. PNA has advised on the aims and objectives of the PIF in the context of their members and to capture best lessons and practices.	PNA will provide advice on zone-based management, VDA, FAD tracking etc. and will engage through its member countries as members of FFA and WCPF Commission
Various Academic Institutions	Several well-known fisheries and ecosystem scientists from such establishments as the University of Tasmania, James Cook and Wollongong had direct input to the documents and were cited in the PIF	Academia will have a vital role to play in undertaking peer review and advising on stock assessment studies etc. This will be further developed through partnerships with the project, particularly through PCCOS
UN Bodies	Both UNDP and FAO were present at the discussions on the TDA and the SAP process and how this would lead to the new Project	UNDP will be the GEF Implementing Agency and will handle administrative matters. FAO has agreed to act as technical advisor and support

NGO Communities	NGOs such as WWF and Pew, as well as more local ones	NGOs such as WWF and Pew will hopefully be valuable partners. Both have sustainable tuna fishing programmes and have been closely involved in past OFM activities. Other appropriate NGOs will be identified and appropriate partnerships developed through the ProDoc development and during the project itself.
Fisher Families	Input through FFA and SPC but limited direct interaction at PIF stage	National stakeholder consultations in each country will ensure input from local communities and fisher family representatives
Private Sector	PITIA – Pacific Islands Tuna Fisheries Association were involved in the presentations and discussion on the TDA and next steps toward a Project	Through FFA, project development will engage with PITIA to continue that on-going collaboration and coordination that has grown through FFA during the OFMP and OFMP II and to see what valuable partnership activities and involvement can be added to the Project which would directly involve them

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Gender equity is a common mainstream theme across global and regional organisations. FFA and SPC both have committed gender policies. Under OFMP, the project has supported a publication which features women of influence in fisheries management. According to a baseline study on the performance indicators of the OFM project, FFA has been trying for some time to get specific gender employment data from members but has yet to access useful comprehensive information. So, there is a now wider FFA target to produce more detailed gender related employment data (but this is not specific to the GEF OFM project).

A series of FFA and SPC studies on gender and tuna/oceanic fisheries since 2006 (and most recently an EU-funded SPC study on gender in fisheries science and management) have assessed gender related issues. At the broad socioeconomic level, improving the management of the region's most valuable single natural resource offers improved food security, public services and income earning opportunities. In terms of gender participation, the 2011 report sees three ways to increase women's participation in fisheries - raising the profile of fisheries as a potential career as well as the profile of women already working in the sector; providing a support network for women in fisheries and strengthening the institutional level (work environment and conditions). At the industry level, the differences in gender participation are reflected in employment of men almost completely onboard and largely of women in onshore processing facilities. From the employment patterns, 65-75% of the new industry jobs noted above are likely to be filled by women, but even then, senior and technical positions will be largely held by men. However, perceptions are changing, as women gain access to education and communication technologies through gender-equity policies across societies and economies, and the preceding Project has been able to successfully use as role models the small but increasing numbers of women in senior commercial and technical positions^[1].

The Steering Committee for the OFM II project has discussed gender issues, notably at its meeting May 2017, the record of which notes that, in 2014, in fisheries training workshops for more than 1600 officials there were less than 300 female participants. Gender participation is an indicator in the OFMP project, and there will be a gender survey at FFC to inform the revised KM and its workplan. There are however perceptions of negativity and antagonism that require education to counter. Altering gender balance can be a sensitive issue culturally and needs to be handled tactfully and diplomatically. FFA also produces an annual Tuna Fisheries Report Card which reports employment in the fisheries sector, but employment figures are not disaggregated by gender.

In GEF 7, gender issues and mainstreaming are more rigorous requirements and for this full project (during the PPG phase) a detailed Gender Analysis and Gender Mainstreaming Plan will be developed and included in the Project Document along with disaggregated and gender-sensitive indicators in the Results Framework

[1] See for example <http://www.ffa.int/gef/files/gef/OFMP%20Profile%201.pdf>

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources; Yes

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

A regional fisheries project of this nature will inevitably require strong and interactive private sector engagement if it is to achieve its aims and outcomes, and the SAP specifically identifies the need for such partnerships, noting early concerns expressed in the evaluation of previous OFM projects. One area that will definitely involve private sector engagement will be the ecolabelling and sustainability awareness necessary to maintain the current status of stocks. Furthermore, the fishing industry will need to be directly involved in the context of on-board monitoring and reporting.

In this context, the OFMP II project, through FFA and SPC, has become increasingly more engaged with the Pacific Islands Tuna Industry Association. PITIA is a regional organisation representing and advocating for the domestic industry in the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu. Its Objectives are 1. To provide a united voice for the domestic fishing and associated industries of members, 2. To facilitate and encourage the economically and biologically sustainable use of tuna and tuna-related resources 3. To undertake, coordinate and promote liaison and negotiations with national, regional and international bodies and other entities with similar interest. A key function of PITIA is to keep the smaller Industry associations fully informed on WCPFC developments and proposals and activities at FFA and SPC which may be of concern to them. PITIA, as an "industrial" NGO, has no national borders and can look at the 'non-geopolitical' issues and alternatives and provide 'impartial' advice to government(s) on issues such as comparing the benefits of deriving income from tendering vessel days under the VDS to facilitating domestic catching/ processing activities.

PITIA provides a voice for the domestic longline, purse seine, pole and line and processing facilities into the wider policy and fishery management systems development across the Western and Central Pacific Ocean. PITIA inputs into Western and Central Pacific Fisheries Commission (WCPFC) processes on annual basis and participates in all the key meetings of the Forum Fisheries Agency (FFA). PITIA is supported by its members and with assistance from the EU via the Pacific EU Marine Partnership (PEUMP) via FFA and for the last four years by the FFA's Oceanic Fisheries Management Project (OFMP II). At the most recent AGM in 2019, PITIA spent considerable time discussing priority concerns for industry going forward and matters that industry would like addressed at WCPFC in 2019 including the sustainability of the organisation and funding for the core functions. PITIA has noted the MCS decision to align the Harvest Control Rules condition requirement across all Marine Stewardship Council certified tuna fisheries in the WCPFC. PITIA has recently stated that 'We consider this matter to be a key priority for WCPFC, not just for our members but for all of the regions certified fisheries' and further noted "The MSC premium is fundamental to the economics of our longline fisheries and we simply cannot risk losing the certification". PITIA has recently endorsed the 2019 WCPFC priorities as identified by Pacific Fisheries Ministers meeting in Pohnpei, FSM in 2019 and listed as; sustaining 'zone based' management, adopting high seas catch limits and allocations, reviewing the transshipment measure, more active participation on the challenge of eliminating inequitable fisheries subsidies and advancing a plan for the adoption of an Electronic Monitoring Strategy. PITIA specifically and strongly endorsed the recent suggestion that, in view of the last Forum Leaders' instruction to more strongly address climate change impacts on tuna fisheries, and to help set the stage for bringing "climate justice" into

the range of arguments for better consideration of SIDS fisheries interests and disproportionate burdens at WCPFC, that it might be useful to consider proposing a resolution to WCPFC for climate change linkages to be considered or addressed more effectively in WCPFC measures. The PPG process will promote and support this engagement with the private sector and a detailed PS engagement plan will be included in the final Project Document.

5. Risks

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

A full UNDP Risk Log will be developed during the PPG and included in the Project Document to include the usual information on description of individual risks, category/type, impact and probability, mitigation measures, owner status. At this PIF stage the following risks can be clearly identified however:

Climate Change: Climate change is a clear risk to the project's overall objective of sustainable fisheries and sustainable livelihoods/economies. This is a high risk and is therefore a major focus of this project as explained in the baseline and the strategy. Major elements of the project will be addressing adaptive management in the face of expected climate-induced changes in stock distribution and accessibility. At this stage, the risk to both of these elements are felt to be low to medium.

Social and Environmental: Concerns here relate to whether the activities of the project will improve the social and economic status of the PICs individually. There will be a strong element of livelihood-building and centralizing benefits away from DWFN and into the islands themselves so this risk is seen to be low at this stage but will be explored further through the PPG process.

Political: As in all such projects, political will can be a significant risk. However, in this case the risk is definitely considered to be low. The Convention was signed some 15 years ago and since then the member countries have (to greater or lesser extent) shown a strong willingness to work together to achieve and maintain sustainable fisheries in this region. This is spotlighted by the fact that the WCPFC region has the only sustainable large-scale tuna fishery in the world at present (albeit highly vulnerable, hence the need for this GEF support). The fact that OFM project was able to commission a highly detailed TDA, a follow-up SAP and then to get that SAP endorsed by all 17 countries, all of this over a period of only 18 months from start to finish, in itself reflects highly on the commitment of the countries and of the agencies that support the WCPF Convention.

Capacity: The project will be addressing the capacity issues and looking into the development and implementation of capacity building through training and other forms of support. The risk here is two-fold i) that there may be insufficient capacity within smaller SIDS and LDCs and ii) that human resources, once trained, will seek better quality of life and wages elsewhere, the constant problem of 'train-and-retain'. This aspect of the project will focus on partnerships and mentoring for training and aim to build a community of interactive expertise that is respected and seen valuable within the region and countries. Other capacity building aspects that will be addressed through the project would be those related to institutional capacity.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

The project will coordinate closely with the various ridge-to-reef projects in the region in the context of connectivity across the coastal area EEZ and high seas. UNDP will not directly execute any components or activities of the project, nor seek direct project costs on any nationally implemented elements. As per the TDA recommendations, the project will collaborate with partners to ascertain the interconnectivity between coastal changes and impacts related to climate change and offshore effects and impacts on the oceanic fisheries (e.g. larval tuna/top predator forage and larval tuna) and on the effects of land-based impacts on habitats and species with interconnectivity into the oceanic ecosystem, particularly large predators (tuna and others) and their prey.

As in previous Oceanic Fisheries Management projects, this project would coordinate and collaborate closely with the Oceanic Fisheries Programme of the SPC. The OFP is the Pacific Community's regional centre for tuna fisheries research, fishery monitoring, stock assessment and data management. The OFP has three main objectives as outlined in the FAME Strategic Plan:

1. Provision of high-quality scientific information and advice for regional and national fisheries management authorities on the status of, and fishery impacts on, stocks targeted or otherwise impacted by regional oceanic fisheries;
2. Accurate and comprehensive scientific data for regional and national fisheries management authorities on fisheries targeting the region's resources of tuna, billfish and other oceanic species; and
3. Improved understanding of pelagic ecosystems in the western and central Pacific Ocean.

OFP achieves these objectives through work programme across four different but interactive sections:

- i. Stock Assessment and Modelling
- ii. Oceanic Fisheries Data management
- iii. Oceanic Fisheries Monitoring
- iv. Ecosystem Monitoring and Assessment

SPC's key fisheries clients are the fisheries administrations of SPC members, for whom it processes and manages data from commercial tuna fishing fleets (both domestic and foreign licensed), assists in the development and implementation of effective fishery monitoring programmes, provides advice on the status of tuna and other affected pelagic fish stocks, conducts research on the biology and ecology of the pelagic ecosystem and provides training and other

capacity building in these areas. The Forum Fisheries Agency (FFA) and the Parties to the Nauru Arrangement (PNA) are also key clients. The OFP provides data products, scientific analyses and advice to assist these groups with the assessment and development of fisheries management measures. SPC is also the data services and scientific services provider to the WCPFC.

The Pew Charitable Trust has two related programmes that could provide valuable collaboration and partnership to the intended outcomes of this project. This includes the Global Tuna Conservation Programme and the Global Campaign to End Illegal Fisheries. The former aims to i) conserve the various tuna species through strong conservation and management measures adopted and implemented by WCPFC (and IATTC), ii) agree and implement harvest strategies for each tuna stock managed by WCPFC and IATTC, iii) minimize the impacts of destructive fishing gears, iv) Improve transparency and accountability across and within various fisheries management institutions. The objective of the latter project (which is more global in nature) is to work with stakeholders to build and implement a global system to detect, deter and combat illegal fishing through advocating for the adoption and implementation of regulations, policies, and tools to improve information sharing, monitoring activity, and prosecuting illicit operators.

The World-Wide Fund for Nature (WWF) Pacific Programme Office (PPO) is largely focused on conservation and natural resource management of the marine environment. The WWF PPO Offshore Fisheries Programme is an advocacy, awareness, research and policy input and project implementation initiative that has been working with the network of WWF offices globally and with partners to improve the health and management of tuna (offshore) and small scale (inshore) fisheries in the Pacific Islands region[1]. Due to the highly migratory nature of tuna in the Pacific, to effectively safeguard their populations from overfishing across their extensive range, a highly collaborative approach between Pacific nations, territories and DWFNs is essential. As such, the programme focuses on lobbying, advocacy and partnership with national, regional and international organisations to promote responsible tuna fishing practices across large swathes of the Pacific. The WWF PPO focuses on three main activities through three separate projects: 1. Sustainable Fisheries, 2. WCPFC Advocacy and 3. Bycatch Reduction. WWF has already worked closely with GEF and the OFM Project on these issues and will hopefully continue to do so.

The International Seafood Sustainability Foundation (ISSF) is a global coalition of scientists, the tuna industry and World Wildlife Fund (WWF) promoting science-based initiatives for the long-term conservation and sustainable use of tuna stocks, reducing bycatch and promoting ecosystem health, largely industry-funded. ISSF identifies as the 3 pillars of its programmes: 1. Science: Advance the sustainability of tuna stocks & their ecosystems through continuous improvement –measurably demonstrated– across global tuna fisheries. 2. Influence: Exercise influence among stakeholders to promote and expedite actions necessary to advance the sustainability of tuna stocks & their ecosystems. 3. Verification: Maintain & enhance credibility through transparency and compliance. ISSF already participates systematically in WCPFC activities and cooperates with PNA through a MOU.

Coordination will be achieved through a Partnership Programme which will be outlined during the PPG and in the Project Document and become fully functional during the project

[1] From http://www.wwfpacific.org/what_we_do/offshore_fisheries/

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The project is aimed at assisting Pacific SIDS to meet their obligations under key global instruments such as UNCLOS and the UN Fish Stocks Agreement, which bestowed on Pacific SIDS the rights to explore and exploit, and duties to conserve, manage and protect, the resources and biodiversity in their EEZs and the adjacent ABNJ for the benefit of their own peoples. A critical element in the duties is the obligation to cooperate with others involved to establish a regional management institution. That institution is the Western and Central Pacific Commission (WCPFC), established under the WCPF Convention. The Convention is the first major new international fisheries management arrangement to have been established under the UN Fish Stocks Agreement and follows that Agreement very closely, serving as a major precedent for the application of the principles of the Agreement. With GEF assistance, the Pacific SIDS updated their legislation to implement UNCLOS, the UN Fish Stocks Agreement and the WCPF Convention, and other relevant global agreements which are also implemented through National Ecosystem Approach to Fisheries Management (EAFM) Assessments and National Oceanic/Tuna Fisheries Management Plans.

The national instruments are linked with the global agreements through a range of regional and sub-regional agreements, plans and strategies. At the regional level, these include the WCPF Convention, the Pacific Island Forum Fisheries Agency (FFA) Convention, the *Niue Treaty* on Cooperation in Fisheries Surveillance and Law Enforcement, the FFA Harmonized Minimum Terms and Conditions, the Pacific Plan, the Regional Tuna Management and Development Strategy, the Regional Monitoring, Control and Surveillance Strategy, and the Pacific Islands Regional Plan of Action for Sharks. At the sub-regional level, these include the Parties to the Nauru Agreement (PNA) and the various associated Implementing Arrangements adopted by the PNA and the Te Vaka Moana (TVM) Arrangement and associated arrangements adopted by the TVM group. This proposed project is designed to build on and strengthen these regional and sub-regional arrangements.

The Project further aims to support the eligible countries in the more effective implementation of their national tuna management plans (including eco-labelling and stronger PSMA's). Currently, all Pacific Island countries have prepared national TMPs, and most have been formally adopted. Characteristically, TMPs give a description of the current national tuna fisheries, the status of the tuna resources (mostly from the work of SPC's OFP), overall government goals in the fisheries sector, specific objectives for the management of the fishery, and the interventions used to obtain the objectives. Tuna resource sustainability is often given as the priority objective in TMPs. Other objectives are related to increasing employment, increasing access fees, and creating and/or enhancing domestic tuna fisheries. The first experience for a number of countries in formally establishing fisheries policies and articulating management goals has been during the process of formulating these plans. The plans have brought a degree of transparency to the fisheries management process, which was otherwise vague and indeterminate in several countries. The solid and definitive set of policy measures advanced by the plans are of significant and vital importance for attracting domestic and foreign investors into the fisheries sector. In some countries, the first government/industry consultative mechanisms in the fisheries sector are those established by the plans. However, in many cases these national plans have not gone much further than formulation and/or adoption and need support for implementation and MCS.

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The project will have a Knowledge Management Component that will focus on the need to both manage the project delivery itself and to manage the knowledge, best lessons and practices and to get this information out to a broader audience of stakeholders for better advantage. One of the Outcomes will expressly deal with knowledge management and communications awareness. This will aim to promote consumer awareness of the status of fisheries and the need for more selective marketing and purchase in relation to sustainability of the stocks and the ecosystem. This component will also support the important inputs from the Pacific Community Centre for Ocean Science and from FAME-SPC and other technical and scientific institutes which will be fundamental to making adaptive management decisions and for monitoring the harvest strategies and their targets. It will further assist with strengthening the coordination with related global institutions. It will also aim to capture the Best Lessons and Practice, not only from this current project as it progresses but also from the previous OFM projects and GEF supported initiatives with a view to recommending replication as appropriate in other RFMOs. The project will allocate 1% of the project grant for IWLEARN activities.

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Mr. Ngatokotoru Puna, Cook Islands	Director	National Environment Service, Cook Islands	9/12/2019
Mr. Andrew Yatilman, FSM	Secretary	Department of Environment, Climate Change and Emergency Management	8/26/2019
Mr. Joshua Wycliffe, Fiji	Permanent Secretary	Ministry of Waterways and Environment	10/1/2019
Mr. Clarence Samuel, RMI	Director	Office of the Environmental Planning and Policy Coordination	10/7/2019
Mrs. Berilyn Jeremiah, Nauru	Acting Secretary	Department of Commerce, Industry and Environment	10/1/2019
Mr. Haden Talagi, Niue	Director	Department of Environment	9/25/2019
Mr. King M. Sam, Palau	Special Adviser to the Minister	Ministry of Natural Resources, Environment and Tourism	9/20/2019
Mr Gunther Joku. Papua New Guinea	GEF OFP	Conservation and Environment Protection Authority	10/22/2019
Mr. Ulu Bismarck Crawley, Samoa	Chief Executive Officer	Ministry of Natural Resources and Environment	10/3/2019
Mr. Chanel Iroi, Solomon Islands	Undersecretary	Ministry of Environment, Climate Change, Disaster Management and Meteorology	9/24/2019
Ms. Paula Ma'u, Tonga	Chief Executive Officer	Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications	9/27/2019

Mr. Soseala, Tinilau, Tuvalu	Director	Department of Environment	9/16/2019
Ms. Donna Kalfatak, Vanuatu	Director	Department of Environmental Protection and Conservation	9/27/2019
Mre. Nenenteiti Teariki, Kiribati	Director	Environment and Conservation Division, Ministry of Environment, Lands and Agricultural Development	10/2/2019

Please provide geo-referenced information and map where the project intervention takes place

Please provide geo-referenced information and map where the project intervention takes place





Map of the area covered by the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC Convention)

ANNEX 3: CAUSAL CHAIN ANALYSIS AS PROVIDED BY THE 2018 TDA

ENVIRONMENTAL IMPACT	SOCIOECONOMIC IMPACT	IMMEDIATE CAUSE	UNDERLYING CAUSE	ROOT CAUSE
Bycatch of non-target species either unknown or too high	Potential loss of food sources from by-catch	Insufficient observer information from longliners	Inadequate monitoring (human or automated) particularly of longliners and carrier vessels	WEAKNESSES IN (AND LACK OF CAPACITY FOR) MANAGEMENT AND COMPLIANCE, ESPECIALLY ON HIGH SEAS
Balance of Species numbers for target species not accurately known (inaccurate or absent catch returns and poor reporting)	Potential for overfishing of some stocks if catch returns and reporting are NOT accurate leading to collapse in fisheries revenues and livelihoods	No information feedback from transshipments	Ineffective port state measures and harbour strategies Disproportionate burden of management and associated sustainability placed on SIDS	
Potential overfishing of stocks (unknown at what level)	Revenues from fisheries not been captured by countries	Continuing IUU fishing activities, especially in High Seas	Inadequate monitoring of all fisheries activities in high seas areas Inadequate management strategies for high seas allocations Need to resolve conflicts of interest between coastal states (SIDS) and fishing	

			states	
Tuna stock ranges altering, expanding and probably moving eastwards	Increased access to stocks in eastern area of WCPFC (e.g. Kiribati) Decrease in Access to stocks in western area of WCPFC (e.g. PNG)	Changes in sea temperatures and currents	Long-Term effects of changes in ENSO Expansion of Western Pacific Warm Pool (SPWP) LME	IMPACTS FROM CLIMATE CHANGE AND ASSOCIATED CONCERNS DUE TO EXCESSIVE CARBON EMISSIONS AND LACK OF ADOPTED GLOBAL MITIGATION PROCEDURES
General decrease in productivity and tuna forage	Potential fall in income due to lower CPYE and general decline in market supply of tuna stocks	Changing sea temperatures and increasing acidification (falling pH) Collapses of upwelling on eastern side of Pacific and from central equatorial Pacific upwelling Reduction in coastal productivity and tuna forage with knock-on effects on oceanic seas food chains	Alteration in biochemical and physical parameters in WPWP LME and across southern Pacific Ocean Climate change effects in coastal areas (Sea level rise, reduction in cover of coral reefs, seagrass beds, mangroves)	
Potential overfishing of stocks (unknown at what level)	Potential for overfishing of some stocks if catch returns and reporting are NOT accurate leading to collapse in fisheries revenues and livelihoods	Balance of target Species numbers taken from fishery not accurately known Insufficient knowledge of how species interact	Tuna and other target species still managed on a single-species basis	INADEQUATE APPLICATION OF PRECAUTIONARY APPROACH AND ECOSYSTEM-BASED MANAGEMENT
Potential damage to ecosystem balance due to excessive bycatch	Loss of ecosystem services to Pacific SIDS	Limited information on bycatch species interaction with ecosystem and with target species	Poor data (particularly from longliners) and uncertainties in accuracy of existing data	
Potential damage to unique ecosystems and species within the WPWP LME	Loss of ecosystem services and unique biodiversity to Pacific SIDS	The effects of the removal of apex predators from isolated and unique ecosystems like seamounts are unknown	Insufficient knowledge of unique habitat types and associated biodiversity	
Potential for overall disruption and deterioration of the WCPWP Large Marine Ecosystem and its services	Loss of ecosystem services and unique biodiversity to Pacific SIDS with associated threats to food security and livelihoods as well as national and regional economies	Adaptive management of the overall ecosystem not practised by countries within and adjacent to the LME	Limited availability of or access to oceanographic data or results of analysis of same for trends Poor coordination or interactions between institutions undertaking scientific research within the WCPFC region	
Detrimental impacts on coastal	Fall in revenues from ocean	Land-based Pollution	Poor coastal management and planning	

Coastal species that form part of oceanic food chain and particularly reef larvae that are young tuna forage	Coastal fisheries	Coastal habitat degradation Sea level rise	Management as part of an overall ecosystem-based management approach	EFFECTS OF COASTAL IMPACTS ON THE OFFSHORE OCEANIC ECOSYSTEM
Detrimental impacts on coastal species that provide subsistence or form part of small-scale artisanal fishery	Loss of coastal food security			
Mortality of both target and non-target species throughout the LME	Collapse in food security and livelihoods	Ingestion of micro- and possible nanoplastics with no nutritional value and attached toxins Entanglement with packaging and other large waste items Ghost fishing gear (lost FADS, nets, etc) Liquid wastes from bilges, washing of fuel stored in fish wells, etc	Poor management of waste material onshore and at seas Loss of fishing gear Lack of compliance with the international conventions on pollution at seas and lack of associated enforcement and surveillance	DISCHARGES AND WASTE DISPOSAL AT SEA AND FROM LAND-BASED SOURCES

ANNEX 4: MINISTERIAL ENDORSEMENTS TO THE STRATEGIC ACTION PROGRAMME

OFMP II Strategic Action Plan Signatories 2019

Ministers and Ministerial designated authorities

Country	Name	Position
Cook Is	Hon. Tutai Tura	Associate Minister
Fiji	Hon. Semi Koroilavesau	Minister for Fisheries
FSM	Hon. Marion Henry	Secretary for Resources and Development
Kiribati	Hon. Tetabo Nakara	Minister for Fisheries and Marine Resources Development
Marshall Is	Hon. Dennis Momotaro	Minister of Natural Resources & Commerce / Chairman, MIMR A Board of Directors
Nauru	Charleston Deiye	CEO NFMRA
Niue	Hon. Esa Sharon Ainuu	Assistant Minister of Natural Resources
Palau	Hon. Umiich Sengebau	Minister for Natural Resources, Environment and Tourism
Papua New Guinea	Noan Pakop	Deputy Managing Director, National Fisheries Authority (NFA)
Samoa	Hon. Faasootauloa Taulap apa	Associate Minister for Agriculture and Fisheries
Solomon Is	Hon. John Maneniaru	Minister for Fisheries and Marine Resources
Tokelau	Hon Mose Pelasio	Minister for Fisheries
Tonga	Villimo Fakalolo	Deputy CEO for Fisheries
Tuvalu	Sam Finikaso	Director for Fisheries
Vanuatu	Sompert Gereva	Deputy Director for Fisheries