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Report of the European Union on Article 30 of the Convention and Resolution 2008-01 of WCPFC

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1. Introduction

2. Oceans' Governance - The Pacific-European Union Marine Partnership (PEUMP) Programme

3. PEUMP main developments during 2020-2021

3.1. Maritime Boundary Delimitation

3.2. Scientific and Management Advice for Oceanic Fisheries

3.3. Economic Benefits from Sustainable Tuna Fishing

3.4. Sustainable Management of Coastal Fisheries

3.5. Illegal, Unreported and Unregulated (IUU) Fishing

3.6. Sustainable Utilisation of Coastal and Marine Biodiversity

3.7. Capacity built through education, training and research and development

3.8 Cross-cutting issues: Gender, Human Rights, and Poverty Reduction

4. Other interventions funded by the EU related to ocean governance in the WCPO

1. INTRODUCTION

The main European Union (EU) source of support to the Pacific region is the European Development Fund (EDF). The EU provides support to the Pacific Region in various sectors such as Oceans' Governance; Climate change and Disaster Risk; Trade; Energy; Health, Gender; Public Finance Management (PFM) and Governance.

2. OCEANS' GOVERNANCE - THE PACIFIC-EUROPEAN UNION MARINE PARTNERSHIP (PEUMP) PROGRAMME

PEUMP is the flagship initiative under the EU cooperation and development regional programme to promote a healthy Pacific Ocean and a strong governance of marine and coastal resources which will improve Pacific Ocean's contribution to sustainable and inclusive growth within the region.

The Programme - jointly financed by the EU and Sweden for a total amount of EUR 45 M - is a clear sign of EU's and its Member States' commitment to promote sustainable, responsible and transparent management of the marine resources in the Pacific Ocean. The EU and its Member States consider oceans governance as a priority in the partnership with Pacific Countries.

The PEUMP Programme overall objective is to "improve the economic, social and environmental benefits for 15 P-ACP¹ states arising from stronger regional economic integration and the sustainable management of natural resources and the environment". The specific objective is to "support sustainable management and development of fisheries for food security and economic growth, while addressing climate change resilience and conservation of marine biodiversity".

The Programme adopts an integrated and multi-sectoral approach, with inter-related components implemented by several Agencies at the regional, national and local levels, revolving around six components and a Programme Management Unit. The six components are aligned with the two focal sectors of the regional roadmap – oceanic and coastal fisheries and are as follows:

Oceanic Fisheries

- High quality scientific and management advice for oceanic fisheries provided and utilised at regional and national levels.
- Inclusive economic benefits from sustainable tuna fishing increased through supporting competent authorities and strengthening private sector capacities to create decent employment.

Coastal Fisheries

- Sustainable management of coastal fisheries resources and ecosystems improved through better quality scientific information, legal advice, support, mentoring and empowerment at community level.

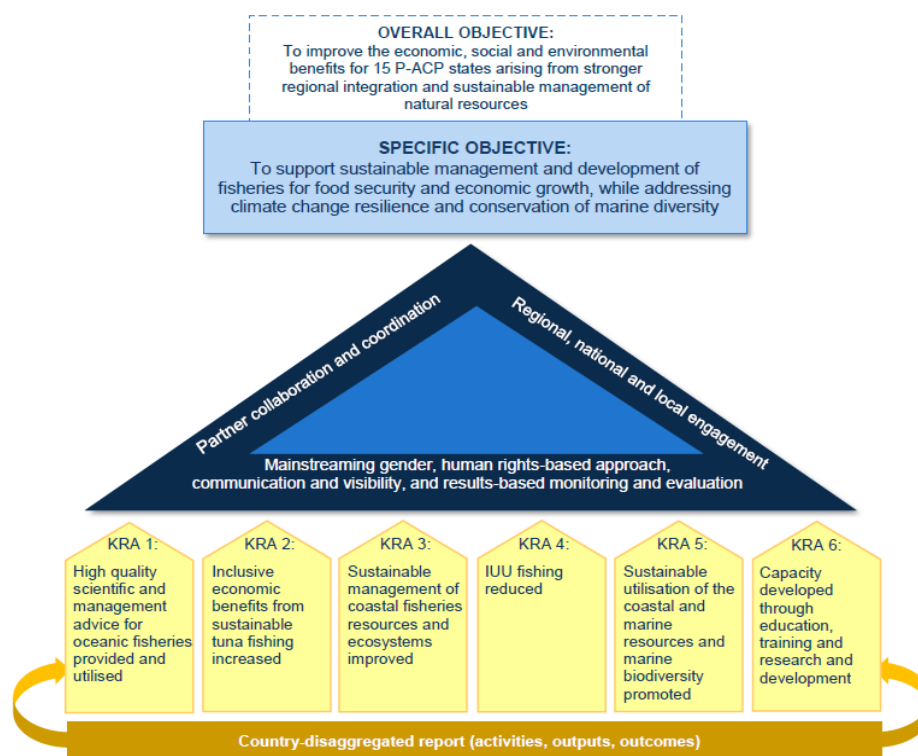
Coastal and Oceanic fisheries

- IUU fishing reduced through enhanced monitoring control and surveillance of both oceanic and coastal fisheries, improved legislation, access to information, and effective marine area management.
- Sustainable utilisation of the coastal and marine biodiversity promoted through improving marine special planning, increasing climate change resilience, enhancing conservation, mitigation and rehabilitation measures.

¹ Cook Islands; Fiji; Federated States of Micronesia; Kiribati; Nauru; Niue; Palau; Papua New Guinea; Republic of the Marshall Islands; Samoa; Timor Leste; Tonga; Tuvalu; Solomon Islands; Vanuatu.

Capacity development

- Capacity built through education, training and research and development for key stakeholder groups in fisheries and marine resources management.



The first five components are implemented by the Pacific Community (SPC), the Forum Fisheries Agency (FFA) and the Secretariat of the Pacific Regional Environment Programme (SPREP). The last one is implemented by the University of the South Pacific (USP).

Given the scope and breadth of the PEUMP Programme, agencies have been working with and through partners in some areas of implementation: The International Union for the Conservation of Nature (IUCN), The Locally Managed Marine Area (LMMA) Network, the Pacific Islands Tuna Industry Association (PITIA) and the World Wide Fund for Nature (WWF) are amongst other implementing partners of the PEUMP Programme.

A Programme Management Unit (PMU) was established within the leading agency (SPC) to ensure effective overall coordination and to foster coordination amongst the different implementing agencies.

3. PEUMP MAIN DEVELOPMENTS DURING YEAR 4 OF IMPLEMENTATION (2021-2022)

This chapter summarises the main accomplishments by each Key Results Area (KRA) during Year 4 of implementation (2021-2022). More detailed information can be found at PEUMP's webpage (<https://www.peump.dev>), which was launched in September 2020. The website enables decision makers, research community and target groups in the region to have access to scientific research, PEUMP reports, documents, information videos and stories.

The PEUMP Programme Year 4 Annual Report and Year 5 Work Plan will be posted at the [Knowledge Centre](#) Section of PEUMP's webpage.

3.1. Maritime Boundary Delimitation

The focus of this sub-component led by SPC-GEM under KRA 0 is to provide technical assistance with delimitation and negotiation of maritime boundaries of some Programme countries. There are 48 shared or overlapping boundaries between countries in the Pacific, of

which 36 are formalised in agreements. Currently, there are 12 outstanding bilateral maritime boundaries remaining to be declared. The following were the highlights of activities in Year 4:

- Fiji & Solomon Islands signed a maritime boundary agreement. During year 3, SPC provided technical advice on the Fiji-Solomon Islands boundary treaty agreement to both countries. The draft maritime boundary treaty was endorsed by the Fiji Parliament on the 9th February 2021, the endorsement gave Fiji the green light to sign the shared maritime boundary with the Solomon Islands. The Solomon Islands already gazetted the maritime boundary agreement with Fiji in their Parliament in 2017. Fiji's Prime Minister Voreqe Bainimarama and Solomon Islands Prime Minister Manasseh Sogavare signed an historic Maritime Boundaries Delimitation Agreement, to demarcate their shared maritime boundaries during the 51st Pacific Islands Forum (PIFS) summit in Suva on the 11th July 2022.
- Tonga - Samoa maritime boundary - Technical representatives of both countries have completed technical negotiations to determine the location and turning points of simplified equidistant line and taking into account updated baseline data for Samoa. The Tonga and Samoa delegation took the opportunity to finalise the text of all the articles in their draft bilateral maritime boundary treaty including the schedule of co-ordinates for the location of the relevant maritime boundary, and annex an illustrative map.

Delegations indicated that they would submit the draft text to relevant national authorities for review as required prior to signature of the Treaty.

- Samoa-Tokelau (NZ) maritime boundary. Both countries have shared basepoints and are currently having discussions on the shared boundary between their countries. Both countries have agreed to use equidistance formula and have shared proposed median line for further negotiations and determining of turning points of simplified equidistant line.
- 20th Pacific Maritime Boundary working training session. SPC convened the 20th Pacific Maritime Boundaries session virtually over six (6) weeks in October and November 2021. Total participants were 64 people (27 were female and 37 were male). The purpose of the working training session was to identify priorities and map the progress of maritime boundary (MB) and Extended Continental Shelf (ECS) work in each country. Finally, to plan for the six weeks sprint one-on-one sessions and expert technical support with workshops as per country preference.
- 6 weeks work sprint with 14 Member countries. The six weeks sprint is designed to provide one on one support on identifying priority issues. Webinars were conducted where technical experts provided support and advice to countries. During the month of October, a meeting was arranged between the maritime boundary team and each of the 14 countries to get an update from them on pending MB and ECS activities within country, identify priority actions for the 6 weeks, timeframe to achieve this and the desired outcome envisioned by the country. Additional requests by the countries for 2022 was also collated by the MB team.
- 20th Maritime Boundaries – High Level Dialogue. This high level dialogue meeting follows the 6 weeks sprint where SPC reports broadly on progress, soft launch the maritime boundaries dashboard, and highlight ocean governance opportunities to government heads. Total number of participants that registered were 112 where 74 participants were male and 38 were female.
- Fiji Extended Continental Shelf training – Geocap shelf. The primary purpose of this workshop was for the technical members of the Maritime Affairs Coordinating Committee (MACC) to review the South Fiji Basin extended continental shelf (ECS) submission and technical analysis submitted by Geolimits Consulting. Total number of participants were 10 (7 male and 3 female).
- Datasets developed and provided to FFA to help fisheries Monitoring, Control and Surveillance. Meetings were conducted in 2021 and 2022 for the technical staff to update each other on the datasets delivered as well as to review the quality assurance of the data.

In conjunction with the data exchanges, a common platform was established by the Pacific Data Hub (PDH) team for ease of access by FFA and other organizations to the maritime boundaries data which is an output of the current SLA. The PDH serves as a web-application system under which various datasets in the Pacific region are consolidated and shared on a public domain. This overwrites prior methods of data sharing via external hard drives and sending as email attachments and increases visibility of the work when shared publicly.

An additional functionality of the PDH is the dashboard feature which graphically displays the Pacific maritime boundaries datasets in form of an interactive map that reflects the regional maritime boundaries map with links to individual project country statistics and information that has been deposited to the United Nations.

3.2. Scientific and Management Advice for Oceanic Fisheries

This component, led by SPC Oceanic Fisheries Programme, focuses on providing high quality scientific and management advice for oceanic fisheries that has utility at the regional and/or national level. All four tuna stocks (bigeye, skipjack, yellowfin and south Pacific albacore) are classed as not overfished and not subject to overfishing.

The following highlights were achieved in Year 4:

- Bycatch estimates for purse seine fisheries in the WCPO have been developed through a consultancy and provided to the virtual 17th WCPFC Scientific Committee (August 2021; <https://meetings.wcpfc.int/node/12542>).
- Analyses of the vulnerability of bycatch species were also reported to SC17 (<https://meetings.wcpfc.int/node/12607>) and will re-focus regional work in this area.
- A Palau-specific analysis of bycatch trends in their longline fisheries published in a peer-reviewed scientific journal (www.frontiersin.org/articles/10.3389/fmars.2021.720603/full).
- A paper on ecosystem indicators was provided to the virtual 17th WCPFC Scientific Committee in August 2021 (<https://meetings.wcpfc.int/node/12606>) and will enable ongoing monitoring of WCPO ecosystem health.
- Work on the population structure of skipjack tuna, incorporating otolith shape and chemistry, genetics and muscle isotope analyses is underway in collaboration with industry and academic partners, and is informing discussions around the 2022 WCPO skipjack stock assessment.
- The 15th Central Pacific tuna tagging cruise, to which PEUMP contributed, was completed (2021), despite the ongoing travel restrictions arising from the COVID pandemic. A report on this cruise will be presented to the Pacific Tuna Tagging Programme (PTTP) steering committee scheduled around the 18th WCPFC Scientific Committee.
- Standardised indices for South Pacific albacore were a key input into the 2021 assessment of the stock, presented to SC17 (<https://meetings.wcpfc.int/node/12551>). This was a collaborative effort by SPC and the IATTC to cover the whole of the South Pacific. These analyses were presented to the SC17 as an information paper (<https://meetings.wcpfc.int/node/12561>).
- While the two Pacific Island Fishery Professionals from FSM and Cook Islands successfully completed their PEUMP-supported time at SPC in year 3, their work examining bycatch species, and the purse seine fishery sustainability respectively was provided to SC17 (<https://meetings.wcpfc.int/node/12566>); (<https://meetings.wcpfc.int/node/12607>); (<https://meetings.wcpfc.int/node/12592>).

- A paper demonstrating the potential of tuna stomach contents and associated microbiomes to provide near-real time monitoring of ecosystem change was published in *Frontiers in Marine Science* (<https://www.frontiersin.org/articles/10.3389/fmars.2022.811532/full>).
- A paper evaluating the efficacy of tagging adult bigeye tuna from commercial longline fishing activities published in *Fisheries Research* (www.sciencedirect.com/science/article/abs/pii/S0165783621003222)
- Status of tuna species in PACP controlled waters are not overfished (indicator SO1.1)
- All four main WCPO tuna stocks (south Pacific albacore, bigeye, skipjack and yellowfin) are deemed to be in the green area indicating that these stocks are “biologically healthy”, not overfished nor is overfishing occurring, noting there is a risk (a 1 in 8 chance) of overfishing occurring for bigeye tuna. However, there is no room for complacency with the biomass of most stocks continuing to decline, and a need to address weaknesses and gaps in the management measures currently in place.
- Pacific Island Fisheries Professional position on hold in year 4 due to travel restriction. Following completion of the 2 'Pacific Island Fishery Professional' positions in year 3, regional restrictions on travel have delayed the advertisement of further PIFP positions. Now that those restrictions are easing and the no-cost extension of the project has been finalised, advertisement of a further PIFP position supporting PEUMP activities is planned for advertisement in Year 5.

3.3. Economic Benefits from Sustainable Tuna Fishing

Led by FFA, this component focuses on supporting national Sanitary and Phytosanitary Competent Authorities and strengthening private sector engagement relating to employment in the offshore fisheries sector, thereby increasing economic benefits from sustainable tuna fishing. At the end of the fourth year of the programme, 4 countries (Fiji, PNG, Kiribati and Solomon Islands), still have access to the EU markets for fish and fisheries product exports.

The following highlights were achieved in Year 4:

- The development process for a National Fisheries and Aquaculture Policy for Samoa which began in year 3, continued throughout year 4 of PEUMP implementation and included the following activities: (i) Stakeholder consultations to consider the ‘Zero Draft Samoa National Fisheries and Aquaculture Policy’ at the community level; (ii) Stakeholder consultations for government ministries, authorities and entities; (iii) Stakeholder consultations with industry representatives and communities from coastal villages/groups. Overall, the consultation process engaged with 116 participants (79M; 37F); (iv) Compilation of the Samoa National Fisheries and Aquaculture Policy submission draft; (v) Submission of the Samoa National Fisheries and Aquaculture Policy draft to the National Policy Coordination Committee (NPCC; an ad-hoc Public Service Commission committee) in December 2021 for consideration and approval. The NPCC considered the submission draft in May 2022.

Barring any major changes/objections from the National Policy Coordination Committee, preparations for the finalization and launch of the Samoa Fisheries and Aquaculture Policy will take place in the next reporting period and will include an appropriate media/communications plan for visibility purposes of this first national fisheries policy for Samoa.

- A consultant was engaged during 4 of year 4 to facilitate preparations for the planned FFA PEUMP Gender Equality and Social Inclusion, and Human Rights-based Approaches (GSI & HRBA) meeting, which was initially planned for April 2022, but will take place in year 5. The planned event will be the first FFA-led regional dialogue on matters relating to GSI & HRBA in tuna fisheries, developed in collaboration with PEUMP Programme implementation partners and NGO partners. The dialogue is

intended to draw attention to the links of GSI & HRBA in tuna industries and how these matter for FFA Member countries in practice.

3.4. Sustainable Management of Coastal Fisheries

The coastal fisheries component led by the SPC Coastal Fisheries Programme and supported by the LMMA Network implementation partner, focuses on improving the sustainable management of coastal fisheries resources and ecosystems through better scientific information, the provision of technical support and the empowerment of communities. In Year 4, KRA 3 has focused on: (i) Continued adjustment and refinement of workplans as the PACP region slowly emerges, especially in the latter stages of the second half of Year 4, from the significant constraints resulting from the last two years of coronavirus travel restrictions and lockdowns; (ii) In particular, further developing, adapting and providing ongoing high quality scientific, data, technical, information and management related support and capacity building to the PACPs through innovative online portals, web-based materials and online courses, applications development and training, and virtual and hybrid workshops and meetings; (iii) Supporting and facilitating national level implementation of the Pacific Regional Framework for Action on Scaling-up Community-based Fisheries Management; (iv) Growing the Community-based Ecosystem Approach to Fisheries Management (CEAFM) community engagement components through the LMMA Network and local partners in the four Melanesian PACPs; and (v) Continuing to produce and disseminate a broad range of targeted information and awareness materials.

The following were the highlights achieved in Year 4:

- Continued development and refinement of e-data systems. Further developing the scope and functionality of e-data systems, including the IKASAVEA application and related databases. Key to the sustainable management of coastal resources, and especially the commercially and artisanal important invertebrates, is the effective collection and analysis of catch and life-history data, and its importance for evidence-based management of those resources. The system has been further refined and expanded during Year 4 to enable the collection of key biological and socio-economic information from fisheries markets and landings. The survey and landing modules now incorporate calibration and analysis of measuring board and mat pictures, with automated detection, measurement and species IDs of fishes, detection of sea cucumbers, and the measurement of lobsters.

Work consisted of developing life history sampling protocols that will be adopted by SPC and member countries who request assistance in this area. Life history characteristics of species affects how each species respond to fishing pressure. Therefore, understanding the life histories of key invertebrates allows fisheries managers to introduce management measures that considers their unique biological characteristics. Using data that has been collected from a number of PACPs and analysed, a report has been produced outlining the life-history and morphometric relationships on four key sea cucumber species that are lacking life history and conversion data for the processed product. Protocols have also been developed and tested for assessing key life history characteristics of two key lobster species found through the PACP countries.

- Training on and application of e-data systems for fisheries staff on fishery-dependent landing (creel) surveys (Fiji), and fishery-dependent market surveys (Fiji, Samoa, Tonga and Vanuatu). Training included survey designs, methods optimisation, review of current creel and market survey designs, data collection and management using the IKASAVEA application and web-based databases.
- Solomon Islands: Ministry of Fisheries and Marine Resources (MFMR) staff were trained in fishery-independent sea cucumber surveys, including the use the IKASAVEA app. Training and support included survey design, data collection, data entry and data analysis using GIS for survey planning and reporting. Support was provided to enable the MFMR staff to undertake a sea cucumber survey at Lord Howe Atoll (Ontong Java). The report on the Lord Howe Atoll (Ontong Java), survey has been submitted for publication.

It outlines the status of populations and management recommendations for the Lord Howe (Ontong Java) sea cucumber fishery.

- Online database for underwater surveys (fish and invertebrates). An online database module has been developed and added to the coastal fisheries application portal to support data entry and analysis of fish and invertebrate surveys. Legacy data has been converted and imported in the new database, including 333 invertebrate surveys. Solomon Islands MFMR used the system to enter and analyse the Ontong Java sea cucumber survey data. Fiji Ministry of Fisheries (MoF) used the system to enter and analyse fish underwater and invertebrates surveys. By the end of Year 4 several additional countries (including Palau and Nauru) have requested training in Year 5.
- Software development & maintenance, training and user support for market and landing surveys and socio-economic survey modules (Kiribati, Tonga, Fiji, Samoa, Vanuatu). Market and landing survey modules now incorporate calibration and analysis of pictures, with automated detection, measurement, and species identification (ID). Training on various aspects have been provided to Kiribati, Tonga, Fiji, Samoa and Vanuatu. The tablet application for socio-economic survey has been completed and 47 reports were created for the analysis of the data on the web module. Legacy data has been imported and cleaned for Kiribati and Fiji.
- Development of AI models for the recognition and identification of corals, sea cucumbers and fishes on pictures and videos. Artificial intelligence models have been created/improved for the detection of picture type (fishes on mats, invertebrates on measuring boards), calibration of pictures for direct measurement (measuring board/mat), the detection and reading of weight value, the detection of and measurement of fishes, the detection of sea cucumbers and the measurement of lobsters. Species identification for fishes includes 237 species. During Year 5, the focus will be on automating measurement of additional invertebrates (crabs, dried sea cucumbers, octopus, slipper lobster) and improvement of species identification of corals, fishes and invertebrates.
- Kiribati and Fiji received support to resolve their socio-economic data collection and reporting issues on small-scale fisheries. In Year 3 support was provided to the Tonga Ministry of Fisheries (MoF) to evaluate the impact of Special Management Areas (SMA - community-based managed areas). This work was undertaken in partnership with MoF, FAO and USP, and described in the Year 3 Annual Report. In Year 4, SPC provided support to analyse and interpret the results of the socio-economic assessment of the SMA programme in Tonga, conducted during the first half of 2021. A final report is currently under revision and will be published as soon as it has been cleared by all relevant stakeholders. In addition, SPC completed an assessment of COVID-19 impacts on fishing communities in Tonga.
- Livelihoods assessments. A framework and an online survey to assess the viability of recreational fisheries as an alternative livelihood were developed. This was initially conceived to support Cook Islands, but both the framework and the survey will be able to support the development of recreational fisheries in other PACP countries.
- Development of the Pacific Framework for Action on Scaling-up Community Based Fisheries Management. In Year 3, SPC designed and implemented four CBFM scaling-up consultative workshops (3 subregional and 1 regional workshop) involving national and subnational fisheries agencies, local communities (traditional leaders, women, youth), local non-governmental organisation and civil society organisation, regional and international organisations and institutions. Through these consultative workshops the Pacific Framework for Action on scaling up CBFM: 2021-2025 was developed, then approved by the 13th Heads of Fisheries (June 2021 – Year 3) and endorsed by the 2nd Regional Fisheries Ministerial Meeting (RFMM2) in July 2021 (Year 4), together with a Policy Brief. This was a significant achievement, as the Framework for Action is a regional commitment that supports, empowers and values our coastal communities in sustaining coastal fisheries in the Pacific.

Development of national CBFM scaling-up Strategies. Consultations commenced in Year 4 on the initial stages with the Tonga Ministry of Fisheries, Nauru Marine Resources Authority and Tuvalu Fisheries Department on the development of their specific national level CBFM scaling up strategies. The CBFM Framework for Action will be the main guiding document in the development of national strategy. This activity will continue in Year 5.

CBFM Scaling-up training modules. In collaboration with the Locally Managed Marine Area Network (LMMA), a draft CBFM scaling-up course structure is being developed. This activity will continue in Year 5.

Establishing and ad hoc Community-Based Fisheries Management Technical Advisory Group (CBFM-TAG). The Terms of Reference for a CBFM-TAG was developed. The purpose of the advisory group is to ensure that high quality advice is provided towards the efficient and effective implementation of the CBFM Framework for Action in the region.

Collation of national CBFM information and the development of CBFM web portal. A consultant is currently working with Pacific countries and Timor Leste to collate national CBFM information by country through a regional broad scale assessment guided by the CBFM Framework for Action. The general assessment will enable members and SPC to understand the status of enabling environment for CBFM scaling-up (i.e. legislation, policy, staffing), coverage of site-based approaches (i.e. number of active, inactive and in-progress sites vs total number of coastal communities) and some insights into broader human rights and tenure aspects across the region. The collated information will assist in tracking the implementation of the CBFM Framework for Action since its endorsement across the region. This activity will continue in Year 5.

- Community-based Ecosystem Approach to Fisheries Management (CEAFM) support in Melanesia. Activities related to this component are being implemented through the Locally Managed Marine Area Network (LMMA) through contracted in-country partners in PNG (Wildlife Conservation Society-WCS, targeting New Ireland Province), Solomon Islands (World Fish Centre, targeting Malaita Province), Vanuatu (Wan Smolbag Theatre with Vanuatu Fisheries Department, targeting Tafea province) and Fiji (consortium led by Conservation International-CI, WCS and Fiji LMMA, targeting Lau, Ba, Lomaiviti, Cakaudrove, Kadavu, Macuata, and Nadroga-Navosa provinces).
- A significant amount of targeted information and awareness products have been produced and broadcast/distributed in Year 4, and itemised in Annex 2. They include: broadcast materials – videos; talkback radio shows; news media products; social media postings and campaigns; materials for print, MP3s/podcasts, videos/smart-phone apps. They include both general and targeted materials.

3.5. Illegal, Unreported and Unregulated (IUU) Fishing

Led by FFA, this component focuses on enhancing monitoring, control and surveillance (MCS) efforts of both oceanic and coastal fisheries, improving legislation, access to information and effective marine management.

In Year 4, the main activities undertaken are summarised as follows:

- During year 3, a consultant was engaged to develop a new regional template for FFA Member countries' NPOA-IUU. The resulting template was completed and presented to FFA Members at Monitoring Control and Surveillance working group (MCSWG25) in February 2022. The template was utilised to develop NPOA-IUUs for Nauru & Tuvalu, which were finalised during year 4.

The NPOA-IUU template will be used to draft/update NPOA-IUUs for those FFA Member countries looking to develop NPOA-IUUs, and those whose NPOA-IUUs are due to be updated.

- FFA PEUMP has been part of a collaborative effort to collect eMonitoring data and test various technologies on board a fish carrier vessel during at-sea transshipment with long-line fishing vessels. One such technology is an electronic scale integrated with the vessel's eReporting system. FFA PEUMP has provided financial support to engage the Consultant who will be responsible for data collection and reporting on board the fish carrier vessel during the trial period. Planned execution of the trip was scheduled for mid-2021, however, was stalled due to COVID-19 travel restriction in key entry ports. Port entry clearances for the Consultant were issued during quarter 4 of year 4, and implementation of this activity will now be completed during year 5.
- Procurement and distribution of Job Aid Tools for MCS Boarding and Inspection Officers: Inspection kits comprising of freezer suits, protective gloves, thermal protective gear, safety equipment and PPEs were procured and distributed in collaboration with the Australian Fisheries Management Authority, to 10 FFA Member countries. The objective of the initiative was to provide tools to enhance the capabilities of MCS Boarding Officers to execute effective Inspections on Fishing Vessels at Sea and in Port to deter Illegal, Unreported and Unregulated (IUU) Fishing.
- A study was undertaken on emerging technologies and their applicability to coastal fisheries and aquaculture Monitoring Control Surveillance and Enforcement. The study captured as many potential tools and technology as possible, assessing of over 175 tools from over 135 companies around the world. A summary of the report was presented to the 14th Heads of Fisheries in June 2022 (<https://purl.org/spc/digilib/doc/r3z2c>). In Year 5, SPC will undertake field trials to evaluate the effectiveness of the emerging technologies and assist countries to strengthen their coastal fisheries MCS capacity at the community, national and ultimately even regional level.

3.6. Sustainable Utilisation of Coastal and Marine Biodiversity

Led by SPREP, this component focuses on promoting sustainable utilisation of coastal and marine biodiversity through improving marine spatial planning, increasing climate change resilience, and enhancing conservation and management. In Year 4, the following were achieved:

- In October 2021 SPREP published the 'A Review of the Status of Sea Turtles in the Pacific Ocean 20216' (<https://library.sprep.org/content/review-status-sea-turtles-pacific-ocean-2021>). Being the most comprehensive literature review undertaken for the Pacific region to date, it presents a summary of the relevant publications and knowledge about sea turtle reproductive biology, movements, and connectivity, and presents these alongside relevant threats that, in combination, are pertinent to understanding the status of sea turtle populations in the Pacific Ocean. The review has not only informed the development of the extinction risk assessment model for sea turtle regional management units in the Pacific, but also the development and regional endorsement of the Pacific regional Turtle Action Plan as part of SPREP's Pacific Islands Regional Marine Species Programme (PIRMSP) 2022-2026. A peer review of the extinction risk model by an expert reference panel was completed on 28 June 2022. The model is now being run to generate assessments which will be published by SPREP in Quarter 2, Year 5 and the modelling approach will be published in an academic journal. Having created the extinction risk model the results published in Year 5 will create a baseline against which to monitor the effectiveness of regional conservation efforts over time.
- A Partnership Agreement with WWF Pacific was signed on 2nd September 2020 titled 'Improving uptake of by-catch mitigation measures for Species of Special Interest in the Pacific longline fleet through a port-based extension programme'. In Fiji Covid-19 restrictions hampered the implementation of port-based outreach activities until December 2021. However, Birdlife continued to engage virtually with vessel owners and with Fiji Ports Authority, the Ministry of Fisheries during lockdown and monitored the Global Fish Watch service for fishing activities in areas beyond 25 degrees south for future outreach & data collection on birds and other Species of Special Interest (SSIs) (turtles, sharks and cetaceans). Between December 2021 and June 2022 Birdlife's

extension officer conducted 120 engagements with vessel crews, collecting data on by-catch and sharing information about relevant WCPFC Conservation Management Measures for SSIs and their implementation. He distributed 14 tori lines (bird scaring devices) in 2022 to date, with another 12 to be given to vessel skippers in July. The distribution of turtle by-catch mitigation device kits and training was delayed and will be continued through to October 2022.

- ‘Cetacean Review in the Western Central Pacific Ocean - An ecological review of species interacting with fisheries’. The final report was submitted in February 2021 and following review by FFA and SPC, the report will be submitted to the WCPFC Science Committee on 23 July as a working paper for consideration in the review of whale and dolphin Conservation Management Measures.
- Marine compliance optimisation project. In Year 4, the second meeting of the Solomon Islands compliance project core team was held in September 2021. The objective of this meeting was for the consultant to present the draft working draft document including the draft Marine Compliance Management Optimization Project (MCMOP) Plan; MCMOP Planner; MCMOP Information Collection Template and MCMOP Working Group Terms of Reference. In 2022 were not realised due to challenges beyond the project’s control. However during this period, the compliance consultant has been working behind the scenes with IUCN to develop the following documents were developed: (i) a complete draft of the Solomon Islands Marine Compliance Management Optimisation Project (MCMOP) Plan; (ii) a framework of templates to manage the lifecycle of the project; (iii) Stakeholder Consultation Sessions Information” Communique Flyers for the MCMOP; (iv) Information collection plans for consultations and interviews with (SIG) Ministry Representatives; and (v) materials for the upcoming planned workshop where all these developed documents will be presented to the relevant Government agencies in Year 5.
- Following the regional approach taken to provide Pacific CITES Parties support to respond to the Appendix II listing of two species of sea cucumber that SPREP initiated with SPC and the NGO TRAFFIC in May 2020, SPREP have continued to support them to meet their legal obligations.
- Since the Eighteenth meeting of the Conference of the Parties (COP) in 2019 there have been several developments in relation to Marine Turtles under the Convention. Ahead of the COP 19 to be held in Panama in November 2022 SPREP, in partnership with TRAFFIC and SPC organised a 2-day workshop in July 2022 to discuss: (i) CITES and related agreements and developments since 2019; (ii) Regional Marine Species Programme and Action Plan for Marine Turtles: 2022-2026; (iii) Findings of the Pacific Marine Turtle Extinction Risk Assessment; (iv) CITES processes going forward; (v) National level Implementation of CITES; (vi) The regional priorities going forward for inclusion in any CITES Decisions or Resolution.

3.7. Capacity built through education, training and research and development

The University of the South Pacific (USP) is responsible for KRA 6. A summary of the main outcomes during year 5 is provided hereunder:

- Education and training activities included supporting cohorts for existing fisheries and fisheries-related certificate level programs, generic professional short courses and two existing Micro qualifications. Tailored technical and generic upskilling opportunities through these Technical and Vocational Education (TVET) and Continuing Professional Development (CPD) opportunities, addressed existing and emerging issues (globally, regionally and locally) in the Pacific Ocean space. Such efforts are intended to address some of the gaps identified in the capacity needs and gaps analysis carried out in the first year. In addition, support was provided for the development of the first ever mainstream gender course linked to environment – Gender and Environment which included a fisheries component.

- During the programme development phase, an Industry Programs Advisory Committee (IPAC) is established to provide technical expertise and advice in the development process. Committee members include, subject specialists from industry, educators and practitioners in the region including PEUMP programme implementing partners.
- Two developments of lower tertiary qualifications or Technical and Vocational Education (TVET) qualifications namely, Certificate IV in Pacific Ocean Finance and the Diploma in Fisheries Investigation and Prosecution were instituted at the 93rd Council Meeting of the University of the South Pacific in May 2022. With regards to continuing professional development (CPD), an additional two Micro-qualifications (Analysing Agriculture and Fisheries Value Chain and Community-based Fisheries Management Tools) and a Massive Open Online Course on SDG14 are under development to provide for economic and educational empowerment of our marine professionals and communities, particularly, for women and youth. KRA6 staff were involved in the review/development of existing resilience programs including Certificate IV and Diploma's – levels 5 and 6 (upper TVET).
- Relative impacts of the TVET and CPD programs were measured through online Tracer survey results which contributed to improvements in delivery. An average of 45.5% of students from each of the six training programs participated in the online tracer surveys. A significant impact for the Certificates was the 41 regional professionals who had access to higher roles and responsibilities as a result of the upskilling. To ensure that a human rights based approach was used, equal gender representation and participation from countries across the Pacific Islands region, a gender equality and social inclusion (GSI) lens is applied during the development and delivery of the training programs and at the student selection/mentoring process.
- A total of ninety-six Pacific Island professionals (44 males; 52 females) were scholarship recipients from 8 P-ACP countries (Cook Isl., Fiji, Kiribati, PNG, Solomon Isl., Timor Leste, Tuvalu & Vanuatu) as part of up-skilling and continuing professional development initiatives of the programme. In addition, 14 students completed the post-graduate course in Gender and Environment, the development of which was funded under the USP KRA6 program.
- Research topics of both students and staff were to aid in data collection for informed management of national priority marine species (coastal & offshore), including DNA sequencing; emerging regional environmental issues; (heavy metals, micro-plastics) traditional knowledge, climate change adaptation/impacts on marine resources; impacts on ecological connectivity on coastal forests. Significant outcomes of research were five publications by two students and three staff.
- Communication and visibility was a critical component which provided awareness of KRA6 activities to partners, stakeholders, donors and the general public. This was conducted through social media, USP Corporate Website, USP IMR website and the SPC-PEUMP website. Education and training visibility events included, certificate awarding ceremonies, short course activities and agreement signing. Conference presentations and publications contributed to research visibility.

3.8. Cross-cutting issues: Gender, Human Rights, and Poverty Reduction

Year 4 continued to focus on technical assistance to regional implementing partners, tools development and creating learning exchange, including meeting the increased country requests to provide GSI/RBA mainstreaming support. Year 4 showed successful leadership of regional implementing partners who applied GSI/HRBA concepts with little or no guidance in their specific areas of work, demonstrating ownership of the mainstreaming process and a stronger embedment of GSI/HRBA into institutional structures. Thus, PMU GSI/HR expertise in Year 4 was directed towards those regional implementing partners that required stronger guidance as

well as supporting the increased demand of national agencies for capacity building and technical advice. Key accomplishments across KRAs during Year 4 are highlighted and overarching PMU led activities are summarized hereunder.

- Technical assistance in mainstreaming GSI and human rights related issues such as food security (right to food) and livelihood related issues (right to a livelihood, right to work, right to a healthy environment), including linkages to poverty reduction regarding impacts, coping mechanisms and adaptation was provided to KRA3 as lead for this activity.
- Building in country capacity on GSI/HRBA in fisheries and connecting national gender and human rights agencies with fisheries agencies through mentoring in Tonga.
- HRSD GSI/Human Rights Advisers supported FAME in mainstreaming a People Centred Approach (PCA) in their Regional Technical Meeting on Coastal Fisheries and Aquaculture (RTMCFA) in October 2021. This resulted in enhanced “voices of the people in the region” being heard through CSO and Non-State Actors (NSAs) participation.
- Noticeable progress has been made by KRA3 to increase GSI/HRBA advice in CBFM technical work through the inclusion of GSI/HR experts in the CBFM-TAG, including GSI/HRBA considerations made mandatory as part of the CBFM-TAG terms of reference. A similar advisory group is being established for the strengthening of CSO/NSAs voices anticipated to include GSI/HR considerations as well.
- Contribution to the study on “Local practices and production confer resilience to rural Pacific food systems during the COVID-19 pandemic” which was published in the journal Marine Policy.
- Building on the 2020 regional GSI and human rights workshop for selected countries, a similar workshop was designed and conducted remotely at the end of June 2022 for FSM and RMI. In total, 36 (21 women/15 men) participated. Main purpose was to present back key findings and recommendations from recent gender and fisheries assessments and from the complementary draft legal analysis on gender and human rights in coastal fisheries and aquaculture. In addition to presenting and discussing findings, the workshop provided participants with an enhanced understanding of GSI and human rights concepts as a basis for improved mainstreaming into national policies, laws and actions.
- PEUMP supported the Solomon Islands MFMR request for capacity building to better mainstream GSI/HRBA in their daily work and as part of their current flagship projects. The trainings were conducted in a hybrid format using a mix of virtual presentations via zoom by SPC, Pathways trainers and in-person facilitation by WorldFish and SPC-HRSD in-country focal point as well as presentations from the Ministry of women on national gender priorities and emerging issues.
- The development of the SPC GSI and Human Rights Handbook for Pacific Tuna Industries was initiated. A wide range of stakeholders across national agencies, CSOs/NSAs, private sector and development partners were engaged in the consultation process or through input and feedback shared during review of draft versions. The Handbook on GSI in coastal fisheries and aquaculture was used as a model for the GSI/HR tuna handbook on GSI/HR, using similar format and style and including lessons learnt for adaptation as well as introducing new elements on human rights across all thematic areas, dual responsibility from private and state agents, a specific Fiji case study and tools for each learning module. The final handbook is expected to be finalised and published early 2023.

The draft GSI/HR tuna handbook will cover the following thematic areas: Module 1: Introduction; Module 2: Social analysis and MEL; Module 3: GSI/HR at sea; Module 4:

GSI/HR at port areas; Module 5: GSI/HR in onshore processing; Module 6: GSI/HR in the informal small-scale tuna sector; Module 7: GSI/HR in fisheries management and science; Module 8: Stakeholder engagement for GSI/HR in tuna industries; Module 9: Fiji case study.

4. OTHER INTERVENTIONS FUNDED BY THE EU RELATED TO OCEAN GOVERNANCE IN THE WCPO

Project Name	Description	Amount EU Contribution	Status
Biodiversity and Protected Area Management – BIOPAMA II	To overall objective is to contribute to improving the long-term conservation and sustainable use of biodiversity and natural resources in ACP regions in protected areas and surrounding communities through better use and monitoring of information and capacity development on management and governance.	EUR 1.3 M Pacific component	On-going through SPREP and IUCN
Pacific Biodiversity and Sustainable Land - Seascapes - Pacific BioScapes	The overall objective is to contribute to the sustainable development of Pacific SIDS and coastal countries while contributing to the implementation of the SAMOA Pathway by supporting and improving the management and sustainable use of coastal and marine resources.	EUR 12 M Pacific component	On-going through SPREP
FISH4ACP: Sustainable development of fisheries and aquaculture value chains in ACP countries	The overall objective is that sustainable fisheries and aquaculture value chains contribute to economic growth, decent jobs creation, food and nutrition security in ACP countries.	EUR 3 M RMI value chain selected for support in the Pacific	Ongoing through FAO
“Kiwa initiative” Pacific Initiative on Biodiversity, Climate Change, and Resilience	The overall objective is to make pacific island ecosystems, economies and communities more resilient to the impacts of climate change.	EUR 13.9 M (total of 41 M) (+ EUR 6 M in negotiation)	Ongoing through the AFD
Global Climate Change Alliance (GCCA+) initiative for climate adaptation and resilience building in Samoa	The overall objective is to promote the sustainable use of Samoa's marine resources while increasing climate resilience of local communities through ecosystem-based adaptation (EbA) and the development of a Marine Spatial Planning (MSP)	EUR 1.144 M	On-going through IUCN
Intra-ACP Climate Services and Related Applications	The overall goal of this Action is to support the climate information services value chain with technical and financial assistance, infrastructure and capacity building in ACP countries	EUR 9 M	Ongoing through SPREP
Pacific Solutions: Integrated Ocean Management PSIOM	The Overall Objective of this action is to strengthen ocean governance in 15 countries where the programme will be implemented.	EUR 1.5 M (total 1.8 M)	Contract under negotiation with SPC
EU Contribution in the area of Ocean Governance (excluding PEUMP)		EUR 69.25 M	
Total EU Contribution in the area of Ocean Governance		EUR 114.25 M	