JOB DESCRIPTION

Job Title:	**COASTAL FISHERIES INFORMATION AND DATABASE MANAGER**
Division/Programme:	Fisheries, Aquaculture & Marine Ecosystems (FAME) Division/ Coastal Fisheries & Aquaculture Programme (CFAP)
Location:	Noumea, New Caledonia
Reporting to:	Deputy Director (Coastal Fisheries & Aquaculture Programme) FAME
Number of direct reports:	1
Purpose of role:	To provide strategic and technical expertise in the design, development, governance, and deployment of coastal fisheries and aquaculture data systems, including databases, digital platforms, and AI-enabled solutions. Support evidence-based management and strengthen capacity across Pacific Island countries through innovative, standardised, and sustainable data systems.
Date:	August 2026

Organisational Context

The Pacific Community (SPC) is the principal scientific and technical organisation in the Pacific region, proudly supporting development since 1947. We are an international development organisation owned and governed by our 27 Members. We work for the well-being of Pacific people through the effective and innovative application of science and knowledge, guided by a deep understanding of Pacific Island contexts and cultures (https://www.spc.int/).

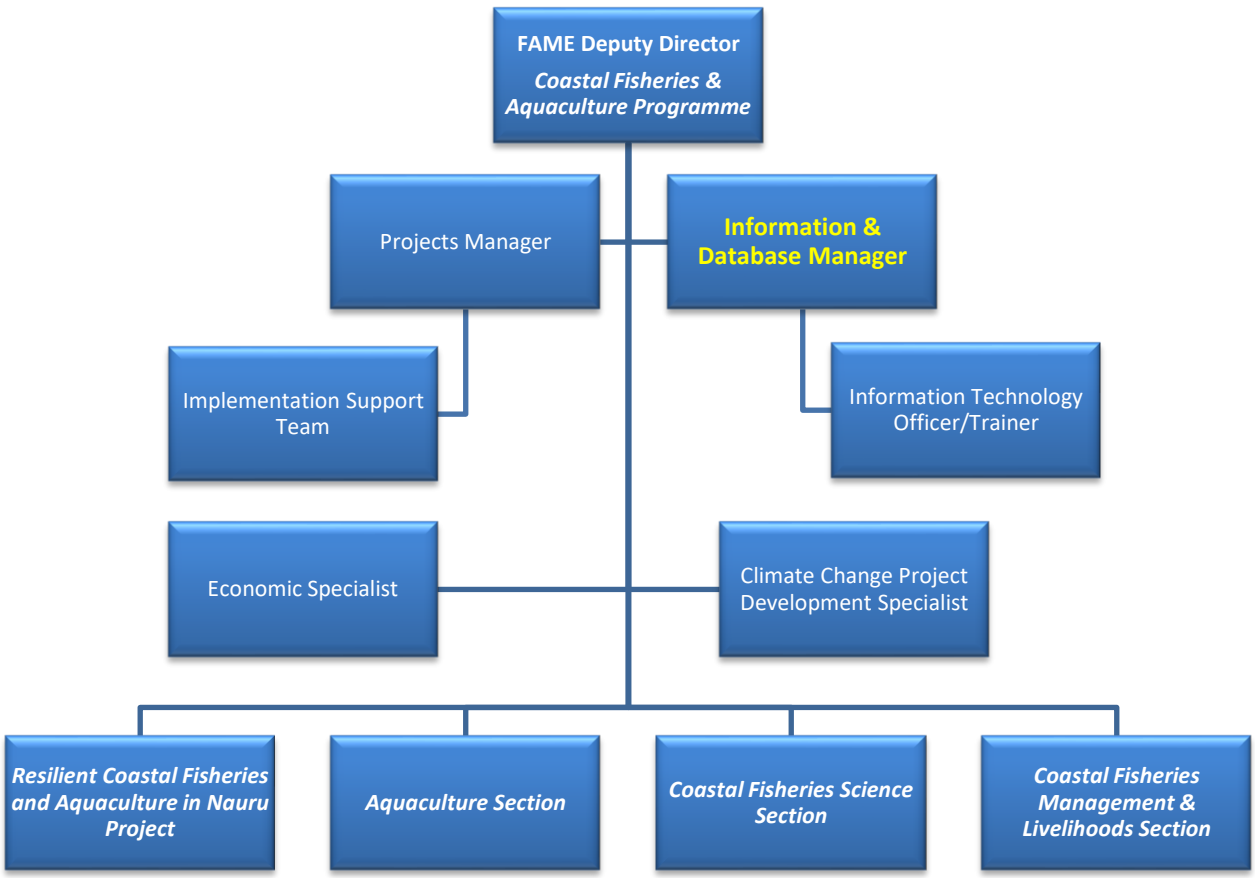
SPC's Division of Fisheries, Aquaculture and Marine Ecosystems (FAME) capability has been providing scientific and technical expertise to support fisheries management and sustainable development in the Pacific for over 65 years. The goal of SPC FAME is that the fisheries resources of the Pacific islands' region are sustainably managed for economic growth, food security and environmental conservation. In pursuit of this goal, SPC FAME provides scientific and management advice to Pacific Island Countries and Territories (PICTs) and regional agencies to support the management of sustainable oceanic fisheries, coastal fisheries, marine ecosystems and aquaculture resources. Along with addressing the challenges in the management of the region's marine resources, there are also significant opportunities to derive greater economic and social benefits from them. Deriving greater benefits from the tuna fisheries, the development of aquaculture in the region, along with alternative livelihoods in coastal and nearshore fisheries, hold significant potential. SPC FAME provides technical assistance to support PICTs to maximise these sustainable development opportunities in the marine sector and in some parts of the freshwater sector.

SPC FAME is composed of three programmes: the Coastal Fisheries and Aquaculture Programme (CFAP); the Oceanic Fisheries Programme (OFP); and the Marine Ecosystems Programme (MEP). The Director's Office provides implementation support and strategic direction across the three programmes and cross-cutting

projects. Working with all 22 PICTs, SPC FAME has strong partnerships with regional, sub-regional and national entities working in the marine and aquaculture sectors. SPC FAME staff are based in New Caledonia, Fiji, Federated States of Micronesia, Solomon Islands, Vanuatu and Tonga, with most of the staff being based in New Caledonia.

The SPC FAME CFAP provides science and technical support to PICT governments and administrations to enhance the effective management of coastal fisheries, and the sustainable development of aquaculture and nearshore livelihoods. CFAP assists PICTs to develop scientifically informed and socially achievable coastal fisheries management policies and procedures. CFAP provides PICTs support for sustainable aquaculture, including planning, research and development, aquatic biosecurity and trade, for governments, the private sector, communities and other stakeholders. CFAP assists in developing sustainable nearshore fisheries to provide for food security, sustainable livelihoods, economic growth, assists with climate change resilience and adaptation, and addressing new and evolving challenges to coastal fisheries and aquaculture in the region.

The **Coastal Fisheries Information and Database Manager** is a key position in SPC FAME, providing strategic and technical expertise in the design, development, governance, and deployment of coastal fisheries and aquaculture data systems, databases, digital platforms and AI-enabled solutions.



Key Result Areas (KRAs):

KRA#1: Develop and maintain high-quality regional and national coastal fisheries and aquaculture databases and information systems and provide training in their use (30%).
KRA#2: Practical assistance to members in the designing and targeting of appropriate awareness raising and educational information (15%).
KRA#3: Develop Artificial Intelligence based tools and models for data collection (25%).
KRA#4: Promote inter-agency networking and cross-sectoral collaboration in coastal fisheries and aquaculture (15%).
KRA#5: Administration and communication (15%).

The performance requirements of the Key Result Areas are broadly described below

Jobholder is accountable for	*Jobholder is successful when*
KRA#1: Develop and maintain high-quality regional and national coastal fisheries and aquaculture databases and information systems and provide training in their use (30%): • Develops, maintains and updates the regional coastal fisheries (science, management and development) and aquaculture databases including training in the use of databases, data extraction and analysis • Develops new web and mobile applications for the regional and national databases in line with country needs and the needs of the coastal fisheries and aquaculture programme staff • Develops and assists in maintaining national databases based on the regional databases and additional modules. • Develops specific queries for data extraction and analysis as required by countries or the coastal fisheries and aquaculture programme staff. • Promotes and encourages the use of standard databases and information systems across the region for coastal fisheries and aquaculture data, and countries to providing the data they collect for back-up and storage at SPC. • Identifies and develops linkages between the coastal fisheries and oceanic fisheries databases in collaboration with oceanic fisheries statistics and data collection section. • Identifies ways to better use GIS and remote sensing products in relation to the analysis of coastal fisheries and aquaculture data.	• Database modules for coastal fisheries and aquaculture are developed and implemented at the regional and national level with ongoing training, assistance and maintenance. • All fieldwork activities and trainings are undertaken in line with the annual work plan for the CFAP Sections. • Data extraction done for all applications as requested by countries or coastal fisheries programme staff. • Countries are using standard databases and providing their data to SPC for back-up. • SPC coastal fisheries, aquaculture, oceanic fisheries and other relevant databases compatible • GIS application/platform that includes available baseline & coastal fisheries and aquaculture data is available to conduct spatial analysis.
KRA#2: Practical assistance to members in the designing and targeting of appropriate awareness raising and educational information (15%): • Develops training materials on data entry, cleaning and extraction. • Assists with developing and maintaining the website for the CFAP with the Information Unit to assist with the dissemination of information in general. • Provides input to awareness raising and educational materials focused on coastal fisheries science and/or management or livelihoods and aquaculture	• Training materials and manuals are produced in line with annual work plan and country needs • Website is updated at least on a monthly basis. • Digital library and photo library are maintained and expanded
KRA#3: Develop Artificial Intelligence based tools and models for data collection (25%): • Improves coastal fisheries and aquaculture data collection using photos and videos automatically processed by computer vision and artificial intelligence	• AI tools are effectively integrated into fisheries workflows • Processing chain is developed to automate the processing of images

• Develops and trains models to calibrate and reproject pictures for measurement from picture • Develops and trains models to automate measurements of fishes and invertebrates for the various types of measurements • Develops and trains models for species identification.	• Training datasets are created and AI models trained for use in image classification, calibration, and specimen measurements
KRA#4: Promote inter-agency networking and cross-sectoral collaboration in coastal fisheries and aquaculture (15%): • Develops links with other CROP agencies and NGOs in regard to database needs and design for coastal fisheries and aquaculture • Advocates at global forums on behalf of the Pacific region sectoral interest**s** • Develops and promotes collaborations within the CFAP on issues such as food security, small-scale livelihoods, climate change adaptation, etc. • Works closely with other sections of CFAP to ensure smooth implementation of projects.	• Links are developed and maintained with other relevant CROP agencies and NGOs • Pacific issues and concerns are being voiced at global forums • Input is provided to joint internal projects where a holistic approach is needed.
KRA#5: Administration and communication (15%): • Assists the CFAP Deputy Director and Section heads, to include information and database needs in the annual work plans and work plan reports for each Section, consistent with the strategic plan. • Maintains up to date corporate and administrative procedures for all activities undertaken. • Contributes where applicable to Programme, Divisional and Corporate publications, such as Fisheries Newsletters, annual reports, and Divisional reports for CRGA. • Produces reports for all activities undertaken in the appropriate format for the activity including technical reports and trip reports, and input to funding proposals, donor reports. • Manage, develop and train direct report. • Fills in for senior staff when they are on leave or duty travel, when required	• Annual work plans and reports for the CFAP Sections are consistent with the strategic plan • All of the operations and activities undertaken are fully documented and all administrative tasks completed within the set deadline. • Input or articles are provided for all Programme, Divisional and Corporate publications within the set deadlines. • Reports are produced within two weeks of completing an activity • Acting roles for senior staff are successfully fulfilled.

The above performance requirements are provided as a guide only. The precise performance measures for this job will need further discussion between the jobholder and supervisor as part of the performance development process. Many of the outputs described here will only be achieved through teamwork. The incumbent will not be solely responsible for achieving them.

Most Challenging Duties Typically Undertaken (Complexity):

- Standardise and collaborate on database development and monitoring systems with countries, NGOs and others involved in this area when many want to work in isolation using their approach or systems.
- Integrating emerging technologies such as AI and computer vision into operational environments and training custom AI models.

- Assisting with establishing functional coastal fisheries and aquaculture databases with local staff in country with them taking ownership and conducting the maintenance of the database, updating of data and doing data extraction
- Providing training in database management, database maintenance, and data analysis with local staff, with them being competent in all areas after the training.
- Developing queries for data extraction to meet the needs of member countries and territories and the coastal fisheries programme staff.
- Maintaining, updating and further developing parts of the website for the CFAP, including the development of web-based programmes for access and exchange of information and services.

Functional Relationships & Relationship Skills:

Key internal and/or external contacts	Nature of the contact most typical
External Key external contacts are: • Pacific Island governments and departments involved in fisheries and aquaculture issues, research, stakeholders • Regional and international agencies including CROP agencies, WorldFish, FAO, etc. • Universities and other research agencies, particularly those operating within the region • International and Pacific Island national NGOs	• Persuading, gaining cooperation, liaising, reporting • Working with, facilitating, advising
Internal Key internal contacts are: • FAME Deputy Director (Coastal Fisheries and Aquaculture Programme) • CFAP Section heads • Other CFAP staff • Oceanic Fisheries Programme data managers and scientists • Operations and Integration (corporate) services, especially ICT • FAME Director's Office cross-cutting units • Other SPC technical Divisions – PCCOS, GEM, SDD • SPC Flagships (Digital, Food Systems, Oceans, Climate Change, Gender)	• Explaining, gaining cooperation, resolving minor conflicts • Leading, supervising, coaching, monitoring • Liaising, working collaboratively

Level of Delegation:

Routine Expenditure Budget: EUR 200,000 per year

Budget Sign off Authority without requiring approval from direct supervisor: EUR 2,000

Person Specification:

This section is designed to capture the expertise required for the role at the 100% fully effective level. (This does not necessarily reflect what the current position holder has.) This may be a combination of knowledge / experience, qualifications or equivalent level of learning through experience or key skills, attributes or job specific competencies.

Qualifications

Essential:	Desirable:
• Master's in computer science, database development or a related field/discipline or equivalent body of knowledge and experience.	• Postgraduate qualification in Artificial Intelligence, Machine Learning, Computer Vision, Data Science or a related field.

Knowledge/Experience

Essential:	Desirable:
• At least 12 years' of demonstrated experience in database management, project management and software development associated with the successful implementation of medium- to large-scale web and desktop application systems • At least 8 years' of demonstrated experience in the use of Microsoft products, both as a user and developer, in particular, (i) experience in software engineering, (ii) programming in client-server environments in C# with MS Visual Studio, (iii) ASP.NET Core and single page web applications with MS Visual Studio (C#, JavaScript and angularjs), (iv) database technologies (preferably SQL Server) and other database formats, (v) development of mobile application in C# (.NET MAUI) • Demonstrated experience with (i) producing system and user manual documentation, (ii) user training and (iii) ongoing technical support for deployed applications • Excellent communication skills (oral and written) • Excellent interpersonal skills, ability to work in team as well as undertake unsupervised work, and negotiate with people from different ethnic, cultural and educational backgrounds. • Demonstrated problem solving skills, detail orientation, and ability to multi-task. • Willingness to travel and undertake overseas assignments in SPC member countries	• A working knowledge of both of SPC's official languages (English and French) • Experience in development of AI models for computer vision (classification, detection, segmentation) • Experience in GIS technologies (Quantum GIS) • Experience with coastal fisheries and/or aquaculture data

Key Skills/Attributes/Job Specific Competencies

The following levels would typically be expected for the 100% fully effective level:

Expert level	• Database management • Project management • Software development

Advanced level	• Software engineering, programming client-server and web applications in C#, JavaScript and angularjs with MS Visual Studio • Database technologies (preferably SQL Server) and other database formats
Working knowledge	• Computer vision and training custom AI models for detection/classification • Cross platform mobile application development in C# and associated technologies • GIS and Remote sensing technologies (Quantum GIS)
Awareness	• Crosscutting issues such as food security and climate change in the Pacific • Relevant social and economic issues in the Pacific

Key Behaviours

*All employees are measured against the following **Key Behaviours** as part of Performance Development:*

- Change and Innovation
- Interpersonal Skills
- Judgement
- Promotion of Equity and Equality
- Teamwork

Personal Attributes

- High level of professional integrity and ethics
- Friendly demeanour
- Demonstrated high level commitment to customer service

Change to Job Description:

From time to time, it may be necessary to consider changes in the job description in response to the changing nature of the work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by SPC. This Job Description may also be reviewed as part of the preparation for performance planning for the annual performance cycle.