

Practising what you teach: field-based training with SPC's e-data systems

Bringing back the personal touch is important when following up online training. Scientists from the Pacific Community (SPC) develop e-data systems to be relevant to member's specific needs, and how better to get to know these individual requirements than in person? SPC's coastal fisheries scientists paid a visit to the Ministry of Fisheries in Fiji to fine-tune their e-data system approach.

SPC's Coastal Fisheries and Aquaculture Programme (CFAP) has developed a web-based e-data system with an accompanying app, Ikasavea.¹ This system is being introduced to Pacific Island countries and territories (PICTs) to enable them to transition from paper to electronic-based monitoring of their coastal fisheries. Use of the e-data system will also enable standardisation of data collection between relevant divisions within member countries. SPC staff visited Fiji in July 2022 to provide training to the Inshore Fisheries Management Division (IFMD) and Research and Development Division (RADD) teams within the Ministry of Fisheries (MoF), in the use of the e-data systems for market and creel surveys.

Before travelling to countries, the science and database team within CFAP works collaboratively with members to ensure development and application of the e-data system remains relevant to their needs. Online training was provided to MoF prior to our arrival, via one-week virtual workshops in 2020 and 2021. These workshops provided the foundational knowledge needed to undertake market and creel surveys using the e-data systems. Topics covered included invertebrate and finfish identification, fish market and creel survey methods, use of the Ikasavea app for data collection, and use of the web-based portal for data management.

While virtual training works well for introducing the system and providing familiarity with the app and associated tools, there is always a need to work face-to-face with members as they learn where and how to best apply the new system. Fiji has a complex coastal fisheries environment with markets and landing sites of varying size and activity levels. This means there is no one-size-fits-all approach with sampling protocols and so, in-person visits by SPC staff with MoF staff are required. Working together in-country has enabled trainers and trainees to think about how existing survey methods for assessing landing sites and markets can be adjusted so that they fit with the new e-data system approach.

After completing the training, which included two weeks in the field with IFMD and one week with RADD, both teams were comfortable in using Ikasavea and the web applications for market and creel surveys. The online training, followed closely by in-person visits, have given RADD and IFMD staff a much-improved understanding of, and practical skills for, what is needed to carry out effective market and landing surveys using the e-data systems. In addition, the teams have acquired knowledge on appropriate measurement protocols for the various non-standard commodities sold at the markets and/or landed by fishers/collectors. These commodities, which can include clam shell meat, piles of bivalves or



Mixed invertebrate commodities including mud crabs (*Qari*) and *Polinices flemingianus*, or moon snails (*Drevula*), being sold at Suva fish markets. Image: © SPC

¹ <https://www.spc.int/CoastalFisheries/FieldSurveys/MktSurvey>

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gastropods, and plates of algae, are a poorly reported but fundamental component of fisheries catches.

Online training followed by in-country support is only the first step in what will be an ongoing relationship between SPC and Fiji's MoF. Further hands-on training, advice and support will be necessary as MoF makes the necessary adjustments to transition their various monitoring programmes from paper to online. Future training activities will focus on analysis and reporting within the e-data system.

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Large berried female *Panulirus ornatus* (ornate rock lobster) sold at Suva Fish markets Fiji. Image: © SPC



IFMD staff (left) underwent training previously and are now assisting as trainers for RADD staff (right) in correct data entry using Ikasavea application on the tablet. Image: © SPC



RADD staff undergoing training in measurement protocols using a mock practical market setup at Ministry of Fisheries Research Station – Lami. Image: © SPC



Mixed invertebrate commodities including giant clam meat and whole trochus being sold at Suva fish markets. Image: © SPC