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Ikasavea and TAILS merge for landing data collection

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To enhance data collection from artisanal fisheries at markets and landing sites, SPC Fisheries, Aquaculture and Marine Ecosystems (FAME) Division's Coastal Fisheries and Aquaculture Programme (CFAP) and Oceanic Fisheries Programme (OFP) have developed two mobile (smartphone and tablet) applications which have been gradually adopted by various data collection teams in the Pacific Islands region.

TAILS was developed to capture tuna and pelagic species catches from small-scale artisanal fisheries for upload into the TUFMAN2 database to support the Western and Central Pacific Fisheries Commission (WCPFC) reporting requirement for annual tuna catches in the region, whereas Ikasavea was developed to collect market, landing, community, socio-economic, and biological data in relation to coastal fisheries and is synchronised with the Coastal Fisheries web applications¹.

Over time, users have realised the benefits and utility of components in both applications. Given the overlap in function, and guidance from the 16th Heads of Fisheries meeting², SPC FAME is actively working to incorporate the features of TAILS into Ikasavea leading to an enhanced application that will incorporate the features of both applications, thus streamlining data collection from nearshore, coastal and artisanal fisheries.

SPC is transitioning to a single application through a phased approach, starting with members that are not actively using the TAILS application, and gradually transitioning those that are. Throughout this transition, SPC will be conducting training workshops to familiarise users with Ikasavea and to ensure that the useability and functionality is continuing to meet the region's needs.

Ikasavea is currently under redevelopment. It has been modernised and migrated to a new technology (.NET MAUI) to ensure long-term support, and enhanced to incorporate additional features such as the possibility to associate landing data with a registered vessel or to an active fish aggregating device (FAD), similar to TAILS. The new version is currently being tested with newly trained Ikasavea users, as well as existing TAILS users, to collect feedback and requirements to ease the transition to the new application. The improved application will be released to the region once completed (with socio-economic surveys and biological sampling included) and fully tested, in early 2025.

As with all database systems, Ikasavea and TAILS use reference data shared between multiple landings, such as lists of species, vessels, fishing areas, active FADs or landing sites. To ensure compatibility between artisanal data in TUFMAN2 and the Coastal Fisheries web application, the reference data from TUFMAN2 has been imported into Ikasavea and we are using that opportunity to clean and standardise some of the legacy data. We added flags to allow for erroneous or duplicated reference data to be retained for legacy purposes (until corrected), but these data will be hidden for new data entry to ensure their use is discontinued. Legacy

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

² [Outcomes of the Sixteenth SPC Heads of Fisheries Meeting](#), paragraph 24.b

trips, efforts and artisanal catch data will be imported on a country-by-country basis after the TAILS users have migrated to the new system.

To ease the adoption process, we intend to add a 'TAILS' mode into Ikasavea that mimics the TAILS interface for landing surveys, for users who want to retain the old interface and methodology, while allowing the use of photos for catch data. We will also migrate reports and queries for artisanal fisheries that may exist in TUFMAN2 Reports but are not yet in the Coastal Fisheries web application.

Finally, we are investigating ways to integrate the TUFMAN2 authentication into Ikasavea and Coastal Fisheries web application for a smooth transfer of users from one system to the other.