

How do we observe and monitor artisanal tuna fisheries in the western and central Pacific?

The Pacific Community established a new artisanal monitoring programme in 2011 to document the number of small-scale vessels involved in the fishery and their total catch. The impact of the industrial tuna fisheries on these vessels is an important focus.

Sampling design

- Standardised data collection forms
- Vessel registration to enumerate and identify vessels
- Data collection at main landing sites, no on-board observations
- Complements and enhances other programmes, including FAD deployments, and socio-economic and creel surveys
- Fisher lead data collection for charter vessels being considered

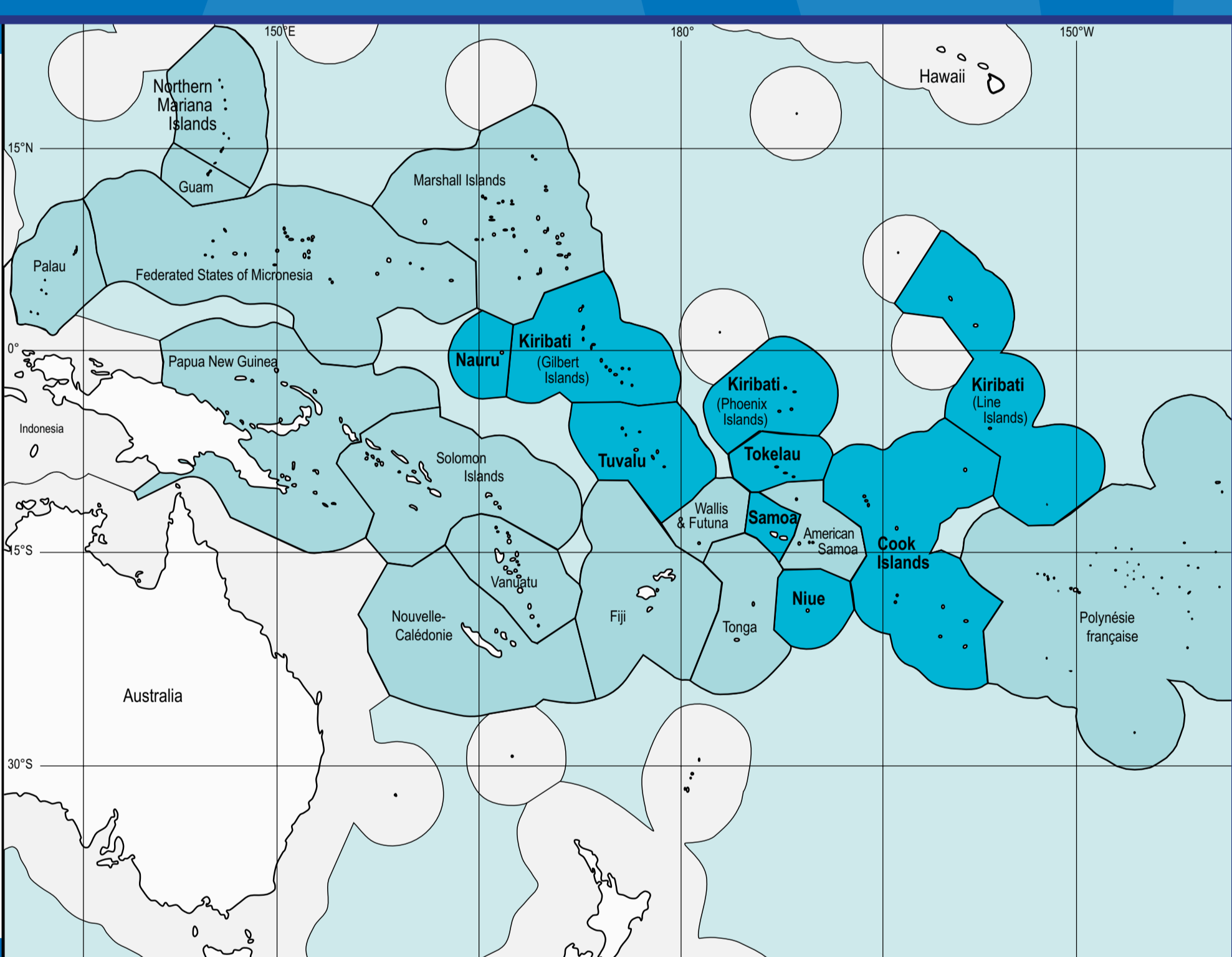


Challenges

- Access to remote sampling sites
- Basic infrastructure
- Difficult to uniquely identify canoes
- Landing sites can be very dispersed
- Neither discards or market data are collected
- Little or no legislation to support monitoring
- Issues of data confidentiality in small communities



Currently across seven Pacific countries



Aligned with observer training

Recognition under the PIRFO certification given for comparable competencies: i.e. length measurements, etc. Accreditation feeds into the PIRFO "Career Pathways for Observers".



Emerging technologies



Tails
 A smartphone/tablet application has been designed to capture data with direct up load when wifi allows. Developed for very low internet connection.



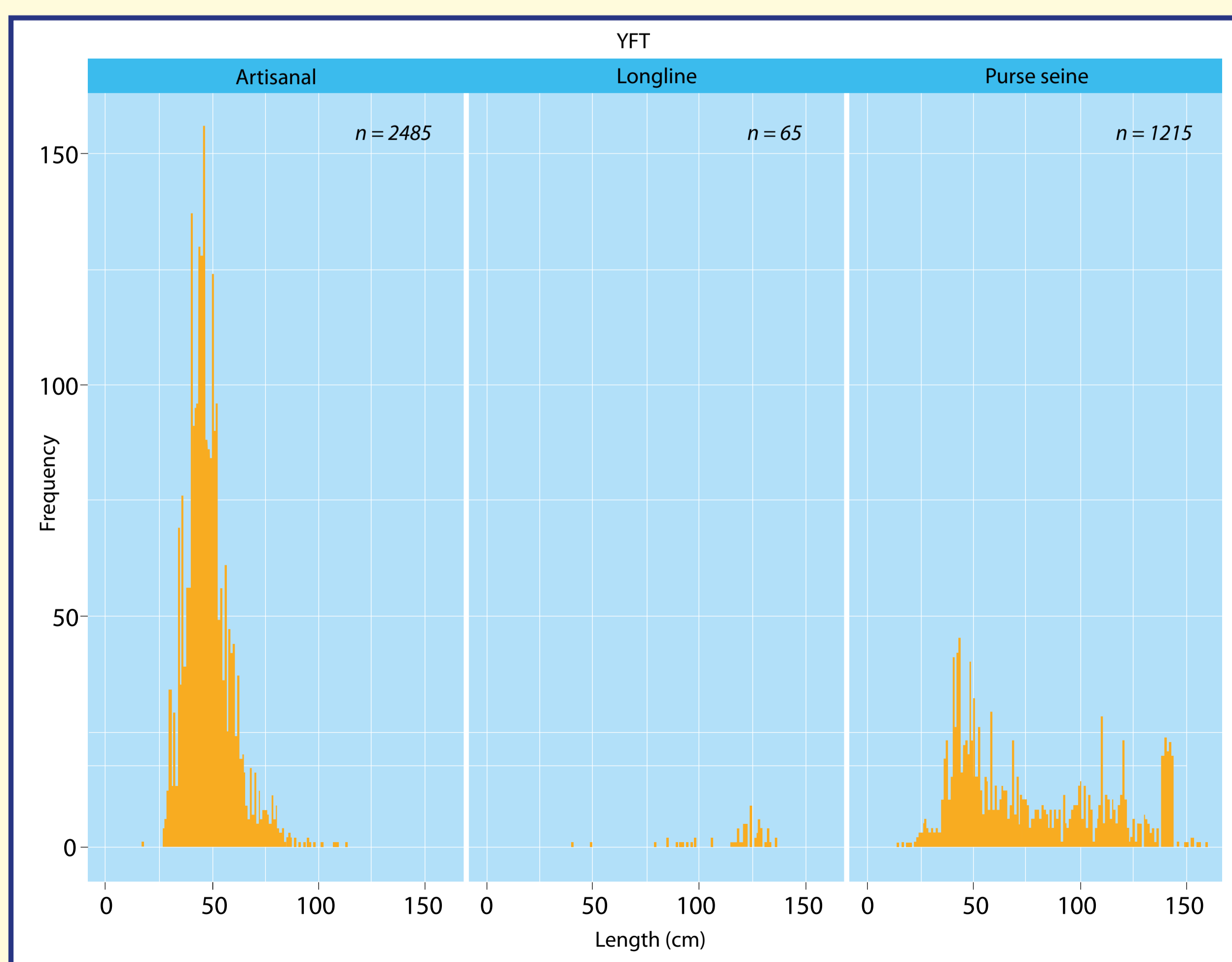
Em-trak
 Devices to track fishing position (trial starts in September)

Upcoming
 Vessel activity counts through camera surveillance at boat ramp (currently in design phase).

Are large offshore vessels affecting artisanal vessels catch?

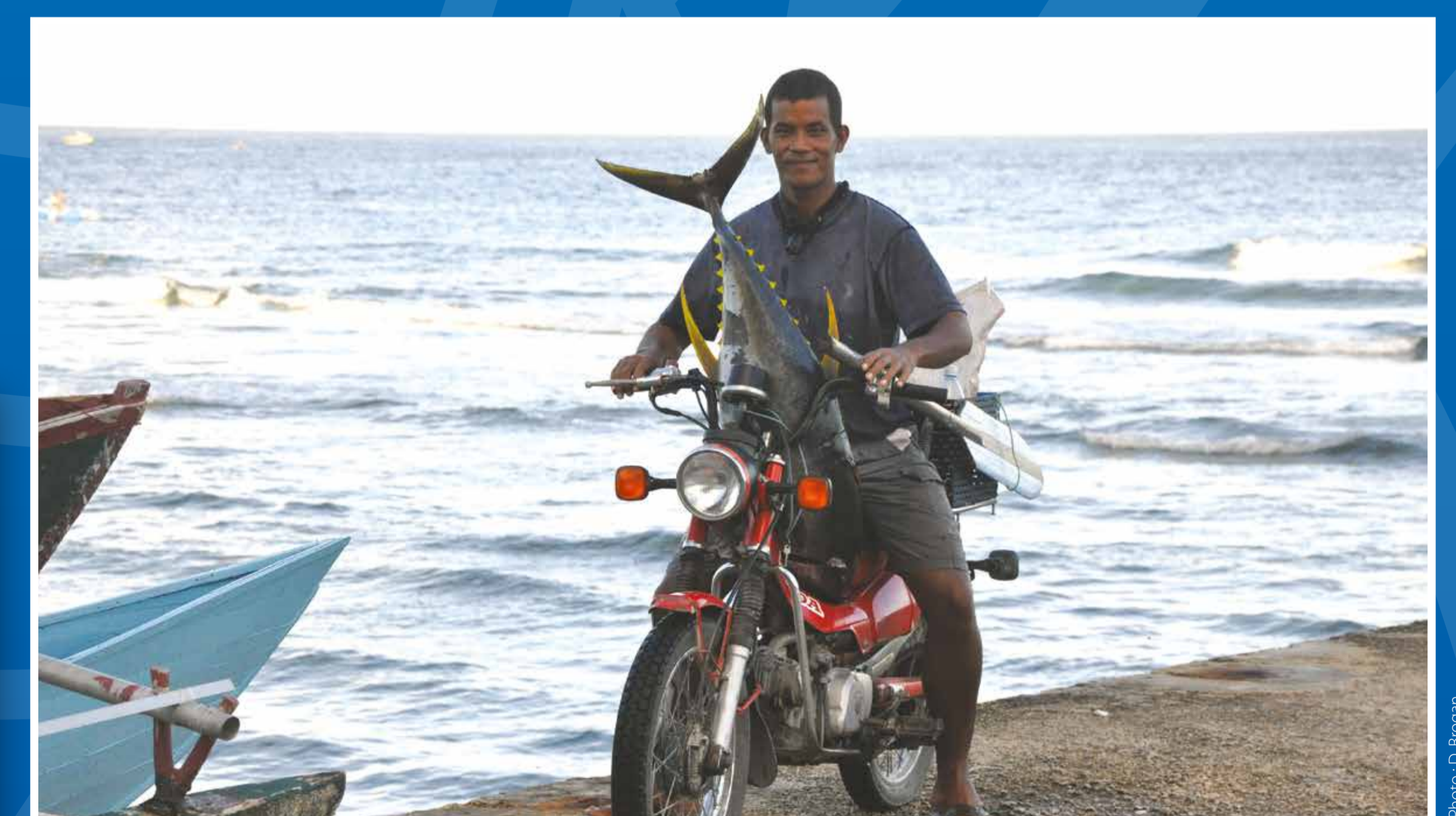
"Gifting" of discards can flood the local market and reduce artisanal fishing.

Analysis of catch data from Tuvalu and others countries shows artisanal catches may be affected by offshore vessels, depending on the extent of the overlap in their fishing location and species composition.



Yellowfin tuna length samples from the purse seine, longline and artisanal catch sampled in Tuvalu

More data are required!



Conclusions

- Report on challenges of vessel registration is available
- Programme is linked to Goal 4 (food security) of Pacific Regional Roadmap for Fisheries
- Long-term data sets starting to emerge
- Future steps will increase the use of technology and more analysis