# Appendix B. Towards Strengthening Palau's Domestic Fishery Sector

## Palau's pelagic fishery sector is currently dominated by foreign-owned businesses

Locally based, foreign-owned longline fleets provide 84–94% of pelagic fish in Palau's market, which is often low-quality fish. Conversely, a few Palauans currently operate small-scale, recreational vessels (i.e. day boats) using a variety of gear types (e.g., trolling, vertical longlines, jigging, live-bait handlining, and deep drop-stone (Ika-shibi)), and contribute the remaining 6–16% of pelagic fish in the market. Moreover, studies show there is a high unwillingness from Palauans to enter the fishery given its high operational costs and low returns.

### Achieving a viable day-boat fleet could be more immediate and sustainable than a domestic industrial fleet

Revival of a pole-and-line fishery, which was once a small operation in Palau, or a domestic industrial longline fleet have low likelihoods of economic success based on previous experiences in the region. Moreover, current domestic demand and market prices will result in low returns while fleets accrue high operational costs and require significant capital investments (e.g., infrastructure and gear). Thus, *the viability of these industrial fishery fleets is highly uncertain.* 

Scaling up the current small day-boat fleet would

similarly require capital investments, albeit smaller than supporting a domestic industrial fleet. However, at their current effort, the existing day-boat vessels do not fully meet Palau's pelagic demand and are limited by infrastructure needs, gaps in the supply chain (e.g., market access), and high operational costs versus low returns. However, *these obstacles to a viable dayboat fleet could be overcome more immediately and efficiently* than investments and training needs for industrial fleet.

### Several policy and investment priorities are important to Palau's domestic pelagic fishery

If Palau wants to build and sustain a domestic pelagic fishery, several policy and investment priorities are clearly important no matter which fishery sector structure (longline; pole-and-line; day-boat; or some hybrid) is pursued. First, *infrastructure improvements* would be needed to connect the pelagic supply to potential consumers. Palau would need a central marketplace for sale and processing of pelagic fishes. It also would need a cold chain that allows fishers to preserve quality, and allows buyers to have a reliable year-round supply of pelagics. Second, proactive measures are needed to *build domestic demand for pelagic fish*—within recommended and safe health limits—to sustain a growing industry. These measures

This document is a component of the report titled "Palau's National Marine Sanctuary: Managing Ocean Change and Supporting Food Security; Report of an Expert Working Group Convened by PICRC and COS." For further information please see http://picrc.org/picrcpage/palau-national-marine-sanctuary and https://oceansolutions.stanford.edu/pnms-report

could include:

- 1. A ban or limit on the sale of reef fish in restaurants and tourist operations
- 2. Development of a local, sustainable brand of pelagics, primarily aimed for sale to tourists
- 3. Support value-added products (eg: loins, dried, jerky) and seafood processing opportunities
- 4. Support for the "Choose Pelagics" program

Third, Palau should consider measures to improve the economic returns for pelagic fishers. Policies that would bolster the small day-boat fleet include *a* "start-up" package which offsets gear and operational costs, provides safety equipment and a benefits packages where fishers receive services similar to government employees (e.g., retirement, sick leave), and a functioning and maintained FAD network. These policies, which should be transparent and accountable, could help defray the costs of capital investments or operations, excluding fuel subsidies and capacity enhancing which have proven to be detrimental in most cases. Incentives need to be carefully controlled so that these capital investments are not used for reef fishing and monitoring should support appropriate use of fishing gear.

#### A viable domestic pelagic fishery sector will face



#### challenges.

Previous efforts around the region and the world prove that *building a local industrial pelagic fishery is costly*, and it has typically been difficult to create an industry that is profitable and can be sustained. *Climate change is expected to have impacts on fisheries in Palau's EEZ*, primarily by changing the distribution, size, and availability of fishes. Model projections indicate that total fisheries catch potential within the western pacific region will likely decrease by 30–50% by 2100. Conversely, a recent study found that other species, such as mahi mahi and amberjack, might increase their populations, presenting new opportunities for fisheries.

### Options exist to strengthen Palau's pelagic fishery sector beyond strengthening its fleet.

Palau does not have to focus on developing a domestic pelagic fishing fleet to capture more value from its fisheries. Instead, opportunities exist across the whole sector—from fisher to consumer, including fishing, fish processing, and value-added products-to increase the value of the domestic pelagic fishery for economic development, livelihoods, and food security. For example, if fish processing of some form were required prior to export, it could stimulate an on-shore industry. Next, development of value-added products, such as fish loins, dried fish, and jerky, could create opportunities for employment and sales, and emerging efforts have demonstrated an interest by the touristfocused retail sector for marketing such products. Thus, policies should support economic opportunities across this sector. Finally, the *relaxation or repeal of the export* ban for domestic fishers and value-added products would allow them to access international markets that offer higher returns without (necessarily) raising the domestic price.