

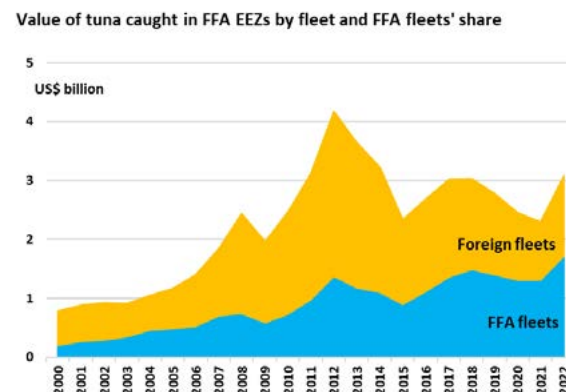
THE CATCH IN FFA EEZS AND STATUS OF STOCKS

From 2020 to 2022, the average annual catch of albacore, bigeye, skipjack and yellowfin within the national waters of FFA members was 1.5 million tonnes 3% lower than the average between 2017 and 2019. This catch accounted for 55% of the WCPO tuna catch and 30% of the global tuna catch.

All four main WCPO tuna stocks (albacore, bigeye, skipjack and yellowfin) are in the green area that is considered to be “biologically healthy”, in that they are not overfished nor is overfishing occurring. It is important to note that although the stock is biologically healthy, it does not mean that the associated fisheries for that stock are performing well economically or that desired management outcomes are being achieved. Stock projections for south Pacific albacore suggest that under status quo fishing conditions where catch levels are maintained at recent 2020 levels, the stock size will decline further in the short term before stabilizing at 47% of its current size and there is a 19% risk that it will fall below the Limit Reference Point (LRP). The skipjack stock is currently above its interim target reference point of 50% of the spawning biomass in the absence of fishing.

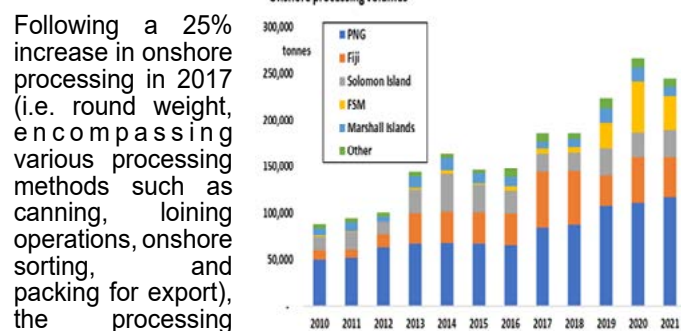
CATCH VALUES WITHIN FFA EEZS

From 2020 to 2022, the annual value of the tuna catch taken in FFA waters averaged \$2.6 billion. Notably the purse seine fishery made a substantial contribution of 85% (\$2.2 billion) from this total catch value in the FFA EEZs during this period. In contrast, the longline fishery contributed 13% while other fisheries contributed 1%. On key tuna species, the average (2020-2022) value of skipjack accounted for 61% of the total catch value, while yellowfin, bigeye and albacore contributed 29%, 6% and 4% respectively. Historically foreign fleets have dominated the harvest sector in FFA EEZs but their share of catch value has declined significantly over the past decade whilst the share of FFA members’ fleets (includes flagged or chartered vessels) has grown over time. Between 2014 and 2019, the share of the catch value taken by FFA members’ fleets increased from 34% to 51% and has continued to increase, reaching 56% in 2022.



VOLUMES PROCESSED OR HANDLED ONSHORE

In recent years the annual volume of tuna processed or handled onshore in FFA member countries has exhibited a consistent upward trajectory. In 2021, the majority of onshore tuna processing occurs in PNG (approximately 48%) and the remainder in Fiji (17%), Solomon Islands (12%), FSM (15%), the Marshall Islands (4%), and other FFA member countries (4%).



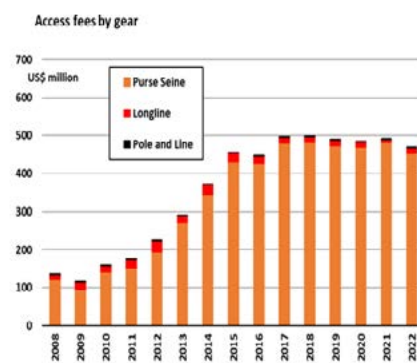
Following a 25% increase in onshore processing in 2017 (i.e. round weight, encompassing various processing methods such as canning, loining operations, onshore sorting, and packing for export), the processing volume stabilized in 2018 at approximately 186,000 metric tonnes. Year 2019 saw this increase to 20% followed by a further 19% rise in 2020 with an estimated volume of 266,000 metric tonnes. However, this declined by 8% in 2021 to around 245,000 metric tonnes.

In 2020, a surge in total volume was driven by increased onshore processing in Fiji and FSM, compensating for declines in Kiribati, Cook Islands, and Tonga. PNG’s upturn was due to a rebate scheme, while FSM’s growth resulted from containerization. The overall upward trend reflects FFA members’ commitment to boost economic returns from tuna fisheries. In 2021, 17% of FFA waters catch was processed onshore, up from 6-7% a decade earlier. Purse seine tuna and longline caught albacore is typically canned or loined, with some countries adopting containerization, while longline bigeye and yellowfin catch is processed into sashimi and other non-canned products.

LICENSE AND ACCESS FEE REVENUE

After a decade of rapid growth, license and access fee revenue have been relatively stable since 2017 ranging from \$469 to \$497 million.

The rapid growth in access fee revenue in the period prior to 2017 was driven by a significant increase in the rate of return in the purse seine fishery resulting from the implementation of the PNA purse seine Vessel Day Scheme (VDS).

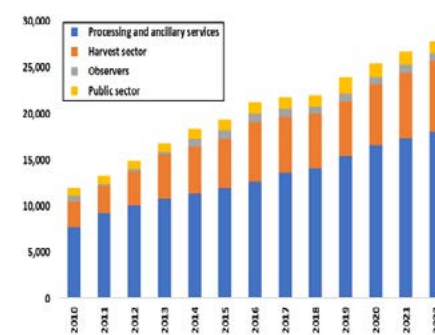


The introduction of a minimum benchmark price for VDS days, set at \$5,000 in 2011 and later increased to \$8,000 in 2015, drove access fee revenue. Current prices for VDS days range from \$9,000 to \$14,000. Pre-2011, purse access fee revenue was 6% of purse seine catch value, rising consistently since 2015 to exceed 17%, reaching as high as 25%. Longline access and license fee revenue surged to \$16 million in 2022, a 91% increase from 2021, attributed to the longline fishery’s recovery from the Covid-19 impact. In 2022, total access fee revenue from all fisheries for FFA member governments was \$469 million, a 4% decline from the previous year. Access and license fees contribute 25% or more of government revenue (excluding grants) for six FFA member states.

EMPLOYMENT

Over the past decade, employment figures have consistently grown, with the onshore processing segment emerging as the primary contributor, constituting 18,099 workers (65%) of the total employment being 27,803 in 2022. Note, employment figures represent workers associated within the tuna fisheries sector that include both governmental and industrial sectors within FFA Members.

The harvest sector represents the second-largest contribution, estimated at 7,736 (28%), while the observers and public sectors collectively contribute 3% and 4% to the total employment, respectively, in 2022.



A significant proportion of processing sector employment in 2022 occurs in PNG, constituting approximately 70% of processing jobs. The distribution of the remainder is as follows: 13% in the Solomon Islands, 9% in Fiji, 3% in the FSM, and 2% and 1% in the Marshall Islands and Kiribati, respectively. By gender among processing workers, an estimated 11,127 individuals are women, equivalent to 61%. In contrast, only 23 (or 3%) of observers are women. The harvest sector, particularly in with regard to vessel crew, is also predominantly male.

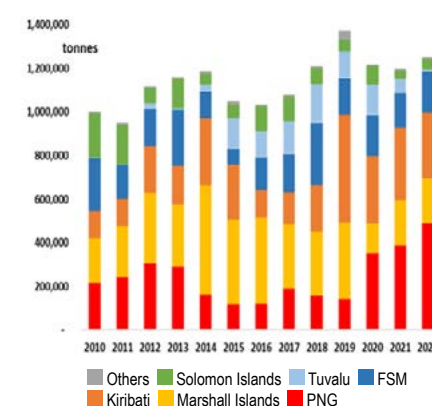
PURSE SEINE PORT UNLOADING VOLUMES

The unloading volume by purse seiners at FFA members’ ports has exhibited an upward trajectory since 2017. This trend persisted, reaching a new record at 1.37 million metric tonnes in 2019.

However, in 2020, there was a substantial decline of 12% to 1.21 million metric tonnes, mainly attributed to the profound impacts of the Covid-19 pandemic. The implementation of port restrictions and border closure mitigation measures significantly influenced this downturn.

In 2021 there was a further 2% reduction in unloading volumes, however, in 2022, there was a recovery with unloading volumes increasing 5%, bringing the total to 1.25 million metric tonnes.

PNG saw the highest relative increase compared to other member countries in 2022, with a 27% surge from the preceding year, reaching a new record of nearly half a million metric tonnes. Similarly, FSM experienced a substantial rise of 21%, totalling around 192,000 metric tonnes. Conversely, Kiribati and the Marshall Islands witnessed declines of 11% and 1%, respectively.



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Tuna Economic and Development Indicators 2023



EXPORTS

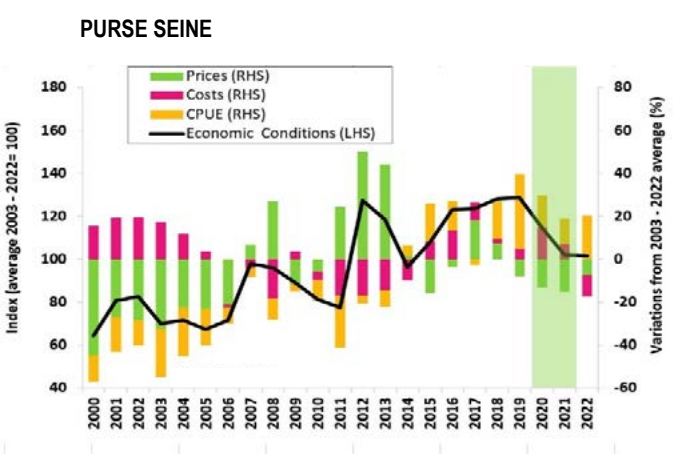
The assessment of the export performance of FFA member countries are based on import data from the four primary export destinations for tuna from the region, namely the markets in Thailand, EU, US and Japan. Sustained growth in recent years has seen exports achieve a new milestone and reach a total of \$1,127 million in 2022 up 23% year on year.

Frozen tuna and loin products have consistently maintained their dominance in the export sector among FFA members. Over the period from 2015 to 2022, the share of frozen tuna imports from FFA member countries has ranged from 53% to 62% of the total exports, while imports of loin products have consistently remained at or above 20%. Notably, there has been a 57% increase in the value of prepared and preserved products since 2015, reaching \$125.2 million in 2022. Similarly, the export if loins sector has exhibited substantial growth of 65% since 2015.

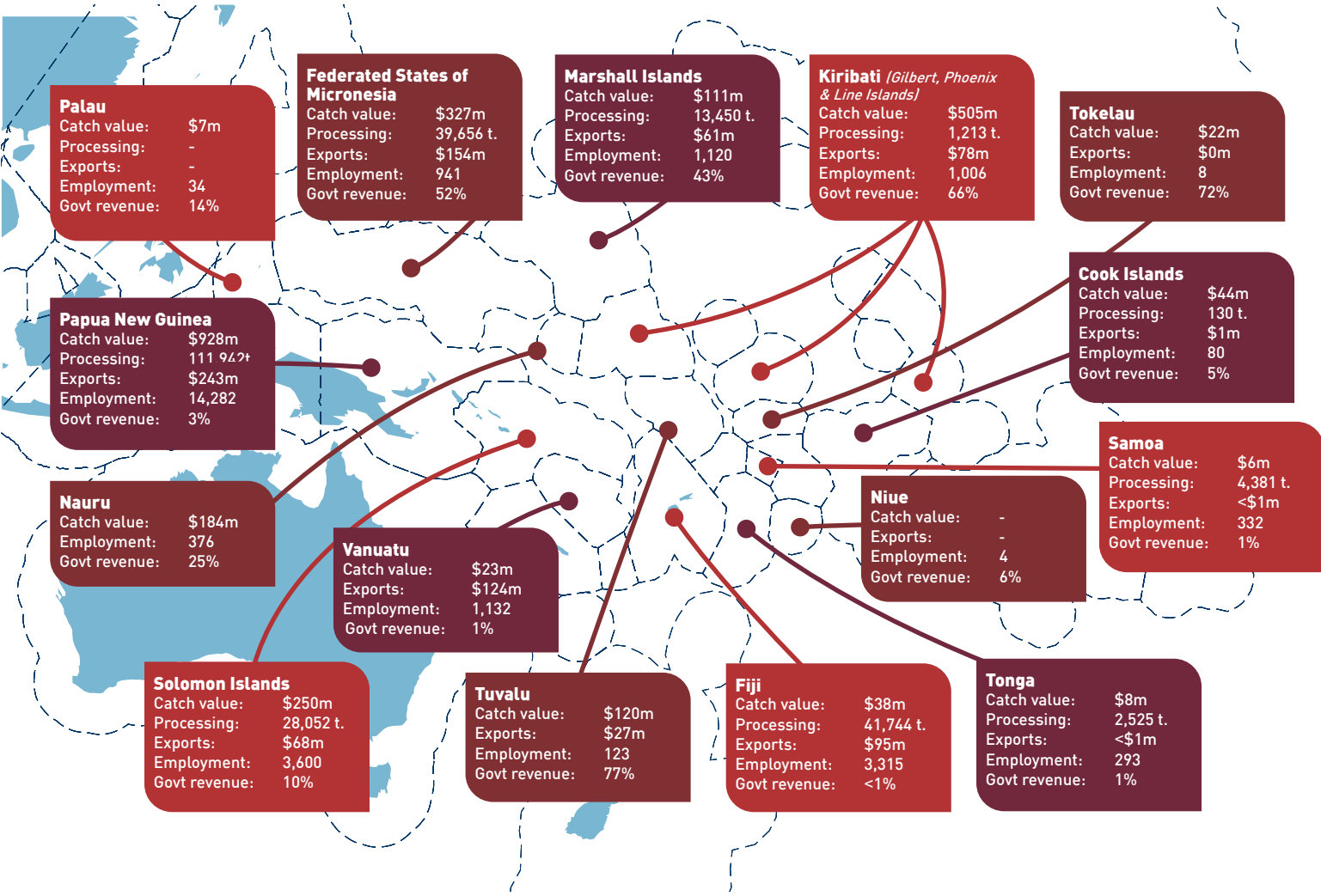
In contrast the fresh products, representing a share of 2% to 7%, have experienced a 52% reduction in growth since 2015. This decline can be attributed in part to reduced demand for sashimi (related to vessels swapping operations from fresh to frozen) and the general disruptions and cost escalations associated with airfreight, a situation exacerbated by the onset of the COVID-19 pandemic and related mitigation measures implemented in 2020. Consequently, the industries are currently undergoing a gradual recovery process.

ECONOMIC CONDITIONS IN THE MAJOR FISHERIES

FFA has developed economic indices for the major tuna fisheries, aiming to offer insights into the prevailing economic conditions within each fishery. It is important to emphasize that these indices specifically measure the relative profitability of the fishery itself, excluding access fees. Access fees, represent a transfer of profits generated in the fishery from the fleet to coastal states granting access to their Exclusive Economic Zones (EEZs), are not factored into the indices.



A notable consideration is emphasized on the interpretation of the economic conditions index (particularly for tropical and southern longline fishery) presented in 2020 and 2021. The economic conditions index presented may underestimate the influence of the COVID-19 pandemic on cost structures. The fishing cost used in the index only includes changes in fuel costs and excludes other



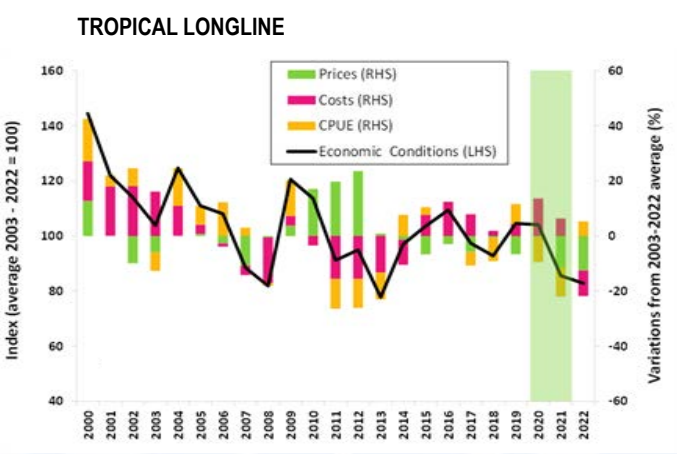
FFA member states comparative development indicators annual averages 2020-2022

FFA member	Catch EEZ	Value EEZ	Own fleet catch	Own fleet catch value	Volumes handled or processed onshore*	Purse seine unloading volumes	Employment	Tuna Exports^	Access & License fees
	'000 mt	US\$ m	'000 mt	US\$ m	mt	mt	No.	US\$ m	US\$ m % of Gov revenue
Cook Is.	13	44	4	11	130	-	80	1	6 5%
Fiji	8	38	11	54	41,744	2,638	3,315	95	2 0.2%
FSM	190	327	168	285	39,656	178,889	941	154	70 52%
Kiribati	317	505	199	328	1,213	314,578	1,006	78	113 66%
Marshall Islands	54	111	89	147	13,450	183,076	1,120	61	32 43%
Nauru	123	184	106	163	-	325	376	110	44 25%
Niue	0.1	0	0.002	0	-	-	4	0	1 6%
Palau	1	7	0.002	0	-	-	34	0	8 14%
PNG	556	928	185	301	111,942	412,580	14,282	243	119 3%
Samoa	1	6	2	10	4,381	-	332	0.01	1 1%
Solomon Islands	131	250	46	105	28,052	58,434	3,600	68	38 10%
Tokelau	10	22	0.04	0	-	-	8	0	11 72%
Tonga	1	8	0.3	2	2,525	-	293	0.43	1 1%
Tuvalu	76	120	27	43	-	71,101	123	27	31 77%
Vanuatu	5	23	62	131	1,603	-	1,132	124	2 1%
Total	1,487	2,574	900	1,581	244,696	1,221,621	26,646	963	481 na

*Annual average over 2019-21. ^Includes only exports to EU, Japan, Thailand and US

important expenses like shipping, air freight, and imported equipment and gear – all of which were affected by the pandemic. Hence, when analysing the tropical and southern longline fishery index figures, particularly for 2020 and 2021 (shown in the shaded areas of the graphs), caution is recommended.

Since 2012, the economic conditions index for the tropical purse seine fishery has consistently remained above average, with the exception of 2014. Over recent years, there has been considerable variation in the contributions of different index components. For instance, high index readings in 2017 were primarily driven by high fish prices, while high catch rates were the main driver between years 2018 and 2022. Although the index in 2022 remained above average at 101, it reached its lowest level since 2014, primarily due to a significant increase in MDO (Marine Diesel Oil) prices that was exacerbated by the Russia/Ukraine conflict.



Following a decline in the tropical longline fishery economic index in 2017 and 2018, falling below the 20-year average due to increased fuel costs and lower catch rates, conditions stabilized from 2019 to 2020, hovering around the long-term average. Despite reduced fish prices and catch rates in 2020, stability was maintained, attributed to lower fuel costs amid the Covid-19 pandemic. In 2021 the index declined due to rising fuel prices and falling fish prices. In 2022, while catch rates recovered, the index declined further as fuel prices continued to rise and hit its lowest point since 2013.

The southern longline fishery index faced a decline in 2018 and 2019 due to lower catch rates, despite high fish prices, along with lower fuel costs in the latter year. Economic conditions worsened in 2020 and 2021 due to substantial drops in catch rates, resulting in the index hitting its lowest point since 2013. However, in 2022, despite higher fuel costs due to the Russia/Ukraine conflict, the economic index showed a significant increase, nearing its 20-year average, driven by improved catch rates.

