

2021

Sector Sustainability Update



14 LIFE
BELOW WATER



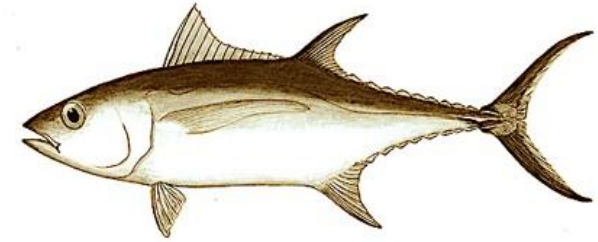
Local fishermen unloading tuna on Zanzibar Coast, Tanzania © Shutterstock

TUNA

May 2022

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Pacific Yellowfin Tuna illustration © Queensland State Archives

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SUMMARY

Production and trade

- This sector consists of **wild stocks** of four tuna species harvested worldwide and is a relevant sector within the scope of [Target 75](#).
- Wild production of the **four species combined** shows an increasing trend, reaching an average historical maximum during the last five years of about **5 million tonnes**.
- Asia-Pacific countries, mostly reporting catches from the Pacific Ocean, contributed about 70 percent of world tuna production in 2019, with **Indonesia** alone representing close to 14 percent of global production.
- Skipjack tuna accounts for more than 60 percent of global production, followed by yellowfin tuna (24 percent) and bigeye and albacore tuna, with 7 and 5 percent, respectively.
- More than half (53 percent) of global trade for these four tuna species **is exported from Asian countries**, mostly to European, North American, and other Asian markets.
- Although Indonesia leads world production, it is **less representative in terms of market share**, representing only 6 percent of global trade value for this commodity. By contrast, Thailand reports only residual production volume for these species but leads exports for this commodity, with 18 percent of global trade value.

T75 status and current strategic priorities

- Almost 56 percent of global tuna production, nearly 7 million tonnes, was considered as **sustainable or improving** in 2019. South Korea, Papua New Guinea, and Spain contributed most of the sustainable and improving production of this commodity in 2019.
- SFP's improvement work in the tuna sector will focus on reducing the bycatch of endangered, threatened, and protected (ETP) species in longline fisheries. Additional improvements are also needed in longline and other gear-type tuna fisheries to close the gap to Target 75, particularly in main producing nations such as Indonesia, Japan, China, and Taiwan.

DISCLAIMER

This report was prepared with information available from multiple sources, accessed in late September 2021. The report is not intended to be a comprehensive review of the sector, but rather a summary of progress against the Target 75 initiative, with some selected key highlights and improvement needs for the sector. For more detailed information on seafood production, trade or the status and attributes of particular certifications and improvement projects, the original sources should be consulted.

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Skipjack tuna (*Katsuwonus pelamis*) for sale in market (Sri Lanka) ©SFP

THE TARGET 75 INITIATIVE

Sustainable Fisheries Partnership (SFP) applies a sectoral approach to its mission of making actionable information available to the supply chain, in order to leverage market forces to achieve improvements in fisheries. Seafood sectors may be defined in terms of the shared biological characteristics of harvested species, as well as their role in defined markets.

In 2017, SFP launched the Target 75 (T75) initiative, as a dedicated and concrete benchmark on the way to our ultimate goal of 100-percent sustainable seafood. **T75 aims to ensure that 75 percent of seafood (by volume) in 13 key sectors is either sustainable or making regular, verifiable improvements.** Together, these T75 sectors cover most of the main types of seafood consumed in North America and Europe, and a significant portion of what is consumed in Japan and Oceania.



1 TUNA SECTOR

This sector comprises albacore, bigeye, skipjack, and yellowfin tuna from all fisheries.

Note that this does not include the three bluefin species, nor any neritic tunas, as SFP recognizes that interventions to improve their fisheries require a different approach, given smaller volumes in specialist markets that may be out of reach.

Tuna is destined for fresh and frozen markets, mainly in Japan, Spain, Italy, and the US, as well as shelf-stable markets in North America and Europe.

More information on the definition and scope of this and other Target 75 sectors is available [here](#).



Tuna fishing vessel (Thailand) ©SFP



Tuna for sale in local market (Indonesia) © SFP

2 SCOPE AND OBJECTIVES

This report provides a quick summary update on progress so far for the [tuna sector](#) against the 75-percent goal, in terms of volume of production that is already considered as either sustainable or improving. The update also includes highlights on which sources of production had the most relevant changes, as well as the most recent trends in production and trade.

For the purposes of this analysis, we define a fishery as “sustainable” if it is Marine Stewardship Council (MSC)-certified or green-listed in SFP’s [Metrics](#) tool. We define a fishery as “improving” if it is certified by one of the following programs: MarinTrust, ASMI RFM, Iceland Responsible Fisheries, Fair Trade USA; if it is under full assessment in the MSC program; or if it is in a fishery improvement project (FIP) that is making good progress (i.e., with a progress rating of A, B, or C, or formed within the last 12 months but still unrated), using SFP’s [FIP Evaluation Tool](#).

Data on production refers to 2019 production and is from the [FAO FishstatJ](#) database. Status in terms of certifications and fishery, and FIPs refers to September 2021.



Purse seiner fleet targeting yellowfin tuna (Seychelles) ©Seychelles News Agency



Fresh tuna for sale at auction (Japan) © SFP

3 PRODUCTION

Tuna is one of the biggest seafood sectors within the scope of T75, with average annual production of 5 million tonnes in the last five years for the four species combined (FAO 2021a). Annual production shows an increasing trend since the 1950s (**Figure 1**), with relatively low annual growth, averaging 1.6 percent over the past two decades, and a gross increase of 10 percent in the last two years.

The top ten producing countries account for 61 percent of total production for the four tuna species combined (**Figure 3**). Asia-Pacific countries, mostly reporting catches from the Pacific Ocean (WCPFC and IAATC RFMOs), contributed 70 percent of world tuna production in 2019, with Indonesia alone representing almost 14 percent (**Figures 2 & 3**). Among the other RFMOs, IOTC accounts for 21 percent of total 2019 catch volume, while ICCAT reports close to 10 percent of global volume for this commodity (**Figure 2**).

Skipjack tuna represented more than 60 percent of global tuna production, followed by yellowfin tuna (24 percent), and bigeye and albacore tuna, with 7 and 5 percent respectively (**Figure 2**). All four species present an increasing trend in production, even though the annual growth rate of production decreased in the last two decades (**Figure 1**). Indonesia, Japan, Taiwan, South Korea, and Ecuador are among the top five producing countries for at least two of the tuna species. For albacore, Spain and the United States, and for yellowfin, Mexico, the Philippines, and Papua New Guinea, are also important producers (**Appendix I**).

Figure 1 | Time series of global production for top tuna species and annual export values (bars)

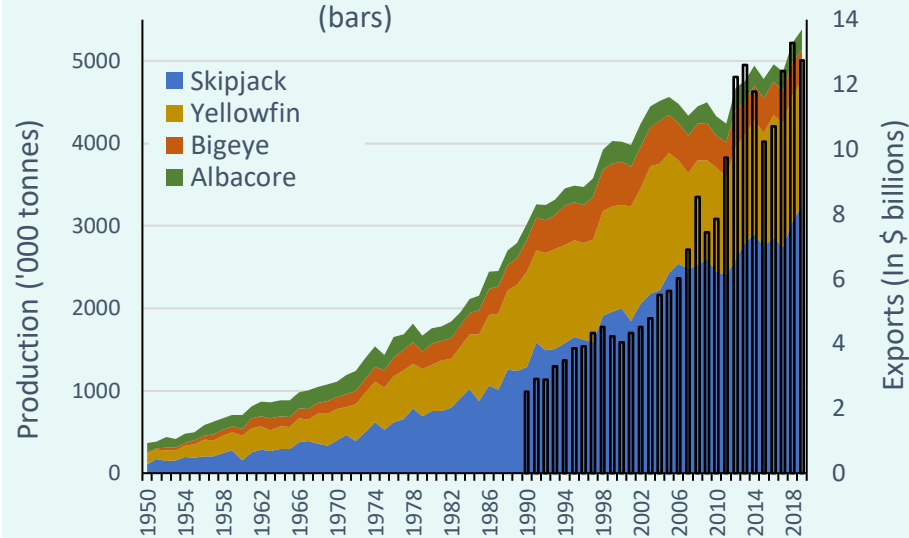


Figure 2 | Production of the four main tuna species and percentage by RFMO in 2019

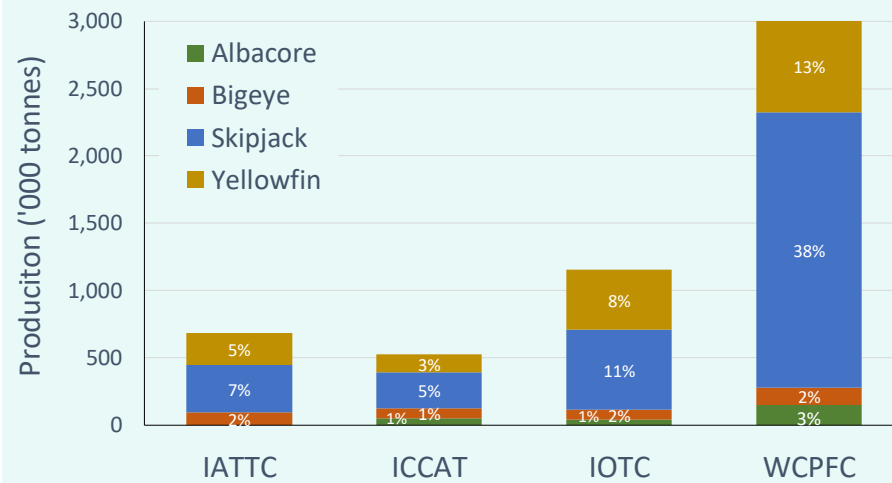
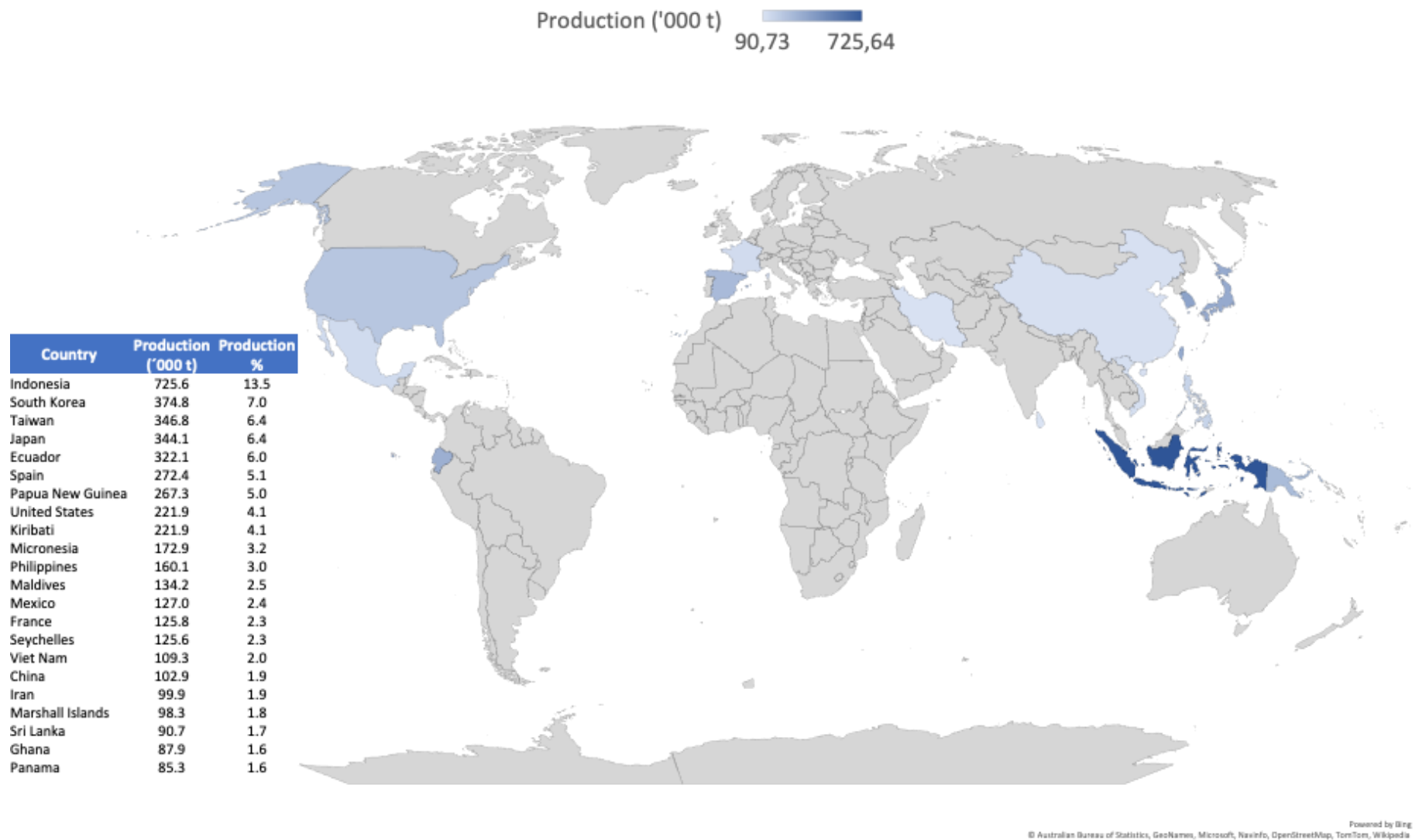


Figure 3 | The top 22 tuna producing countries in 2019 (86 percent of total catches)



Source: FAO FishstatJ (2021a)

4 TRADE STATISTICS

Globally, tuna remains a relevant seafood commodity in terms of trade economics. Tuna trade for these four species represented about USD 12.7 billion by value in 2019, with a contraction of 4 percent from last year. In the past decade, there was a 49-percent increase in economic gross of global exports for this commodity, from USD 7.4 billion in 2009 to the current values, with an average annual variation in growth of 4.5 percent (**Figure 1**) (FAO 2021b).

The top 10 tuna exporters represented 70 percent of global trade value in 2019, with Asian countries accounting for 53 percent, led by Thailand with USD 2.2 billion of exports. Other important non-Asian tuna exporters include Ecuador (9 percent), Spain (8 percent), and the Seychelles (3 percent) (**Table 1**) (FAO 2021c). Even though Indonesia is the main producing country, it only represented 6 percent of global tuna exports by value in 2019. In contrast, Thailand is the main tuna exporter, even though it has no relevance in terms of global production for this commodity.

The top nine importers represented 75 percent of total tuna volume in 2019. Bilateral trade flows show a wide distribution worldwide for this commodity. Europe is the strongest market, with 35 percent of market share, representing nearly USD 4.5 billion, followed by Asia with more than 25 percent and more than USD 3.2 billion of trade value, and the US, with

12 percent and about USD 1.6 billion of trade value (**Table 1**) (FAO 2021c).

Table 1 | Bilateral trade flows showing the main tuna exporters in 2019 and their top trade partners, by percentage of each country's total exports and respective market shares.

Exporter \ Importer	EU / EEA / UK	United States	Japan	Thailand	Australia	Viet Nam	Saudi Arabia	Philippines	Canada	Other	Total 2019 exports (USD billion)	% Total Exports
Thailand	7%	23%	9%	0%	8%	1%	6%	0%	6%	44%	2.24	18%
Ecuador	67%	13%	0%	0%	0%	0%	0%	0%	0%	10%	1.12	9%
Spain	67%	1%	4%	1%	0%	0%	0%	1%	0%	20%	1.03	8%
China*	19%	2%	15%	25%	0%	3%	0%	5%	0%	5%	0.97	8%
Taiwan	0%	1%	37%	28%	0%	4%	0%	3%	0%	7%	0.90	7%
Indonesia	13%	31%	19%	10%	4%	3%	9%	2%	0%	1%	0.72	6%
Viet Nam	21%	45%	3%	5%	1%	0%	0%	2%	3%	7%	0.61	5%
th Korea	17%	3%	32%	23%	0%	6%	0%	2%	0%	3%	0.51	4%
Philippines	58%	14%	19%	0%	0%	2%	0%	0%	1%	17%	0.43	3%
Seychelles	65%	0%	1%	3%	0%	0%	0%	0%	0%	6%	0.39	3%
% Total Imports	35%	12%	10%	9%	2%	2%	2%	2%	2%	25%		

(*) Includes Hong Kong

Source: FAO 2021c

Note: For some countries, tuna species are reported in aggregated categories (e.g., other tuna-like species, tuna frozen, etc.), and thus export value might be overestimated.

Bilateral trade flows show that the top ten exporters in the last decade for this commodity presented a positive trend in gross growth, with China and Viet Nam leading growth in the sector (FAO 2021c). From the previous year (2018), only China, Viet Nam, and Indonesia increased their export values, while the remaining top exporters registered low growth or even a contraction in gross growth (FAO 2021c; S&P 2021).

5 PROGRESS AGAINST THE 75% TARGET

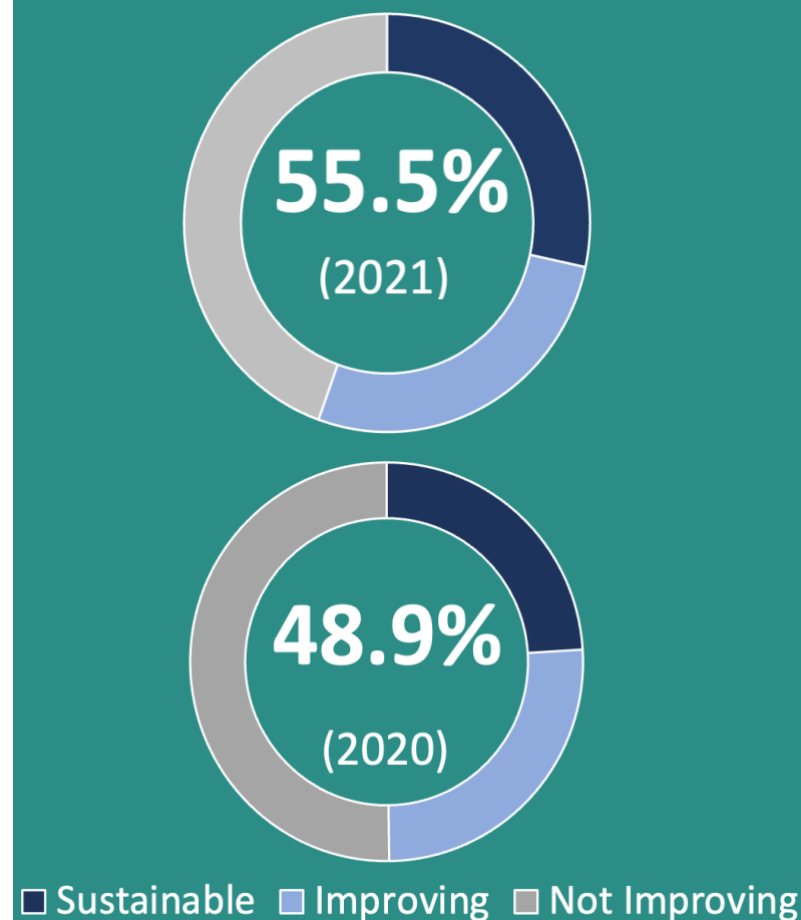
Currently, nearly 3 million tonnes, or 55.5 percent of global production, for the tuna species within the scope of T75 are estimated to be covered by sustainable or improving fisheries. This represents a 7-percent increase from last year ([Figure 5](#)).

There are currently 41 FIPs, 45 MSC fisheries (either certified or in assessment), and six Fairtrade-certified fisheries covering tuna, distributed throughout 49 countries from all continents and oceans ([Appendix II](#)). In 2019, the top contributor in these fisheries was South Korea, with 10.6 percent of the total sustainable or improving volume reported for this commodity. Altogether, the top ten contributors of sustainable and improving tuna accounted for nearly 70 percent of the total sustainable or improving volume.

Since last year, ten new tuna FIPs have been established, including [Indian Ocean tuna - purse seine \(Dongwon Industries\)](#), [Maldives yellowfin tuna – handline](#), [Pacific Ocean tuna - longline \(Sky Vision\)](#), and [Western and Central Pacific Ocean skipjack and yellowfin tuna - purse seine \(General Tuna Corporation\)](#). And about 13 MSC fisheries either became certified or had new components certified or entered into assessment (e.g., [US Pacific Tuna Group Purse Seine FSC and FAD Set Fishery](#) and [Owasebussan Co. Ltd. North Pacific Longline Fishery for Albacore, Yellowfin, & Bigeye Tuna](#)).

Learn about SFP's T75 strategy and prioritized fisheries [here](#).

Figure 5 | Overall production (%) for tuna sector



6 CHALLENGES TO SUSTAINABILITY



ETP bycatch from hook-based fisheries ©SFP

Bycatch mitigation ©Hookpod Ltd.

Tunas are considered a transboundary species, due to their highly migratory nature. This makes it difficult to manage these stocks effectively and requires the collaboration of many nations for success. Key sustainability issues include:

- The stock status and fishery mortality rates of some key species such as yellowfin tuna in the Indian Ocean.
- Lack of comprehensive management at the international and national level.
- Poor data collection on the catch of both target and bycatch species.
- Illegal, unreported, and unregulated (IUU) fishing on the high seas.
- Bycatch of endangered, threatened, and protected (ETP) species.

SFP improvement work in the tuna sector will focus on reducing the bycatch of endangered, threatened, and protected (ETP) species in longline fisheries. The unintended catch of non-target species in commercial fisheries continues to be one of the most significant issues affecting the ecological sustainability of the oceans. Bycatch of ETP species is still occurring globally on a significant scale, despite an increase in the number of certified fisheries and improvement projects, and significant public attention to this issue.

There are technical solutions, proven best practices, and ongoing innovation to assess, monitor, avoid, and reduce bycatch. However, to be effective and impactful, these methods and technologies must be broadly adopted and utilized at a much larger scale and faster pace than is currently occurring.

SFP plans to remove this barrier through a web-based platform that will bring practical information about bycatch into a single place, while forming a network of companies that are actively engaged in tackling the problem. The Bycatch Hub will be the first of its kind in the seafood industry, highlighting voluntary, industry-led adoption of best practices to protect ocean wildlife.

ETP species bycatch

A persisting sustainability challenge in tuna fisheries

Bycatch, the unintended capture of non-target species, is the biggest single threat to the sustainability of marine fisheries. Sustainable Fisheries Partnership is working to address issues of bycatch in tuna fisheries through:

- Conventional stock assessments and adoption of biological reference points and harvest control rules for tuna and key bycatch species (e.g., sharks, billfish).
- Mandatory and standardized data collection and observer programs, with a minimum coverage of 20 percent in the next three years and 100 percent in the next five to ten years, in longline fishing operations, to document bycatch and discards of ETP species, including sharks, turtles, and other non-target species.
- Industry-recognized adoption of changes to fishing practices to minimize the bycatch and mortality rates of ETP species, such as those outlined in the Best Practices for Reducing Bycatch in Longline Tuna Fisheries report.

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8 GLOSSARY

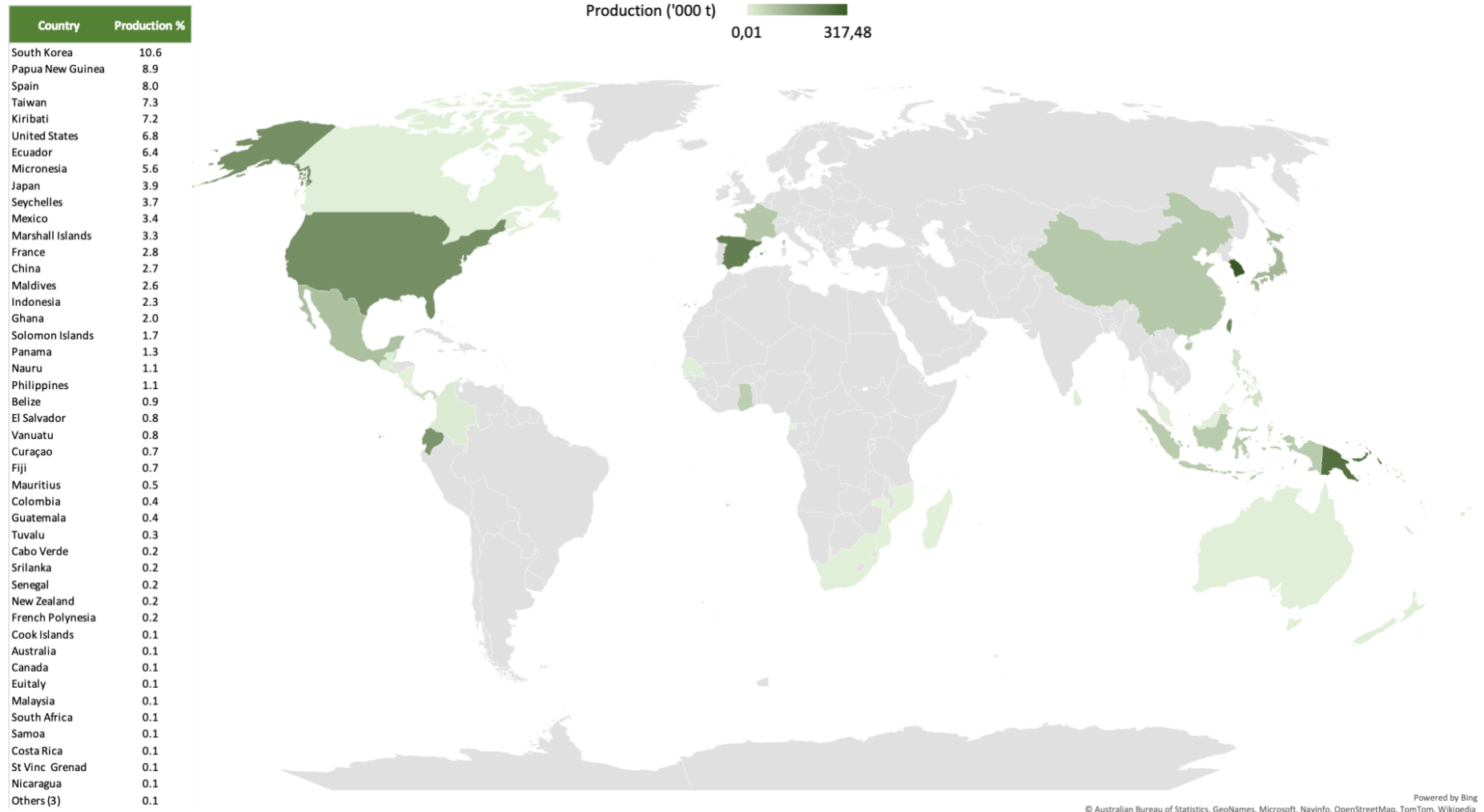
EEZ	Exclusive Economic Zone	SR	Supply Chain Roundtable
FAO	Food and Agriculture Organization	TUNACONS	Tuna Conservation Group
FIP	Fishery Improvement Project	T75	SFP Target 75 initiative
IATTC	Inter-American Tropical Tuna Commission	UoC	Unit of Certification (for a fishery under the
ICCAT	International Commission for the Conservation of Atlantic Tunas		MSC program)
IOTC	Indian Ocean Tuna Commission	WCPFC	Western & Central Pacific Fisheries Commission
ISSCAAP	International Standard Statistical Classification of Aquatic Animals and Plants		
MBAq	Monterey Bay Aquarium		
MSC	Marine Stewardship Council		
MSC C	Marine Stewardship Council Certified		
MSC FA	Marine Stewardship Council Full Assessment		
NEI	Not Elsewhere Included		
NGO	Nongovernmental Organization		
RFMO	Regional Fisheries Management Organization		
SFW	Seafood Watch		
SIOTI	The Sustainable Indian Ocean Tuna Initiative		

Appendix I - Top five producing countries for each of the four tuna species, and respective percentage of reported production in 2019

Species	Country	% of species total volume
Albacore tuna (<i>Thunnus alalunga</i>)	Taiwan	19.3
	Japan	16.7
	China	15.0
	Spain	6.9
	United States	4.7
Bigeye tuna (<i>Thunnus obesus</i>)	Ecuador	11.9
	Indonesia	9.8
	Japan	9.1
	Taiwan	8.1
	South Korea	7.0
Skipjack tuna (<i>Katsuwonus pelamis</i>)	Indonesia	3.1
	South Korea	8.9
	Ecuador	7.1
	Japan	6.2
	Taiwan	6.2
Yellowfin tuna (<i>Thunnus albacares</i>)	Indonesia	16.9
	Mexico	7.0
	Philippines	4.5
	Taiwan	4.5
	Papua New Guinea	4.5

Source: FAO Fishstat (FAO 2021)

Appendix II – Countries with fisheries reporting both improving and sustainable volume for the four tuna species and respective percentage of total improving and sustainable volume for 2019. Data obtained from the last T75 analysis (2021).





School of yellowfin tuna (*Thunnus albacares*) in trap off the coast of Italy ©SFP

FURTHER INFORMATION

<http://www.sustainablefish.org/>

For additional information, please contact us at:
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Sustainable Fisheries
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14 LIFE
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