

Target 75 Update: Squid 2019





TARGET 75 SECTOR UPDATE: SQUID 2019

Executive Summary

This report is a follow-up to the 2018 T75 Squid Sector report. While much of the language remains the same, we have updated this report to include new data acquired since the previous report's release.

SFP's [Target 75 \(T75\) initiative](#) has set a goal to see that 75 percent of the world's seafood production is considered sustainable or making regular, verifiable improvements by 2020. To simplify achieving and measuring progress toward this goal, SFP has divided the world's fisheries and farmed seafood production into various "sectors," defined by groups of species. While the sectors as a whole do not cover the entirety of the global seafood industry (e.g., some high-volume species groups such as carp, milk fish, and some shellfish are not included), those included represent a substantial proportion of the commercial seafood production of importance to markets currently demanding sustainability.

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: IFFO RS, 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 using SFP's FIP evaluation tool).

In this report, SFP provides information on the current status of the sector in terms of volumes coming from sustainable and improving fisheries, and, most importantly, we map out a path to close the gap to Target 75. We base the analysis on a blend of data and expert opinion on priority fisheries. SFP obtained production volumes and additional information relevant to this analysis from the FAO FishStat database, relevant countries' national statistics, and the respective certification programs' websites and certification reports (e.g., MSC, ASMI RFM). Trade data provide a guide to how much of the production goes to markets that are highly engaged in sustainability (e.g., EU, US), markets with activities that engage in improvements (e.g., Brazil, China, Indonesia, Japan), and markets with little evidence of engagement in sustainability or immediate plans to engage in improvements (e.g., Nigeria, Vietnam). Such

trade data provide some insights into the likely influence key markets have, but is combined with expert opinion and information on the structure of production in each country, in order to determine whether a fishery is a candidate to contribute to the Target 75 initiative's goal.

Squid sector

The squid sector comprises all squid species (families: Gonatidae, Loliginidae, Ommastrephidae, Onychoteuthidae). Squids are mostly traded fresh/chilled or frozen, although some small volumes are also traded dried, prepared, or preserved. Most production comes from industrial fisheries using a wide variety of fishing gears, including jigs, hook and line, purse seine, mid-water, and bottom trawling, operating within exclusive economic zones (EEZs) and in international waters. An important artisanal component operates in a number of EEZs, ranging from small vessels with outboard motors carrying two or three fishers to vessels of 15 meters or more carrying five or six fishers.

Global Supply and Patterns of Trade

- FAO reports total global production of more than 3.7 million tonnes. For countries that are known to capture squids but where there is no reported catch at the family level (e.g., Cambodia, Madagascar, Mozambique, Somalia), we have used landings data at the lowest taxa reported (typically “cephalopods nei”) or have estimated squid production based on other sources (e.g., for India, Vietnam).
- More than 95 percent of global production comes from only 18 countries (see Figure 1).
- Imports – Of the 1.26 million tonnes in traded volume in 2014 ([International Trade Center, 2014](#)), China imported the most, with 31 percent of total imports, followed by the EU at 25 percent, Thailand at 11 percent, and South Korea and the US, each with 6 percent of total imports.
- Exports – Of the total traded volume in 2014 ([International Trade Center, 2014](#)), China leads again with 22 percent of total global exports, followed by Peru at 13 percent, the US with 8 percent, Spain at 6 percent, North Korea at 5 percent, India and Taiwan with 5 percent each, Chile and Argentina with 4 percent each, and Indonesia with 3 percent.
- Approximately 8 percent of global production goes to markets engaged in sustainability, with a further 47 percent going to countries with some engagement efforts underway (Figure 2).

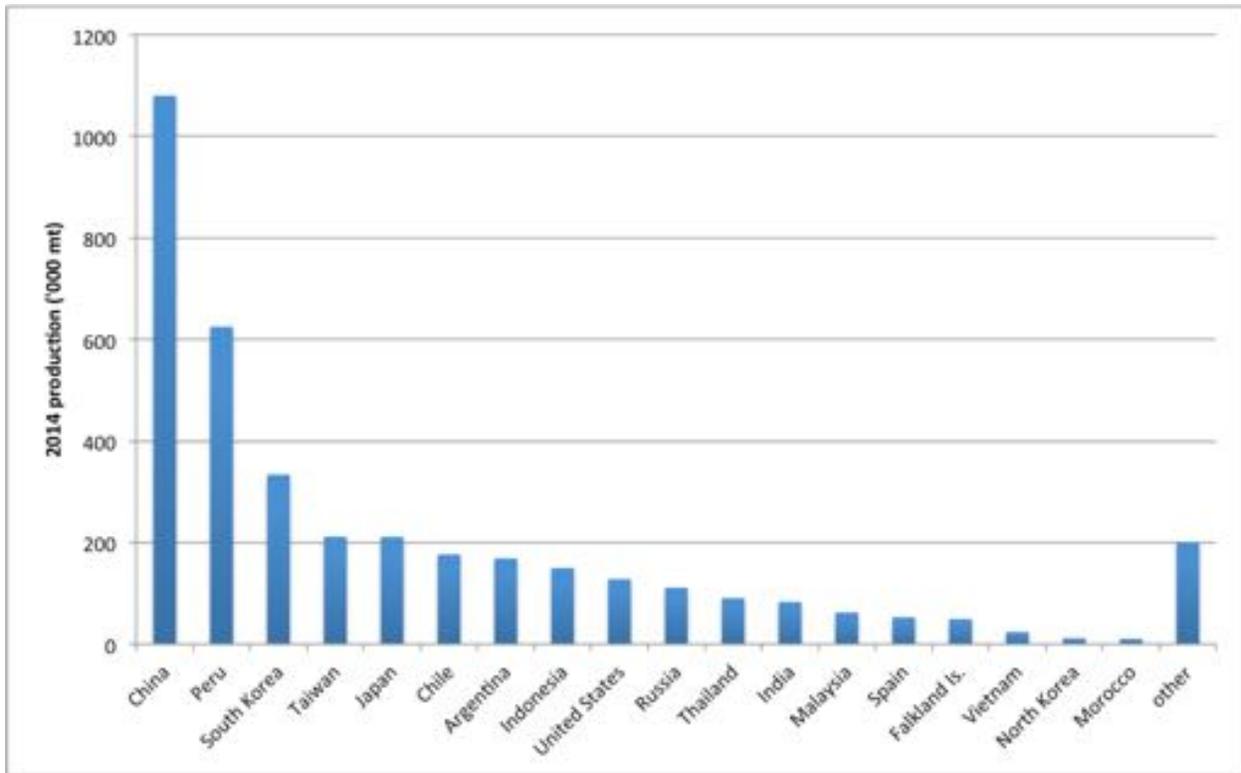


Figure 1. Top 18 squid-producing countries, 2014 production

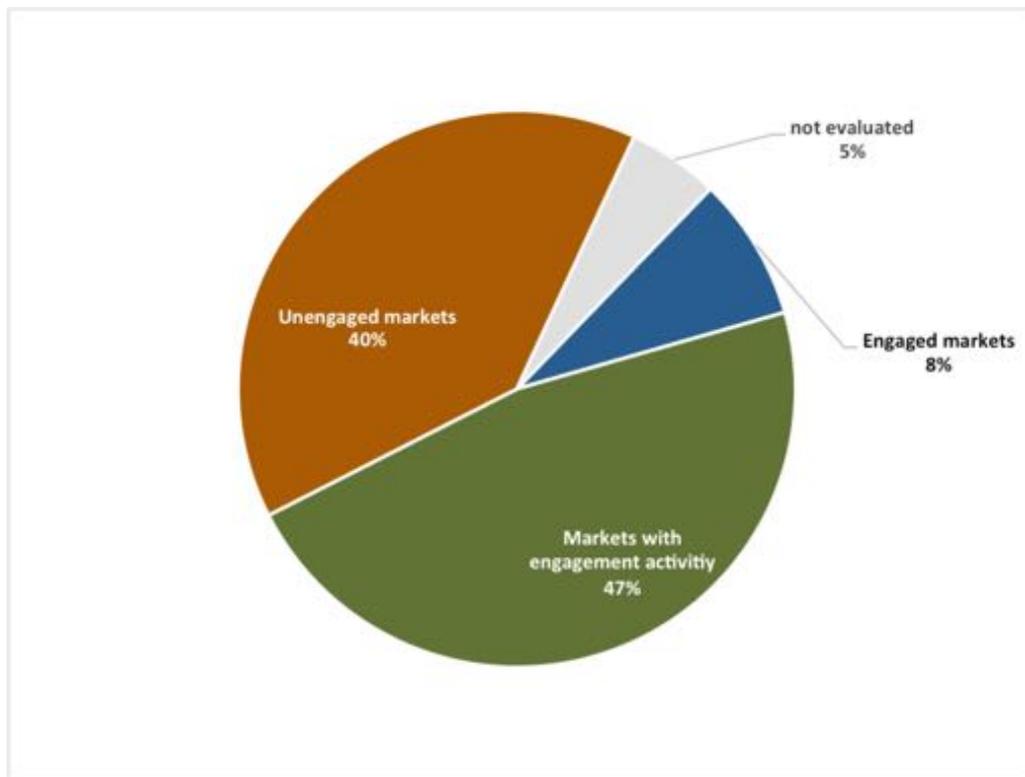


Figure 2. Strategy to reach Target 75 for the squid sector

Improvement Progress to Date

Based on 2014 production data, 527,470 tonnes, or 14 percent of global production, are currently considered sustainable or improving (see Annex: Table 1), using publicly available information on MSC status and FIP progress ratings reviewed in January 2019. This is a substantial improvement over the volumes reported in the previous Squid Sector Report (January 2018), when only 0.3 percent of global production was sustainable or improving.

- MSC-certified fisheries
 - [US Northeast Longfin Inshore Squid Bottom Trawl Fishery](#), longfin squid
- MSC Full Assessment
 - [US Northeast Longfin Inshore Squid Bottom Trawl Fishery](#), shortfin squid
- FIPs with A–C-rated progress/AIPs
 - [Auckland Islands Arrow Squid](#) – C progress
 - [Mexico Gulf of California Giant Squid](#) – C progress
 - [New Zealand EEZ Squid](#) – B progress
 - [Peruvian Jumbo Flying Squid](#) – C progress
 - [Shantou-Taiwan Chinese Common Squid](#) – C progress

Closing the Gap to Target 75

Existing Supply Chain Leverage and Interest

The primary target fisheries for improvement are those in FIPs not making good progress, major fisheries in which existing SR participants have market leverage to deliver improvements, and those fisheries that SFP believes are likely candidates for improvement projects. Together, these fisheries account for more than 1.6 million tonnes of production, representing 43 percent of the global total (see Annex: Table 2).

- Other FIPs
 - The [East China Sea and Yellow Sea Japanese flying squid FIP](#) was launched by Ocean Outcomes and the China Aquatic Products Processing and Marketing Alliance (CAPPMA) in November 2018. This FIP has not yet met the criteria of an active FIP and has not yet received a progress rating; thus it is not counted as "Improving" at this time. When it does become active, an additional 5,000 tonnes will be added to the "Sustainable and Improving" category.
- Supply Chain Roundtables
 - The South American Squid SR and the Asia-Pacific Squid SR merged into one group—the [Global Squid SR](#)—in March 2017. Though the name of the SR

suggests global coverage of squid fisheries, current participant leverage does not encompass all of the fisheries necessary to achieve the Target 75 goal. Current SR participants helped to catalyze new FIPs in China (mitre squid and Japanese flying squid) and Peru (jumbo flying squid), and further efforts are needed to expand the coverage of these FIPs to include a larger portion of the fisheries. Other fisheries of interest that may be covered by this SR include Argentine shortfin squid, Patagonian squid, and jumbo flying squid in South America, as well as Japanese flying squid and common squids in Asia.

Urgent Additions Requiring New Supply Chain Engagement

Target 75 can only be achieved by expanding improvement efforts to Chinese fleets operating in international waters off South America, where they target Argentine shortfin squid off the Atlantic coast and jumbo flying squid in the Pacific. In addition, the engagement of the South Korean market will cover another 3 percent of global production caught in international waters off South America (jumbo flying squid and Argentine shortfin squid). See Annex: Table 3 for the respective volumes of these fisheries.

Improvement Opportunities and Challenges

A number of factors favor improvement in sustainable squid fishing. Unlike some species, squid grow rapidly and typically have an annual life cycle, reproducing and dying at the end of one year. This makes squid stocks resilient to fishing, for example when compared to fish. Also, the most common fishing methods used in squid fisheries—apart from bottom trawling—are known to have relatively low environmental impacts.

Near real-time fisheries data collection has been demonstrated to be an effective complement to scientific surveys helping to improve stock assessment methodology and, therefore, should be a key element of the management strategies for squid fisheries. This has been seen, for example, in the Japanese flying squid fishery within the Japanese EEZ, the Argentine shortfin squid fishery in the Southwest Atlantic, and the Patagonian squid fishery in the Falklands management zones in the Southwest Atlantic.

Monterey Bay Aquarium's assessment of Japan's [Japanese Flying Squid](#) fishery shows that squid fisheries can operate sustainably; this fishery should serve as a model for similar improvement efforts.

In February 2018, a new industry group, Comité para el Manejo Sustentable del Calamar Gigante del Pacifico Sur (CALAMASUR), or the Committee for the Sustainable Management of the Southern Pacific Jumbo Flying Squid, was formed to improve squid fishery management and enforcement at the regional fisheries management organization (RFMO) level.

As improvement efforts progress, cooperation between different jurisdictions will be key. The three biggest stocks worldwide (jumbo flying squid, Japanese flying squid, and Argentine shortfin squid) will require international cooperation and/or agreements to develop management structures and implement management measures to ensure the long-term sustainability of the different fisheries operating on each of those stocks. For management relying on an RFMO-type model, ongoing political disagreements between neighboring countries are likely to remain an obstacle, especially in the Southwest Atlantic.

Given the importance of the near real-time data collection from fishing fleets stated above, three areas are likely to need addressing in order to enable key sustainability improvements: investment in various at-sea data collection and transmission technologies and monitoring capacity; investment in the technical capacity of scientific institutions to optimally analyze and use these data; and development of the ability of regulatory authorities to be responsive to the fishery and stock abundance in near real-time.

Summary

A great deal of progress has been made in the squid sector in the last year, with the addition of three new FIPs and the improved progress of two existing FIPs. Yet, with 14 percent of global production recognized as sustainable or improving, there is a great deal of room for improvement to be made in large-scale squid fisheries. Efforts to engage the international supply chain are still in the early stages, which makes it hard to define a clear, high-confidence route to close the gap to T75.

That said, there are, fortunately, a number of fisheries making incremental improvements that are not yet publicly recorded under FIPs. It is possible that existing supply chain leverage and interest may be able to influence an additional 43 percent of global production. The key to reaching T75 is engaging Chinese and South Korean fisheries operating in the international waters off South America. The industry can accomplish this through demand from some markets already engaged in sustainability, engaging the markets where those products end up, and creating demand for sustainable products from new markets.

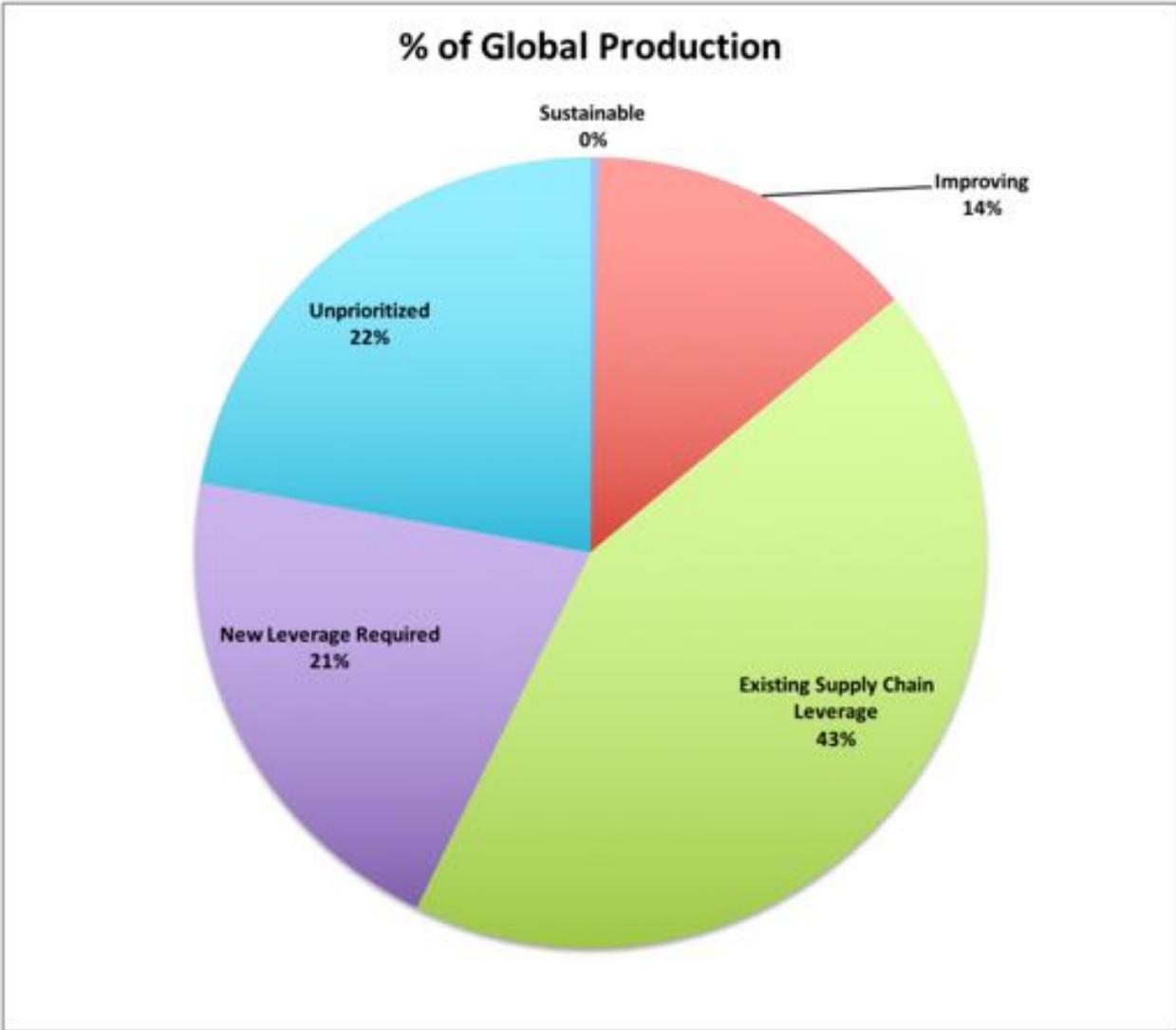


Figure 3. Strategy to reach Target 75 for the squid sector

Annex: Progress toward Target 75 goal

The following tables show key figures in gauging the progress of global squid production toward the Target 75 goal. The table format will be reprised in future reports with updated figures.

Table 1. Volume considered sustainable or improving, as of January 2019

T75 Category	Volume (mt)	% of Global Production
Sustainable: MSC-C or FS Green	12,040	0.3
Improving: MSC-FA	8,770	0.2
Improving: FIPs (rated A–C)	506,660	13.4
Total	527,470	13.9%

Table 2. Target squid fisheries with existing supply chain leverage and interest

Production Source	2014 Landings (mt)	% Global Production	Improvement Outlook
East China Sea and Yellow Sea Japanese flying squid FIP	5,000	0.1	This FIP was launched in November 2018 but has not yet met the criteria for an active FIP or received a progress rating.
Spain, Argentine shortfin squid (FAO 41)	33,460	0.9	
Falkland Islands, Patagonian squid	43,110	1.1	
Falkland Islands, Argentine shortfin squid	6,150	0.2	
China, mitre squid, non-FIP volume	70,000	1.9	
China, squids nei, non-FIP volume	306,730	8.1	
Japan, Japanese flying squid (East China Sea and East/Japan Sea)	173,110	4.6	

Indonesia, common squids nei (FAO 71)	112,050	2.9	
Indonesia, common squids nei (FAO 57)	37,790	1.0	
Thailand, common squids nei (FAO 71)	70,780	1.9	
Thailand, common squids nei (FAO 57)	14,330	0.4	
Argentina, Argentine shortfin squid	168,730	4.4	
Chile, jumbo flying squid	176,600	4.7	
Peru, jumbo flying squid, non-FIP volume	153,110	4.1	
India, squids nei (FAO 51, 57)	83,220	2.2	
South Korea, Japanese flying squid (East China Sea and East/Japan Sea)	163,890	4.3	
Ecuador, jumbo flying squid (Eastern Pacific)	18,150	0.5	
Total	1,636,210	43.3%	

Table 3. Additional fisheries that must be engaged to close the gap to T75

Production Source	2014 Harvest (mt)	% Global Production
China, Argentine shortfin squid (FAO 41)	336,000	8.9
China, jumbo flying squid (FAO 87)	332,520	8.8
South Korea, Argentine shortfin squid (FAO 41)	103,340	2.7
South Korea, jumbo flying squid (FAO 87)	7,200	0.2
Total	779,060	20.6%