

# Surimi Paste Supply Track

## Q1, 2024

### HIGHLIGHTS

- Global surimi production estimates suggest overall volumes decreased by about 8 percent y-o-y in Q1
- Alaska Pollock Production declined by ~15 percent y-o-y in Q1, marking the second lowest level for Q1 in the last seven years.
- According to our estimates, Russian Pollock surimi production suggests an increase of ~50 percent y-o-y in Q2, totaling ~16 thousand metric tons.
- Japanese pollock surimi production estimates suggest a 37 percent y-o-y decline in Q1; however, preliminary data through Q2 show an increase of 33 percent y-o-y.
  - **Please read Tom Asakawa's commentary on the Japanese surimi market (paste and products).**
- Tropical surimi production estimates suggest a 13 percent decrease y-o-y in Q1, with Itoyori declining nearly ~32 percent during the same period.
  - Chinese production estimates of all Tropical was also down by 21 percent in Q1 y-o-y.
- Carp surimi production estimates suggest an increase of about 24 percent y-o-y in Q1
- Overall, pricing of the main benchmark species, like Alaska Pollock and Itoyori surimi, to the main markets showed considerable decreases in Q1, with partial data for Q2 '24 suggesting a potential floor at multi-year lows.



# Table of Contents

## Global Surimi Production Estimates

Production\_\_\_\_\_3

## Alaska Pollock Surimi

Production\_\_\_\_\_4

Trade (Imports)\_\_\_\_\_5

Import price\_\_\_\_\_6

Trade (Exports)\_\_\_\_\_7

## Japanese Pollock & Atka Mackerel Surimi Estimates

Japanese Pollock Surimi Prod. and Inv.\_\_\_\_\_8

Atka Mackerel Surimi Production\_\_\_\_\_9

Tom Asakawa on Surimi Seafood\_\_\_\_\_9-10

## Pacific Whiting Surimi Estimates

Production\_\_\_\_\_11

Trade (Imports and Exports) and Pricing\_\_\_\_\_12-13

## Southern Blue Whiting and Hoki Surimi Estimates

Production\_\_\_\_\_14

Trade (Imports & Exports)\_\_\_\_\_15

## Northern Blue Whiting Surimi Estimates

Production and Trade (Exports)\_\_\_\_\_16

## Tropical Surimi Production and Trade

Intro, Price\_\_\_\_\_17

Thailand\_\_\_\_\_18

India\_\_\_\_\_19

Vietnam\_\_\_\_\_20

Indonesia\_\_\_\_\_21

Malaysia\_\_\_\_\_22

Pakistan\_\_\_\_\_23

Myanmar\_\_\_\_\_24

## Sardine Production and Trade, Peru to Japan\_\_\_\_\_25

## Surimi Production Estimates, China, Trade\_\_\_\_\_26

## Russian Pollock Surimi + Japan imports\_\_\_\_\_27

## Notices, Disclaimers, and More\_\_\_\_\_28

PhD Humberto Godinez  
[Humberto.Godinez@gmail.com](mailto:Humberto.Godinez@gmail.com)  
(646)-645-4572

MS, Angel Rubio  
[angeldrubio@gmail.com](mailto:angeldrubio@gmail.com)  
(201)-921-2664

### Notes and Considerations:

In our last edition of this report, we corrected Russian pollock surimi from using trade figures as a proxy to figures reported publicly by trade associations and producers. Still, we added trade figures from reporting countries from Russia since export figures from the latter have not been publicly available since early 2022. Production figures were recalculated from recently published data (see page 28) by Russian authorities, and an estimated seasonal factor relative to trade behavior was applied; the latter was lagged to match the Russian catch season. These numbers may continue to be revised as Russia ramps up its production. Regarding trade, Japan, South Korea, France, and China are the main markets.

### Disclaimer

The following report is only an executive summary of all the data points analyzed. Because of the many ways the data analyzed can be presented, these summaries only provide a general overview of each data series. However, the data requested by the members is available in many ways in the Excel files provided. All data can be easily manipulated to fit each member's presentation preference, whether in tables, charts, or raw data.

The nuances for many calculations are many, as these vary widely from species to species, origins, and destinations, among other variables. The methodologies for many species are relatively simple since trade data can be assumed to be a function of its production in many cases. However, this is not always the case for specific countries and species. Also, some calculations with limited data and rudimentary methods had to be used to arrive at a "best estimate." Please contact the analyst directly to make changes, suggestions, or corrections for details on each species or market. After exhausting most options available to obtain reliable data, we firmly believe that the estimates presented here are a good approximation of the species, origins, and destinations requested.



# World Production

Global surimi production estimates decreased ~8 percent in Q1 2024 compared to a year ago. Significant production contractions were observed for Tropical and US Alaska Pollock surimi, falling ~13 and ~15 percent, respectively. However, Russian Pollock and Chinese carp surimi production estimates revealed an increase of ~24 and ~49 percent compared to Q1 last year. While smaller given their representation in the overall pie, Hoki, Southern Blue Whiting, Northern Blue Whiting, Atka Mackerel, and Sardine all posted decreases during Q1 compared to last year.

## Global Surimi Production Estimates by Category

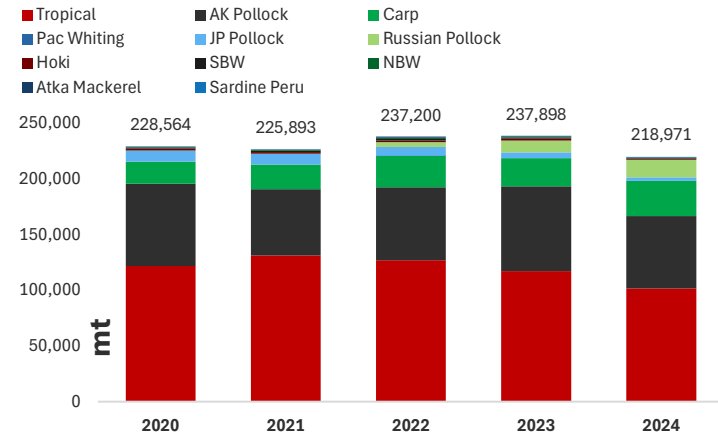


Figure 1. Overall surimi production estimates by species' category. Source: Customs, PlutusIQ, GAPP.

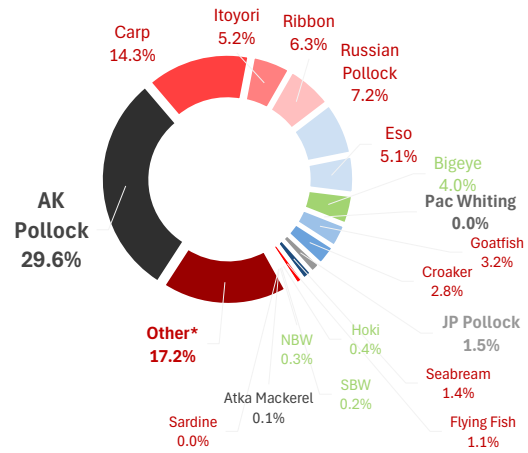
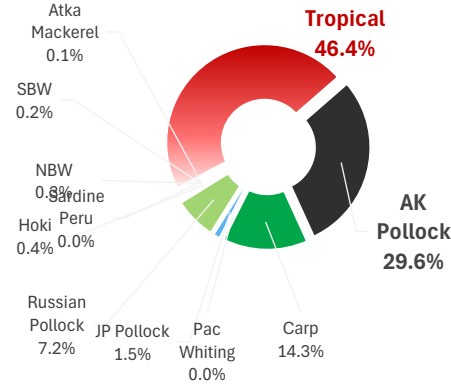


Figure 2 and 3. Pie chart of world surimi production by species and category. Source: PlutusIQ, GAPP.

	2020	2021	Y-o-Y % Chg	2022	Y-o-Y % Chg	2023	Y-o-Y % Chg	2024	Y-o-Y % Chg
Tropical	121,505	131,083	+7.9%	126,806	-3.3%	116,932	-7.8%	101,530	-13.2%
AK Pollock	73,647	59,033	-19.8%	65,191	+10.4%	75,954	+16.5%	64,806	-14.7%
Carp	19,792	22,062	+11.5%	28,131	+27.5%	25,272	-10.2%	31,243	+23.6%
Pac Whiting	0	0		3		0	-100.0%	0	
JP Pollock	9,916	9,766	-1.5%	7,834	-19.8%	5,087	-35.1%	3,209	-36.9%
Russian Pollock	11	87	+723.8%	4,244	+4805.7%	10,609	+150.0%	15,806	+49.0%
Hoki	1,728	1,383	-19.9%	1,710	+23.6%	1,678	-1.9%	913	-45.6%
SBW	934	1,199	+28.3%	1,271	+6.0%	807	-36.5%	465	-42.3%
NBW	614	986	+60.5%	1,038	+5.3%	865	-16.7%	737	-14.8%
Atka Mackerel	166	174	+4.8%	876	+403.0%	478	-45.5%	191	-60.0%
Sardine Peru	250	120	-52.0%	96	-20.0%	216	+125.0%	72	-66.7%
<b>Total</b>	<b>228,564</b>	<b>225,893</b>	<b>-1.2%</b>	<b>237,200</b>	<b>+5.0%</b>	<b>237,898</b>	<b>+0.3%</b>	<b>218,971</b>	<b>-8.0%</b>

Table 1. World surimi production estimates by species. Source: PlutusIQ, GAPP.

	2020	2021	Y-o-Y % Chg	2022	Y-o-Y % Chg	2023	Y-o-Y % Chg	2024	Y-o-Y % Chg
AK Pollock	73,647	59,033	-19.8%	65,191	+10.4%	75,954	+16.5%	64,806	-14.7%
Carp	19,792	22,062	+11.5%	28,131	+27.5%	25,272	-10.2%	31,243	+23.6%
Itoyori	11,799	19,899	+68.6%	20,047	+0.7%	16,846	-16.0%	11,490	-31.8%
Ribbon	13,567	14,694	+8.3%	16,401	+11.6%	15,194	-7.4%	13,904	-8.5%
Russian Pollock	11	87	+723.8%	4,244	+4805.7%	10,609	+150.0%	15,806	+49.0%
Eso	11,680	12,566	+7.6%	13,903	+10.6%	11,474	-17.5%	11,203	-2.4%
Bigeye	9,332	10,278	+10.1%	11,081	+7.8%	8,927	-19.4%	8,759	-1.9%
Pac Whiting	0	0		3		0	-100.0%	0	
Goatfish	7,623	8,049	+5.6%	8,246	+2.4%	6,972	-15.4%	6,913	-0.8%
Croaker	7,080	7,168	+1.2%	7,585	+5.8%	5,987	-21.1%	6,142	+2.6%
JP Pollock	9,916	9,766	-1.5%	7,834	-19.8%	5,087	-35.1%	3,209	-36.9%
Seabream	3,462	3,967	+14.6%	3,529	-11.0%	2,916	-17.4%	3,047	+4.5%
Flying Fish	2,694	2,867	+6.4%	2,992	+4.4%	2,290	-23.5%	2,308	+0.8%
Hoki	1,728	1,383	-19.9%	1,710	+23.6%	1,678	-1.9%	913	-45.6%
SBW	934	1,199	+28.3%	1,271	+6.0%	807	-36.5%	465	-42.3%
NBW	614	986	+60.5%	1,038	+5.3%	865	-16.7%	737	-14.8%
Atka Mackerel	166	174	+4.8%	876	+403.0%	478	-45.5%	191	-60.0%
Sardine	250	120	-52.0%	96	-20.0%	216	+125.0%	72	-66.7%
Other*	54,269	51,595	-4.9%	43,022	-16.6%	46,325	+7.7%	37,765	-18.5%
<b>Total</b>	<b>228,564</b>	<b>225,893</b>	<b>-1.2%</b>	<b>237,200</b>	<b>+5.0%</b>	<b>237,898</b>	<b>+0.3%</b>	<b>218,971</b>	<b>-8.0%</b>

Other\* includes all tropical surimi produced in China, as well as sardine and other species not listed mainly for tropical surimi

Table 2. World surimi production estimates by species' category. Source: PlutusIQ, GAPP.

# Alaska Pollock Surimi Production, US

AK Pollock surimi production, as reported by NMFS, declined by about ~7 percent year-over-year through Q2 and ~12 percent through week 28. The latter is the second lowest level for Q1 production in at least seven years. Production in Q2 2024 was the second largest in at least seven years, while production in Q1 was the second lowest during the same period. It must be noted that production last year reached a multi-year high and that the reduced production seen during the first six months of the year is comparable to the years before 2023.

US Production, Alaska Pollock Surimi (MT)									
	2020	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1	73,647	59,033	-19.8%	65,191	+10.4%	75,954	+16.5%	64,806	-14.7%
Q2	14,511	32,804	+126.1%	15,211	-53.6%	19,798	+30.2%	24,067	+21.6%
Q3	69,935	95,932	+37.2%	78,865	-17.8%	93,384	+18.4%		
Q4	19,048	5,919	-68.9%	2,030	-65.7%	5,971	+194.1%		
Total	177,141	193,688	+9.3%	161,297	-16.7%	195,107	+21.0%		
YTD	88,158	91,837	+4.2%	80,402	-12.5%	95,752	+19.1%	88,873	-7.2%

Table 3. Alaska Pollock Surimi Production by Quarter. Source: NOAA Fisheries, PlutusIQ. Q2 2024 data is incomplete.

## US Production

Alaska Pollock Surimi from week 1 to week 28

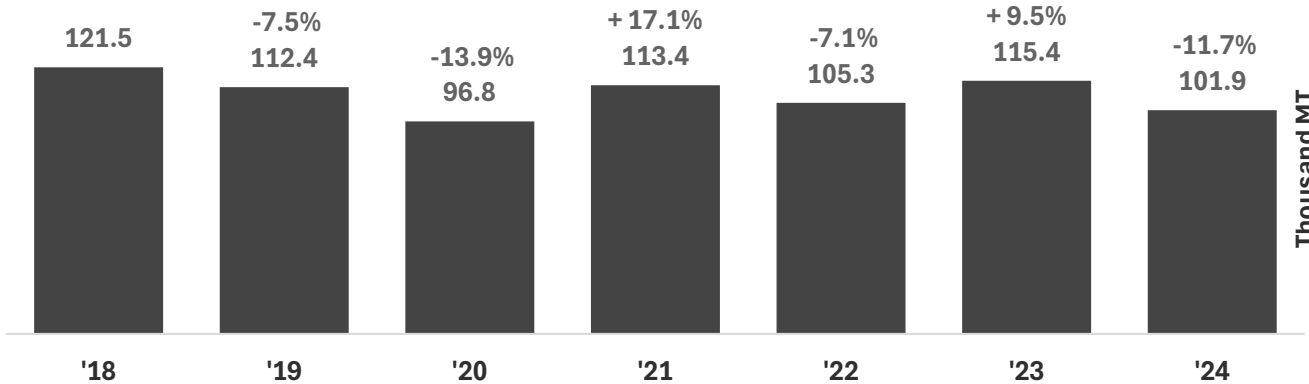


Figure 4. Alaska Pollock Surimi Production and YTD through week 15. Source: NOAA Fisheries, PlutusIQ.



## US Production

Alaska Pollock Surimi

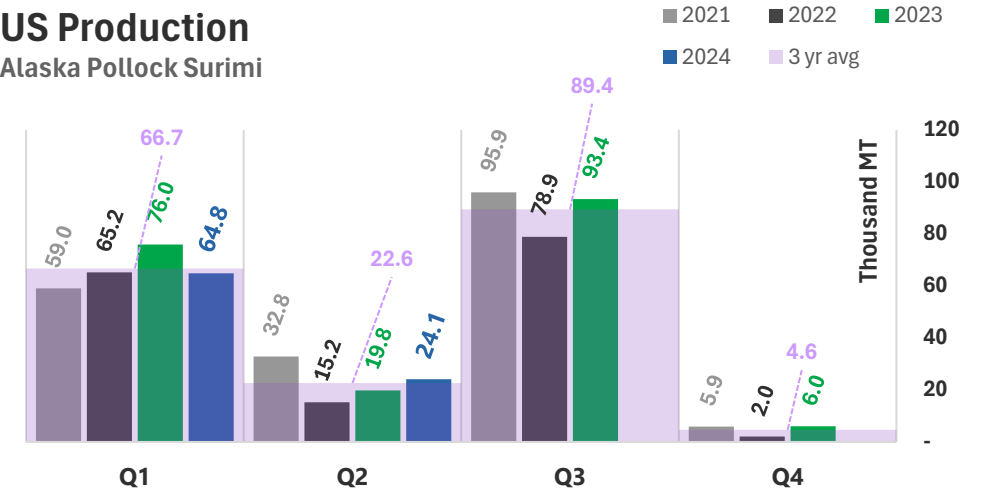


Figure 5. Alaska Pollock Surimi Production by Quarter. Source: NOAA, PlutusIQ.

## US Production

Alaska Pollock Surimi

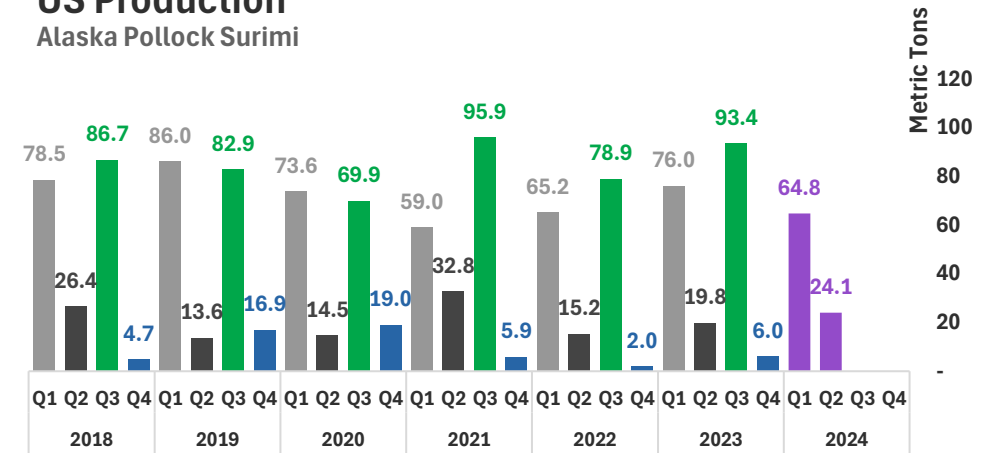


Figure 6. Alaska Pollock Surimi Production by Quarter, linear. Source: NOAA Fisheries, PlutusIQ.



# Alaska Pollock Surimi Trade, US

## Countries declaring imports from the US

Countries declaring imports of AKP surimi from the US suggest a considerable increase of 66 percent year-over-year through Q1. The leading destination, Japan, reported an increase of about ~40 percent in Q1, from 9.5 thousand to about ~13.3 thousand metric tons. The remainder of the importing countries also posted significant gains.

Alaska Pollock Surimi Imports		*YTD from (Q1 to Q1)						
All Countries		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1		17,201	21,060	+ 22.4%	14,460	-31.3%	24,095	+ 66.6%
Q2		49,340	39,260	-20.4%	44,898	+ 14.4%		
Q3		34,694	38,309	+ 10.4%	35,164	-8.2%		
Q4		52,598	31,748	-39.6%	49,116	+ 54.7%		
Total		153,833	130,377	-15.2%	143,638	+ 10.2%		
*YTD		17,201	21,060	+ 22.4%	14,460	-31.3%	24,095	+ 66.6%

Table 4. Alaska Pollock Surimi Imports. Aggregate by declaring countries' customs.

## Alaska Pollock Surimi Imports

All Countries

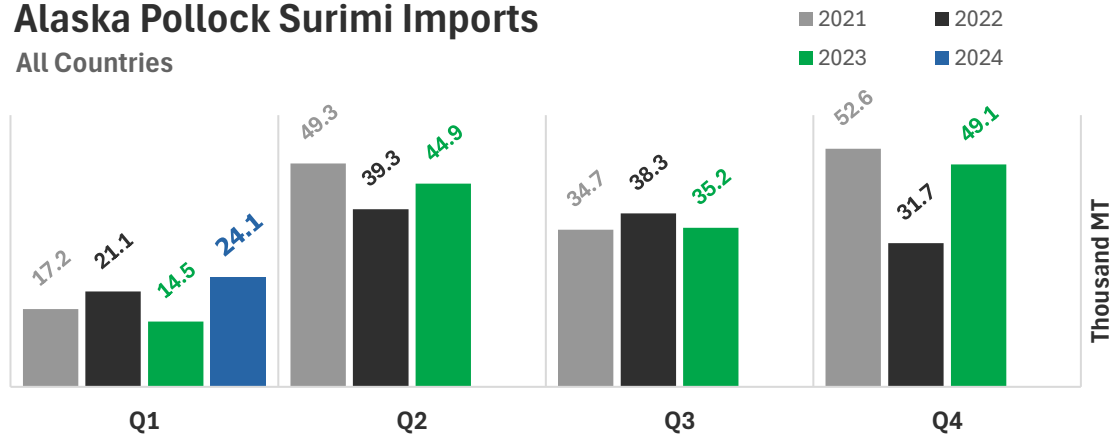


Figure 7. Alaska Pollock Surimi Imports. Aggregate of declaring countries by quarter.



Alaska Pollock Surimi Imports		(Q1 to Q1)						
By Declaring Country through Q1		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan		8,811	10,772	+ 22.3%	9,502	-11.8%	13,323	+ 40.2%
S. Korea		2,372	3,506	+ 47.8%	2,310	-34.1%	3,555	+ 53.9%
France		2,014	3,073	+ 52.6%	1,420	-53.8%	2,785	+ 96.1%
Lithuania		1,778	1,572	-11.6%	902	-42.6%	2,546	+ 182.3%
Thailand		46	409	+ 789.1%	48	-88.3%	335	+ 597.9%
Spain		1,663	978	-41.2%	68	-93.0%	1,138	+ 1573.5%
Taiwan		67	130	+ 94.0%	67	-48.5%	203	+ 203.0%
Poland		171	299	+ 74.9%	76	-74.6%	55	-27.6%
Belarus		187	297	+ 58.8%				
Norway		72	24	-66.7%	46	+ 91.7%	155	+ 237.0%
Ukraine		20			21			
Total		17,201	21,060	+ 22.4%	14,460	-31.3%	24,095	+ 66.6%

Table 5. Alaska Pollock Surimi Imports by declaring country.

Lithuania's imports of Alaska Pollock surimi increased ~180 percent, from 902 metric tons to 2.5 thousand metric tons.

## Alaska Pollock Surimi Imports

By Declaring Country through Q1

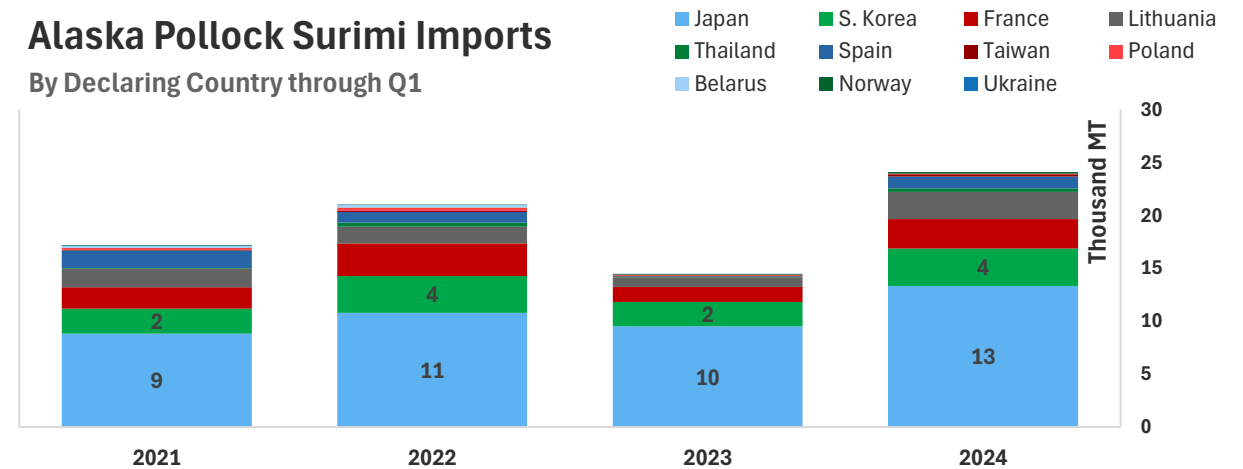


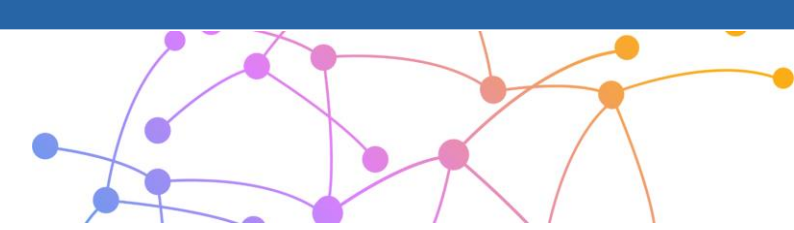
Figure 8. Alaska Pollock Surimi Imports by declaring country.





# Alaska Pollock Surimi Trade, US

## Countries declaring imports from the US + Pricing



It is clear that the overall linear trend is downward despite an increase in production during 2023. This is consistent with the overall uptrend in price, specifically before Q1 and Q2 of 2023, when prices began trending considerably lower. In fact, prices of Alaska Pollock surimi into Japan fell to the lowest level in at least seven years when expressed in USD.

### Declaring Countries' imports

Alaska Pollock surimi

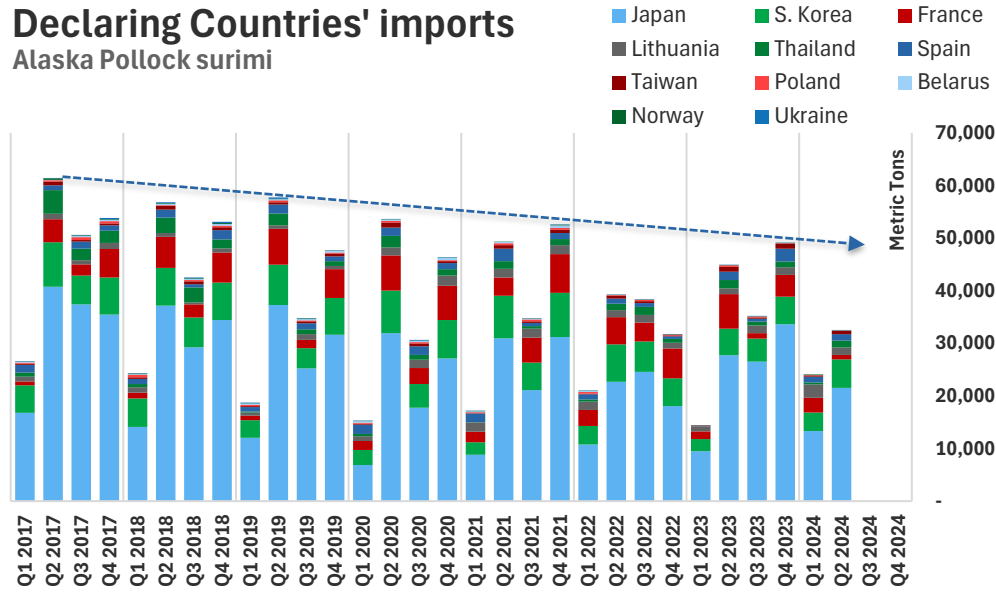


Figure 9. Alaska Pollock Surimi Imports. Linear imports by declaring countries. \*Q4 '23 is incomplete.

Figure 10 illustrates that average prices have declined to multi-year low levels in Q1 '24 and Q2 '24 (data for the latter is incomplete).

### Declaring Countries' imports

Alaska Pollock surimi

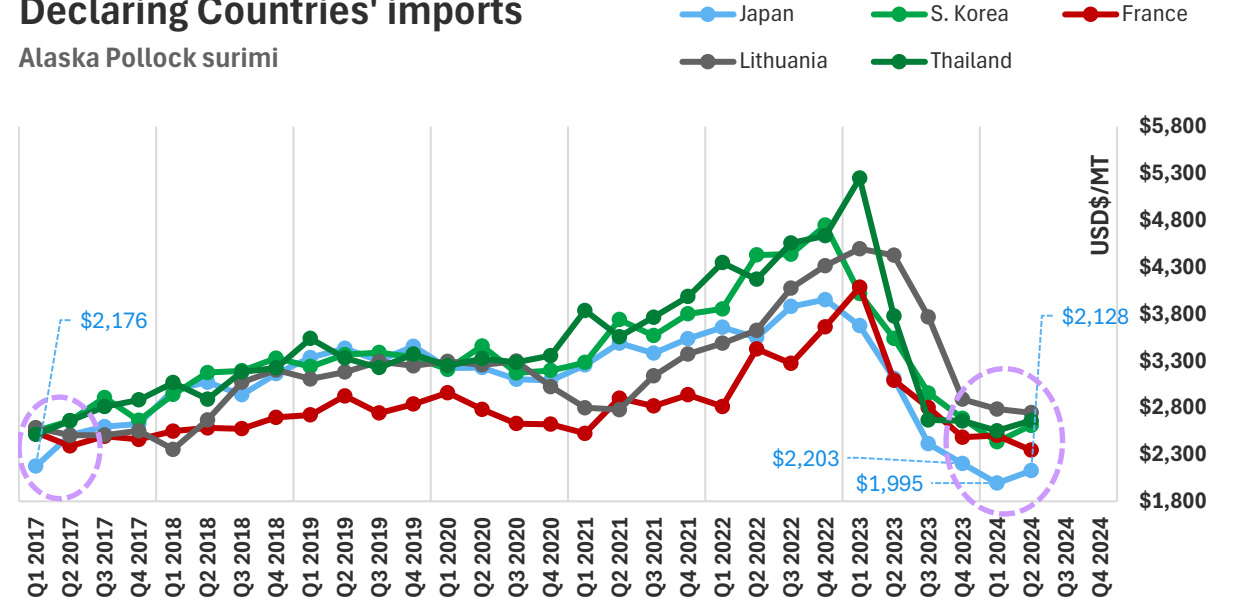


Figure 10. Alaska Pollock Surimi Import Price per MT by declaring country. Q4 '23 data is incomplete.



# Alaska Pollock Surimi Trade, US

## US Exports (by US Customs)

U.S. customs export figures revealed a ~13 percent decrease in Q1 year over year. The story of countries declaring imports surging by 66 percent is consistent with the increase seen in Q4 2023 of about 121 percent year over year. This insight is also consistent with multi-year low prices seen in the previous section. Shipments to South Korea and Japan represent about 75 percent of all exports.

U.S. Alaska Pollock Surimi Exports		*YTD from (Q1 to Q1)						
All Countries		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1		34,010	44,420	+ 30.6%	46,237	+ 4.1%	40,122	-13.2%
Q2		34,944	19,898	-43.1%	29,642	+ 49.0%		
Q3		72,953	67,581	-7.4%	76,434	+ 13.1%		
Q4		25,525	11,161	-56.3%	24,695	+ 121.3%		
Total		167,432	143,060	-14.6%	177,008	+ 23.7%		
*YTD		34,010	44,420	+ 30.6%	46,237	+ 4.1%	40,122	-13.2%

Table 6. Alaska Pollock Surimi Exports (US) by quarter. U.S. Customs, PlutusIQ.

## U.S. Alaska Pollock Surimi

All Countries

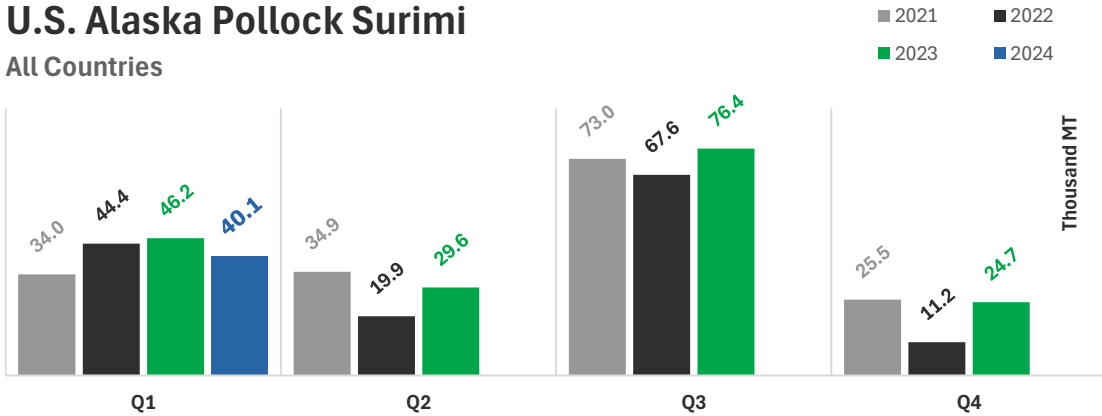


Figure 11. Alaska Pollock Surimi Exports. Aggregate of destination countries by quarter. \*Q2 '24 is incomplete



U.S. Alaska Pollock Surimi Exports		(Q1 to Q1)						
By Declaring Country through Q1		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
S. Korea		16,078	20,619	+ 28.2%	20,102	-2.5%	18,596	-7.5%
Japan		11,236	13,166	+ 17.2%	16,418	+ 24.7%	12,209	-25.6%
France		1,787	2,476	+ 38.6%	4,064	+ 64.1%	1,666	-59.0%
Lithuania		734	1,589	+ 116.5%	1,497	-5.8%	2,641	+ 76.4%
China		305	1,267	+ 315.4%	351	-72.3%	92	-73.8%
Netherlands		2,478	2,552	+ 3.0%	1,920	-24.8%	2,008	+ 4.6%
Thailand		469	1,076	+ 129.4%	522	-51.5%	864	+ 65.5%
Taiwan		318	615	+ 93.4%	243	-60.5%	40	-83.5%
India		432	398	-7.9%			330	
Spain		84	68	-19.0%	724	+ 964.7%	880	+ 21.5%
Germany		22	73	+ 231.8%			337	
Total		34,010	44,420	+ 30.6%	46,237	+ 4.1%	40,122	-13.2%

Table 7. Alaska Pollock Surimi Exports (US) by destination declared.

Shipments to Lithuania increased by ~76 percent, which is also consistent with the previous section of countries declaring imports of US Alaska Pollock surimi.

## U.S. Alaska Pollock Surimi Exports

### By Declaring Country through Q1

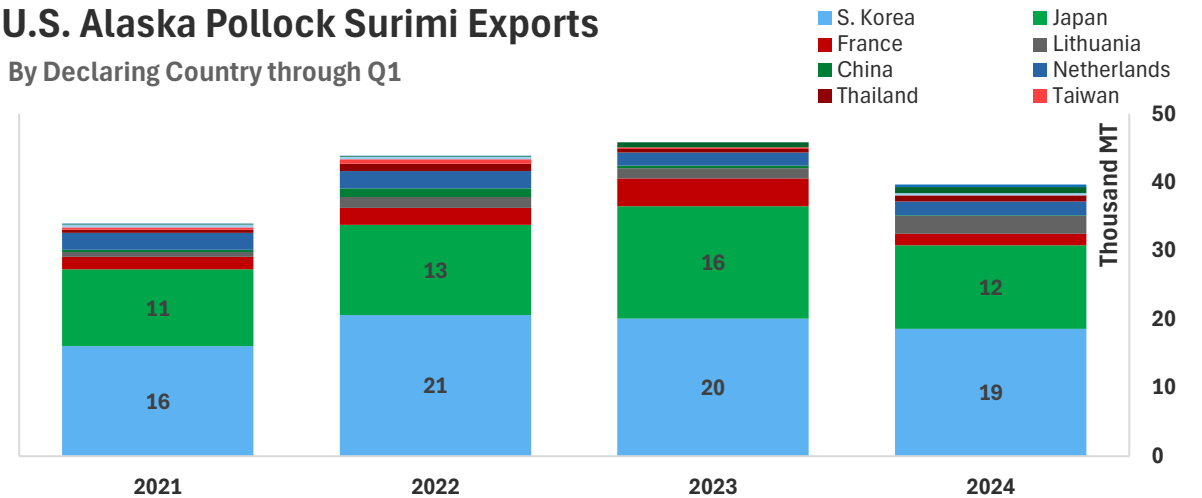


Figure 12. Alaska Pollock Surimi Exports by destination country.



# Japan

## Japanese Pollock Surimi & Atka Mackerel Surimi Production

### Japanese Pollock

Preliminary estimates for 2023 reveal the lowest yearly production out of this origin since at least 1992. This low number is consistent with the Japanese Pollock harvest, which reached the lowest level since at least 2010. Our estimates for 2024, however, suggest production is up by about ~33 percent through Q2. However, Q1 production estimates were considerably lower.

### Japanese Pollock Surimi Production

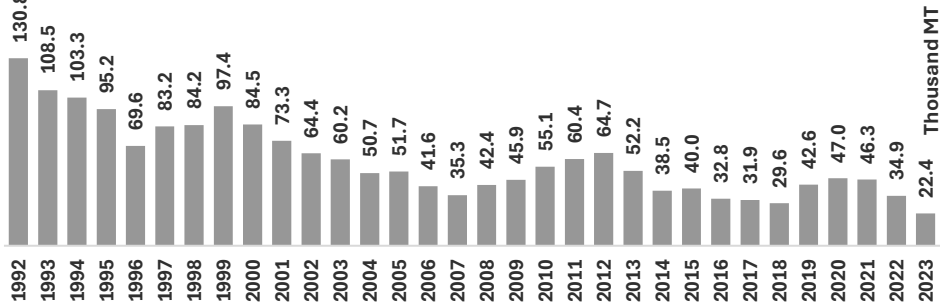


Figure 13. Japanese surimi production estimates. FAO, Japan MOF, Tom Asakawa, TA Pacific Co., and Kambako News, PlutusIQ.

### Japanese Pollock TAC vs. Harvest

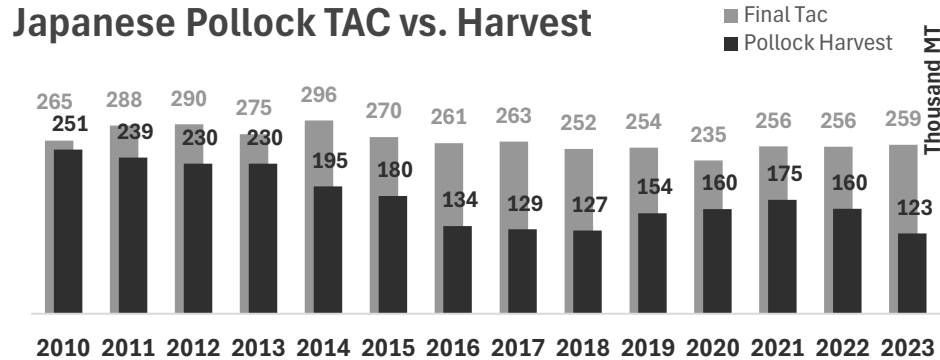


Figure 14. Japanese pollock harvest vs. TAC. Source: Japan MOF, Tom Asakawa, TA Pacific Co., and Kambako News.

### Japanese Pollock Surimi Production

TOTAL ESTIMATE

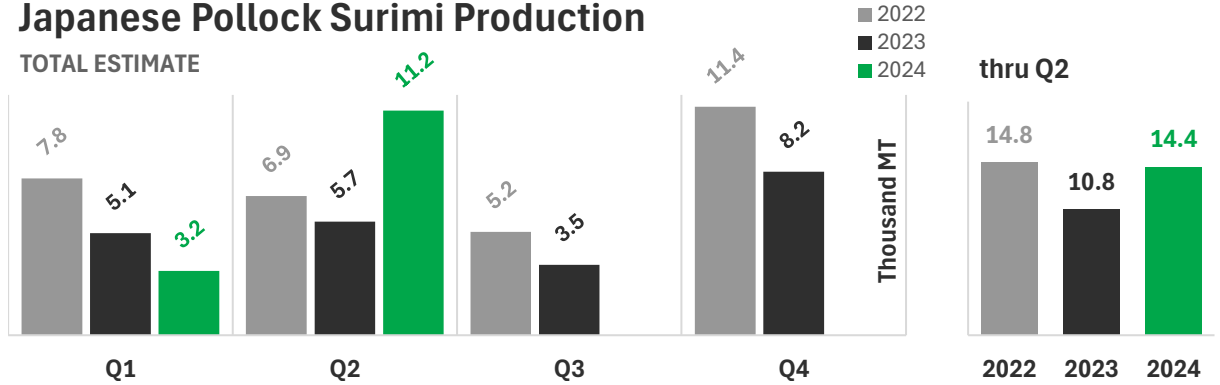


Figure 15. Japanese pollock surimi production estimates. Source: Tom Asakawa, TA Pacific Co., and Kambako News, PlutusIQ.

Inventories as of November 2023 ranked the highest since at least 2018, with Alaska Pollock surimi inventory at a record high in December 2023.

### All Surimi Inventory, Japan

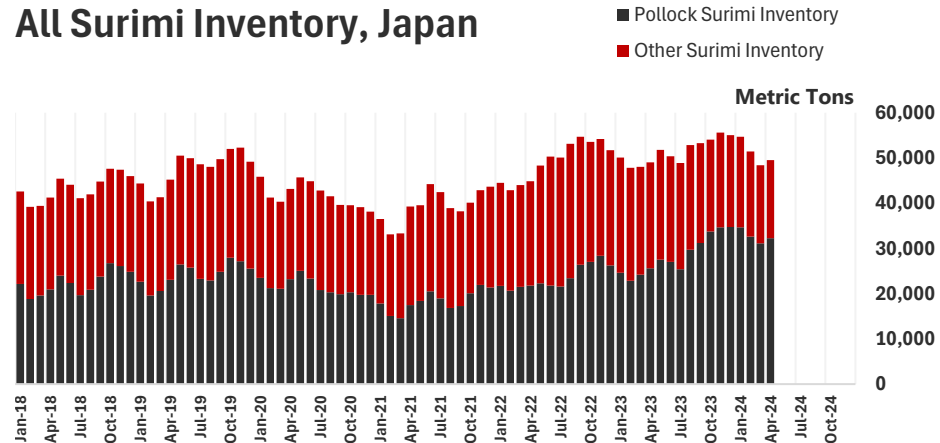


Figure 16. All surimi inventory in Japan. Tom Asakawa, TA Pacific Co., Japan MOF. PlutusIQ. Monthly through July 2023.





# Japan

## Japanese Atka Mackerel Surimi + Tom Asakawa

### Atka Mackerel

Production estimates for this species, which considers production out of Hokkaido, are considerably lower in 2024 compared to at least the last two years. While the linear trend was upward, declines over the last four quarters may hint at a trend reversal.

### Atka Mackerel Surimi Production

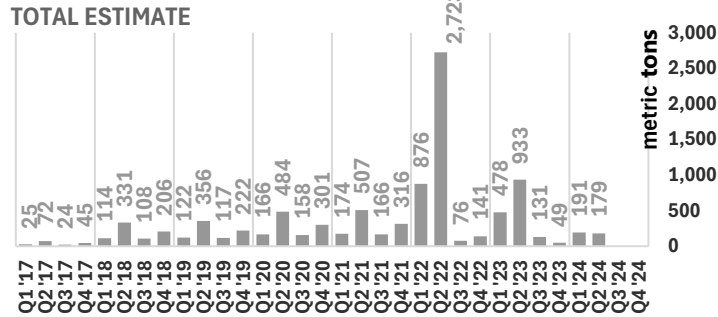


Figure 17. Japanese Atka Mackerel Harvest. FAO, Japan MOF, Tom Asakawa, TA Pacific Co., and Kambako News, PlutusIQ.

### Atka Mackerel Surimi Production

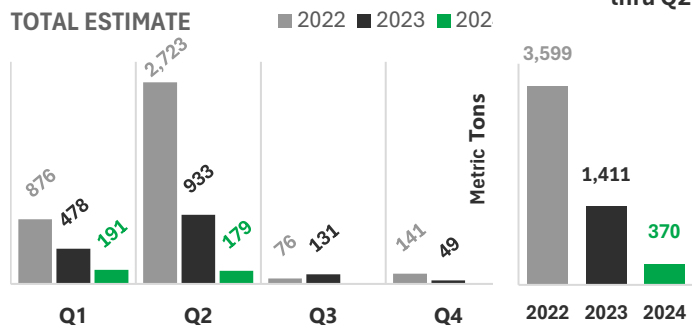


Figure 18. Atka Mackerel surimi production, Tom Asakawa, TA Pacific Co., and Kambako News, PlutusIQ.

### Japanese Market, by Tom Asakawa

#### Japanese Pollock Catch and TAC

The Fishery Agency of Japan set the total Pollock TAC for JFY 2024 at 271,900 MT, an increase of 5.1% from JFY 2023.

The 2023 Pollock catch totaled 122,900 MT, a decrease of 23.4%, the lowest since 2008, blaming small schools and high water temperatures.

In 2022, Japan increased import duty on Russian seafood from 3.5% to 5% in response to Russia's invasion of Ukraine. Still, Japan imported 12,397 tons of Russian pollock surimi in 2023, which decreased by 23% from 16,116 tons in 2022. From January to May 2024, Japan Imported 5,385 MT worth JPY1.84 billion (\$11.62 million).

#### Hokkaido surimi production

The National Surimi Association announced on June 25 that Hokkaido land-based surimi production in May 2024 was 1,429 tons, 48% higher than last year, Kamaboko News reported. It comprised 1,399 tons of Alaska pollock surimi, 60% higher, and 20 tons of Atka mackerel surimi, 59% lower.

The cumulative total from January to May was 3,110 tons, 8% higher. It was broken down into 2,862 tons of Alaska pollock, 18% higher, and 78 tons of Atka mackerel, 66% lower.

Shipment volume in May was 734 tons, 25% higher than last year. From January to May, it was 2,341 tons, 19% lower.

According to member reports, inventories in Hokkaido at the end of May were 1,661 tons, up 107% from the same month last year. 1,505 tons were Alaska pollock surimi, up 154%, and 31 tons were Atka mackerel surimi, down 51%.

In addition, according to the Fisheries Information Service Center's announcement, national surimi inventories at the end of March 2024 were 48,375 tons (31,094 tons of Alaska pollock surimi and 17,281 tons of other species surimi), down 6% from the previous month and 101% from the same month last year.

#### Surimi paste imports

According to the Ministry of Finance, from January to May 2024, Japan imported 83,503 tons of surimi, an increase of 2.5% from the previous year. The import volume from the United States increased by 11.6% to 35,372 MT. Thailand increased by 74.3% to 7,307 MT. India dropped by 16.7% to 18,067 MT. Vietnam fell 6.8% to 5,087 MT. China fell 11.7% to 5,839 MT. Russia increased by 34.1% to 5,385 MT.

#### Surimi products production

According to the Food Marketing Research and Information Center, the national production of surimi products from January to May 2024 was 180,784 MT, a decrease of 7.3% compared to a year ago.

Looking at the breakdown of each product from January to May 2024, authentic ita-kamaboko and pre-packaged kamaboko (hoso-kamaboko) decreased by 18.7% to 14,255 MT and by 40.1% to 3,290 MT, respectively. All other items also decreased: the other surimi products category decreased by 2.3% to 51,528 MT; fried kamaboko decreased by 8.3% to 70,423 MT, naruto/hanpen by 1.6% to 13,925 MT; and chikuwa by 3.3% to 27,363 MT.

*Continued on next page*



# Japan (cont.)

Japanese Market, by Tom Asakawa (cont.)

## Fish protein

Japan Kamaboko Association promotes surimi products with the Fish Protein logo. Surimi is an excellent source of high-quality protein with low fat content and is suitable for children, older people, and athletes. The products with the logo must meet the fish protein content standards set by the Japan Kamaboko Association (8.1g/100g or more, or 4.1g/100 kcal or more).



Suzuhiro, a 150-year-old surimi product manufacturer based in Odawara, supports many professional athletes with its surimi products.

## Osaki Suisan

On June 4, the Agricultural Trade Office of the U.S. Embassy in Tokyo awarded Hiroshima-based Osaki Suisan a citation of the U.S.-Japan Agricultural Trade Hall of Fame. Osaki Suisan is a leading surimi product manufacturer whose business originated in 1928. It pioneered the development of Fish Stick, or a surimi crab analog, in 1974; the main ingredient is SA-grade Alaska pollock surimi imported from the United States.

Established in 2011, the award honors companies and organizations contributing to developing the Japanese market for U.S. agricultural products.

## Surimi-based eel analogs

The price of farm-grown eel remains high due to a worldwide resource shortage. While it is nearly out of reach for general consumers, three surimi product manufacturers, namely Kanetetsu, Sugiyo, and Ichimasa, developed grilled kabayaki eel analogs a few years ago. One serving size is individually vacuum-packed for retail sales. It can be microwaved for a few minutes to serve. Consumer response is good for the reasonable prices ranging from around 300 to 500 yen per package compared to real kabayaki eel imported from China. Manufacturers continue to refine the products' appearance, taste, and texture.



# Pacific Whiting Surimi Production

Production estimates of Pacific Whiting surimi show a significant decrease from year-ago levels and below the average for the last nine years. Our estimates suggest production figures have contracted 60 percent year-over-year to about ~5 thousand metric tons in Q1.

We must disclose that since public data is no longer available, our estimates' margin of error has increased considerably. Still, the relatively decent correlation between landings and surimi production released in the past by NMFS's regional offices suggests that estimates of production figures are likely to be closer to real numbers.

Another round of changes in 2022 in how NMFS regional offices report this information further complicated this process. As a result, we recurred to even more rudimentary methods to calculate surimi production by category. Please refer to the disclaimer for further information.

## Pacific Whiting Surimi Production

Estimates

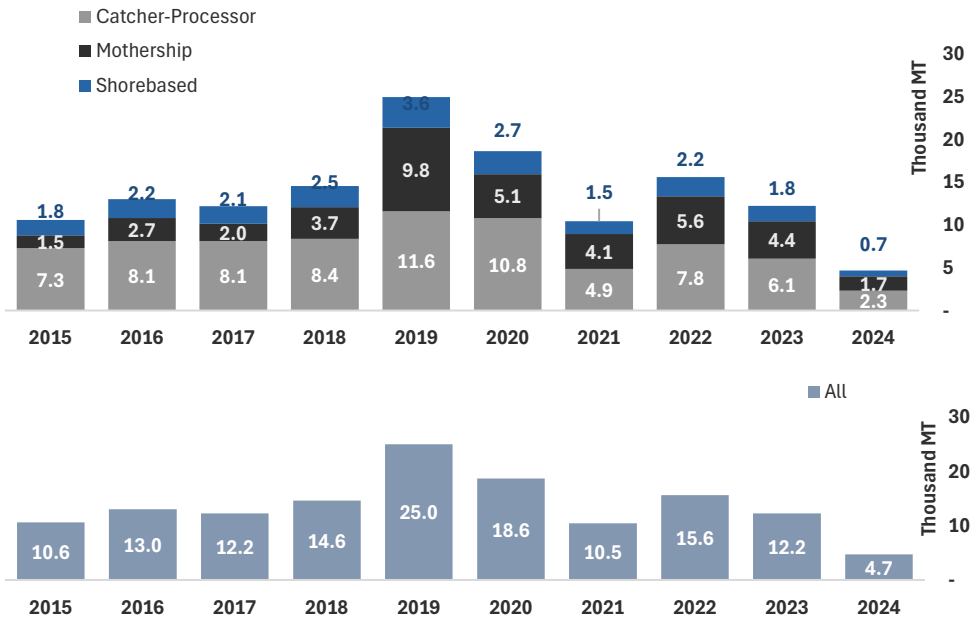


Figure 19. Pacific Whiting Surimi Production. NOAA Fisheries, Northwest Fisheries Science Center, and estimates for \*2020, \*2021, \*2022, \*2023, 2024.

## PW Surimi Production Estimate

NW PW Surimi Prod Est.

2019 2020 2021 2022 2023 2024

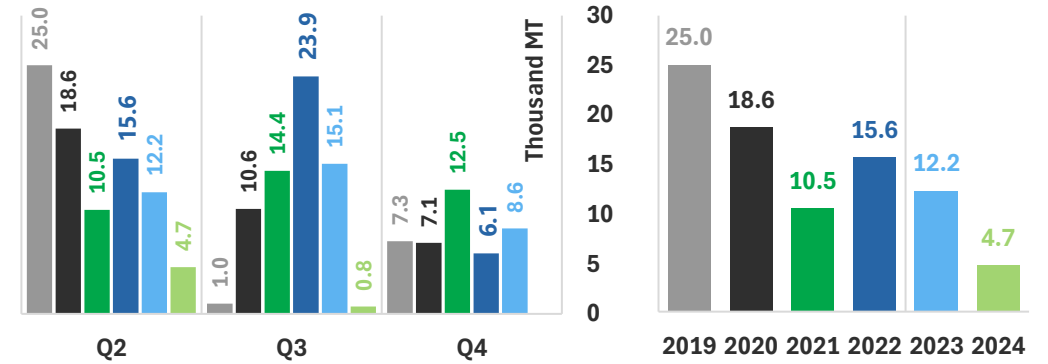


Figure 20. PW Surimi Production Estimate. NOAA, Northwest Fisheries Science Center, PlutusIQ . Data for 2024 considers complete preliminary data through Q2.

Disclaimer: There have been no updates on NOAA's Northwest Fisheries Science Center data beyond 2020. As a refresher, although shore-based production figures were suppressed before the most recent update that included 2020 production figures, total production figures were available, making it easy to calculate the remaining variable. However, "All" was also suppressed in the update mentioned above, making it difficult to approximate the missing values. As a result, we had to estimate the remaining figures by using a previously used method. Although this method is relatively rudimentary due to the lack of available data, we feel this approximation is a decent "best estimate" given the limitations.

As of August 2021, the FISHEYE app is no longer being regularly updated. Data were last updated on August 4, 2021. Therefore, our estimate method changed again.

UB Estimated Production, Pacific Whiting Surimi						**YTD (Q2 to Q2)			
	2020	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1				3					
Q2	18,648	10,458	-43.9%	15,620	+49.4%	12,233	-21.7%	4,692	-61.6%
Q3	10,573	14,395	+36.2%	23,872	+65.8%	15,081	-36.8%	758	-95.0%
Q4	7,133	12,495	+75.2%	6,099	-51.2%	8,601	+41.0%		
Total (UB Est.)	36,354	37,349	+2.7%	45,594	+22.1%	35,916	-21.2%		
*Official thru '20	<b>36,354</b>	<b>37,349</b>	<b>+2.7%</b>	<b>45,594</b>	<b>+22.1%</b>	<b>35,916</b>	<b>-21.2%</b>		
**YTD	18,648	10,458	-43.9%	15,620	+49.4%	12,233	-21.7%	4,692	-61.6%
* UB Estimates.	* '23 data complete								

Table 8. Estimated Production from Pacific Whiting Monthly Landings. NOAA Fisheries, Northwest Fisheries Science Center, PlutusIQ .



# Pacific Whiting Surimi Trade, US

## Countries declaring imports from the US + Pricing

Countries declaring imports of Pacific whiting surimi in Q1 2024 revealed a significant decrease of about ~37 percent compared to the same quarter last year. All main destinations posted significant decreases, particularly Lithuania, which contracted by ~62 percent year-over-year. The latter is consistent with this country's increase in imports of Alaska Pollock surimi. Imports by Spain, the largest market, only contracted by ~1.6 percent year-over-year.

From a price perspective, similar to Alaska Pollock, price levels reached a multi-year low in Q1 and Q2—preliminary data—2024.

Pacific Whiting Surimi Imports		*YTD from (Q1 to Q1)					
All Countries							
	2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1	3,379	3,299	-2.4%	5,805	+76.0%	3,681	-36.6%
Q2	3,291	4,737	+43.9%	4,314	-8.9%		
Q3	5,214	6,230	+19.5%	5,274	-15.3%		
Q4	6,373	6,781	+6.4%	3,295	-51.4%		
Total	18,257	21,047	+15.3%	18,688	-11.2%		
*YTD	3,379	3,299	-2.4%	5,805	+76.0%	3,681	-36.6%

Table 9. Pacific Whiting Surimi Imports, all declaring countries, from the U.S.—each country's customs, PlutusIQ.

Pacific Whiting Surimi Imports		*(Q1 to Q1)					
By Declaring Country							
	2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Spain	1,303	1,052	-19.3%	2,254	+114.3%	2,219	-1.6%
Lithuania	1,499	846	-43.6%	1,872	+121.3%	704	-62.4%
Japan	60	756	+1160.0%	476	-37.0%	96	-79.8%
France	105	220	+109.5%	250	+13.6%	132	-47.2%
Poland	287	231	-19.5%	752	+225.5%	440	-41.5%
Canada	99	73	-26.3%	95	+30.1%	89	-6.3%
Taiwan	20	60	+200.0%	60	-		
Latvia	6	39	+550.0%	46	+17.9%		
S. Korea		22					
*Total	3,379	3,299	-2.4%	5,805	+76.0%	3,681	-36.6%



Table 10. Pacific Whiting Surimi Imports, by declaring country, from the U.S.—each country's customs, PlutusIQ.

## Pacific Whiting Surimi Imports

All Countries

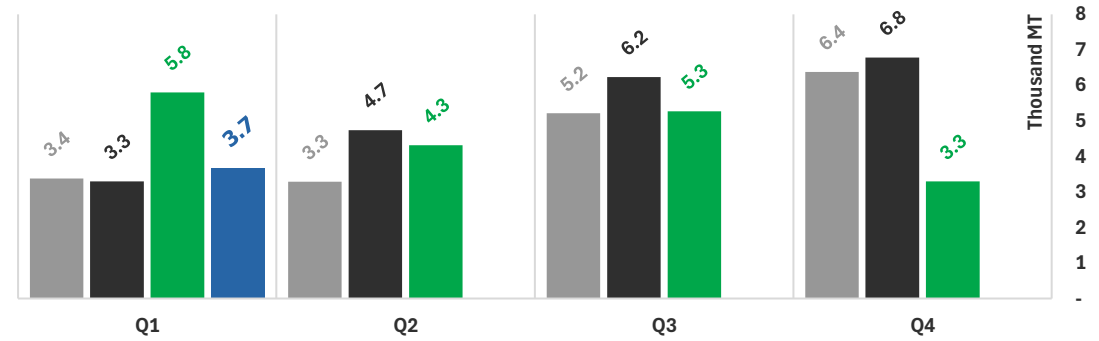


Figure 21. PW surimi imports, all countries by quarter from the U.S.—each country's customs, PlutusIQ.

## Declaring Countries, Imports

### Pacific Whiting Surimi

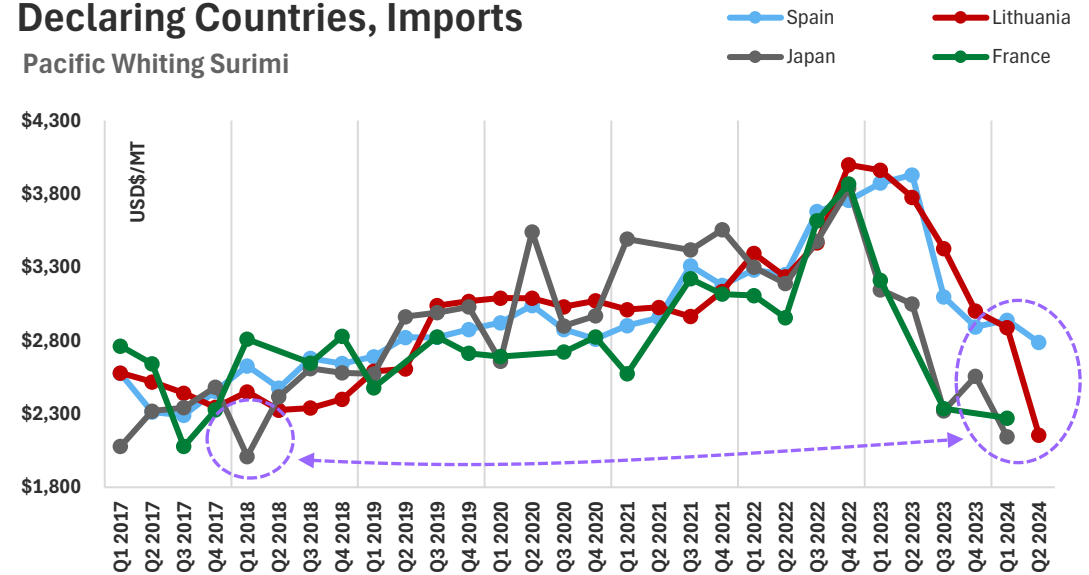


Figure 22. PW surimi import \$/MT—each country's customs, PlutusIQ.





# Pacific Whiting Surimi Trade, US

## Exports (US Customs)

U.S. export data shows a very different picture from countries declaring imports. For instance, it shows a similar pattern to seasonal production, which naturally makes sense, but these are not reflected similarly when analyzing countries declaring imports. Therefore, shipments in Q1 will generally be low compared to the remaining quarters. However, in 2024, US exports of Pacific Whiting surimi surged considerably in Q1 '24 year-over-year. While this could be faulty data, we must consider such discrepancies relative to production and countries declaring imports to make complete assessments. However, when these discrepancies become too large, simply discounting them might be appropriate.

The disparity between countries declaring imports and U.S. export data shows a massive disconnect in how these export codes are reported for this species. However, it also tells us that compared to surimi production, figures could be overstated, and imports and exports could be underreported—aside from being misreported. It is not easy to assess this data from a purely analytical perspective.

### Pacific Whiting Surimi Exports

All Countries

■ 2021 ■ 2022  
■ 2023 ■ 2024

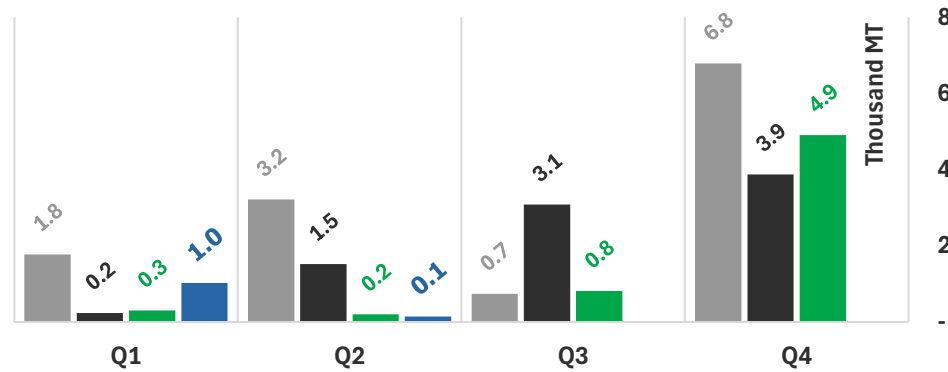


Figure 23. Pacific Whiting surimi exports by quarter. U.S. Customs, PlutusIQ.

Pacific Whiting Surimi Exports		*YTD from (Q1 to Q1)						
All Countries		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1		1,778	238	-86.6%	303	+27.3%	1,026	+238.6%
Q2		3,218	1,521	-52.7%	199	-86.9%	147	-26.1%
Q3		742	3,085	+315.8%	813	-73.6%		
Q4		6,789	3,875	-42.9%	4,907	+26.6%		
Total		12,527	8,719	-30.4%	6,222	-28.6%		
*YTD		1,778	238	-86.6%	303	+27.3%	1,026	+238.6%

Tables 11. Pacific Whiting Surimi Exports. All countries. U.S. Customs, PlutusIQ.

Pacific Whiting Surimi Exports		*(Q1 to Q1)						
By Reported Destination Country through Q1		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Spain		716			134			
Netherlands		901	20	-97.8%			800	
Lithuania								
S. Korea					72			
Canada		123	73	-40.7%	95	+30.1%	183	+92.6%
Japan			120					
Thailand		38	19	-50.0%			42	
China								
Poland								
*Total		1,778	238	-86.6%	303	+27.3%	1,026	+238.6%

Table 13. Pacific Whiting Surimi exports by country U.S. Customs, PlutusIQ.



# Southern Blue Whiting and Hoki Surimi Production

## SBW

Production estimates of southern blue whiting surimi decreased ~42 percent in Q1 '24 year-over-year. Argentina still represents the bulk of production, and estimates suggest a decrease of ~63 year-over-year in Q1. Meanwhile, production estimates out of Chile point to an increase of virtually zero in 2023 to 164 metric tons in Q1 2024. New Zealand production is typically nil in Q1.

## Hoki

Hoki surimi production estimates decreased ~46 percent year-over-year in Q1. Argentina's production decreased considerably, while production out of New Zealand was virtually flat year-over-year in Q1.

The overall linear trend since 2017 remains downward for both SBW and Hoki surimi production.

### Southern Blue Whiting Surimi Production

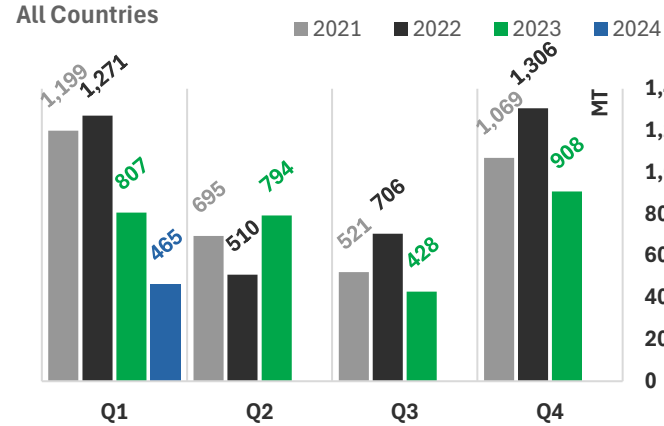


Figure 24. Southern Blue Whiting surimi estimated production by country. \*Q4 is complete.

### Hoki Surimi Production

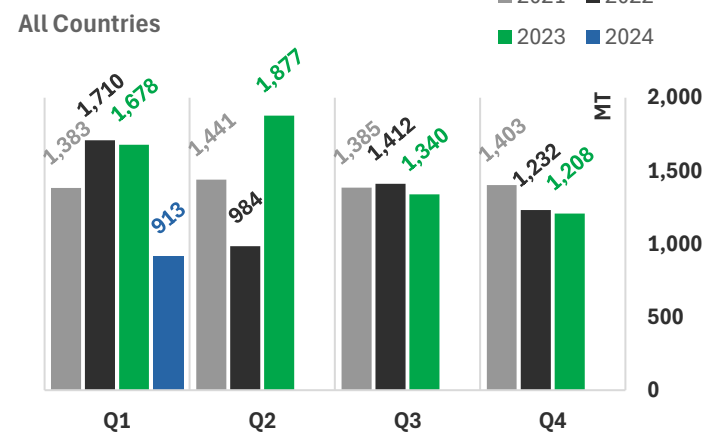


Figure 25. Hoki surimi production estimates. Each country's customs, PlutusIQ. \*Q4 is complete.

Southern Blue Whiting Surimi Production				*YTD from (Q1 to Q1)			
All Countries							
	2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1	1,199	1,271	+6.0%	807	-36.5%	465	-42.3%
Q2	695	510	-26.6%	794	+55.6%		
Q3	521	706	+35.5%	428	-39.4%		
Q4	1,069	1,306	+22.2%	908	-30.5%		
Total	3,484	3,793	+8.9%	2,936	-22.6%		
*YTD	1,199	1,271	+6.0%	807	-36.5%	465	-42.3%

Table 14. Southern Blue Whiting surimi estimated production.

Southern Blue Whiting Surimi Production				(Q1 to Q1)			
Production by Country							
	2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Argentina	635	864	+36.1%	805	-6.9%	301	-62.6%
Chile	564	407	-27.8%	2	-99.5%	164	+8100.0%
New Zealand							
Total	1,199	1,271	+6.0%	807	-36.5%	465	-42.3%

Table 15. Southern Blue Whiting surimi estimated production by country, year-to-date.

Hoki Surimi Production				*YTD from (Q1 to Q1)			
All Countries							
	2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Q1	1,383	1,710	+23.6%	1,678	-1.9%	913	-45.6%
Q2	1,441	984	-31.7%	1,877	+90.8%		
Q3	1,385	1,412	+1.9%	1,340	-5.1%		
Q4	1,403	1,232	-12.2%	1,208	-1.9%		
Total	5,612	5,338	-4.9%	6,104	+14.3%		
*YTD	1,383	1,710	+23.6%	1,678	-1.9%	913	-45.6%

Table 16. Hoki surimi estimated production by country, year-to-date.

Hoki Surimi Production				(Q1 to Q1)			
Production by Country							
	2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Argentina	952	1,296	+36.1%	1,207	-6.9%	452	-62.6%
Chile	23	104	+352.2%	5	-95.2%		
New Zealand	408	310	-24.0%	466	+50.3%	461	-1.1%
Total	1,383	1,710	+23.6%	1,678	-1.9%	913	-45.6%

Table 17. Hoki surimi estimated production by country, year-to-date.

# Southern Blue Whiting and Hoki Trade

Japanese imports of Argentinean surimi decreased by ~62 percent in Q1 year-over-year. These trade figures are incomplete, as Russian imports have been unavailable since mid-2022 due to the Russia-Ukraine war. Such trade figures could be slightly larger than displayed.

Surimi Imports from Argentina		*(Q1 to Q1)						
Countries Importing from: Argentina		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan		1,359	1,979	+45.6%	1,916	-3.2%	729	-62.0%
Russian Federation		156	157	+0.6%				
Spain					96		24	-75.0%
Belarus		72	24	-66.7%				
South Africa								
*Total		1,587	2,160	+36.1%	2,012	-6.9%	753	-62.6%

Table 18. Surimi imports from Argentina by country.

Surimi Imports from Chile		*YTD from (Q1 to Q1)						
Countries Importing from: Chile		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan		1,084	1,354	+24.9%	1,072	-20.8%	724	-32.5%
Russian Federation		7			22			
Spain			26		23	-11.5%	24	+4.3%
Belarus								
*Total		1,091	1,380	+26.5%	1,117	-19.1%	748	-33.0%

Table 19. Surimi imports from Chile by country.

Surimi Imports from New Zealand		*(Q1 to Q1)						
Countries Importing from: ew Zealand		2021	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan		80	171	+113.8%	110	-35.7%	26	-76.4%
South Africa								
*Total		80	171	+113.8%	110	-35.7%	26	-76.4%

Table 20. Surimi imports from New Zealand by country.

Japanese imports of Chilean surimi decreased by about ~33 percent in Q1 year-over-year.

Japanese surimi imports from New Zealand decreased significantly in Q1 year-over-year.

Disclaimer: Southern blue whiting (SBW) and Hoki surimi production were assumed to be a function of trade. There was consensus in which domestic markets for the three leading producers—Argentina, Chile, and New Zealand—were too small to be significant. As such, we utilized the following methodology:

- Use recipient countries' volumes of surimi from Argentina and assume a 60/40 percent split between Hoki and SBW surimi, respectively
- Use Chilean exports as declared, which are divided by species.
- Use New Zealand exports as declared, divided by species.

Countries importing from Argentina All Surimi

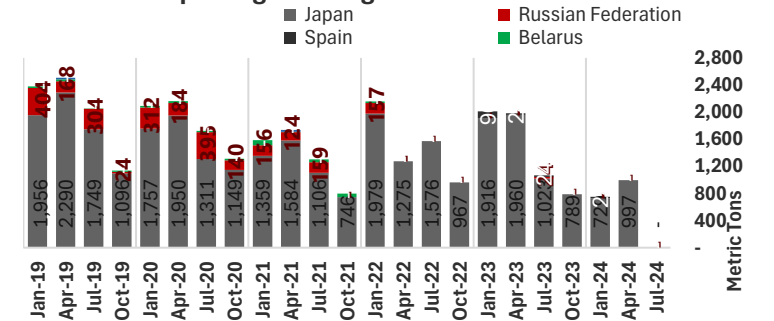


Figure 26. SBW and Hoki Surimi imports from Argentina. \*Q1 2024 data is incomplete.

Countries importing from Chile All Surimi

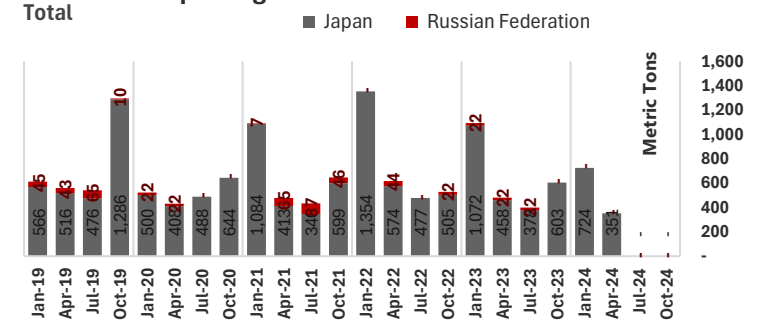


Figure 27. Surimi imports from Chile by country. \*Q2 2024 data is incomplete.

Countries importing from New Zealand All Surimi

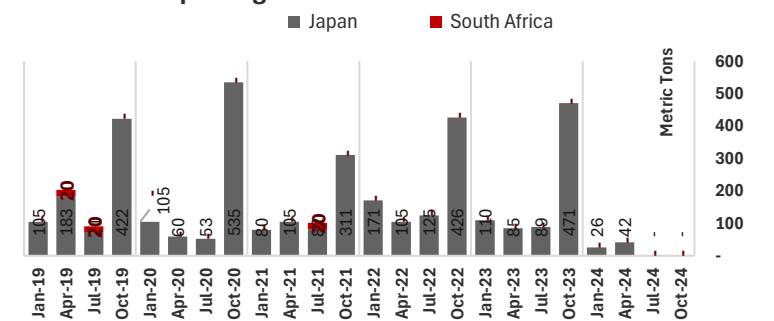


Figure 28. Surimi imports from New Zealand by country. \*Q2 2024 data is incomplete.

# Northern Blue Whiting Surimi Production, France

Northern blue whiting surimi production estimates suggest a decrease from 865 to 737 metric tons in Q1 year over year. These estimates are extrapolated using trade figures.

Countries importing from France from Q1 to Q1		2017	2018	2019	2020	2021	2022	2023	2024
nbw surimi	Japan	143	-	48	-	-	96	-	96
	Belarus	-	-	227	98	59	156	-	-
	China (People's Republic of)	48	23	24	-	-	-	24	-
	Spain	-	-	21	22	-	16	23	5
	Poland	-	-	-	-	-	-	-	-
	Other	-	-	-	2	-	11	10	25
	<b>Total</b>	<b>192</b>	<b>24</b>	<b>320</b>	<b>122</b>	<b>59</b>	<b>278</b>	<b>57</b>	<b>126</b>

Table 21. Imports by declaring countries of northern blue whiting surimi from France.

## France's Northern Blue Whiting Surimi Production

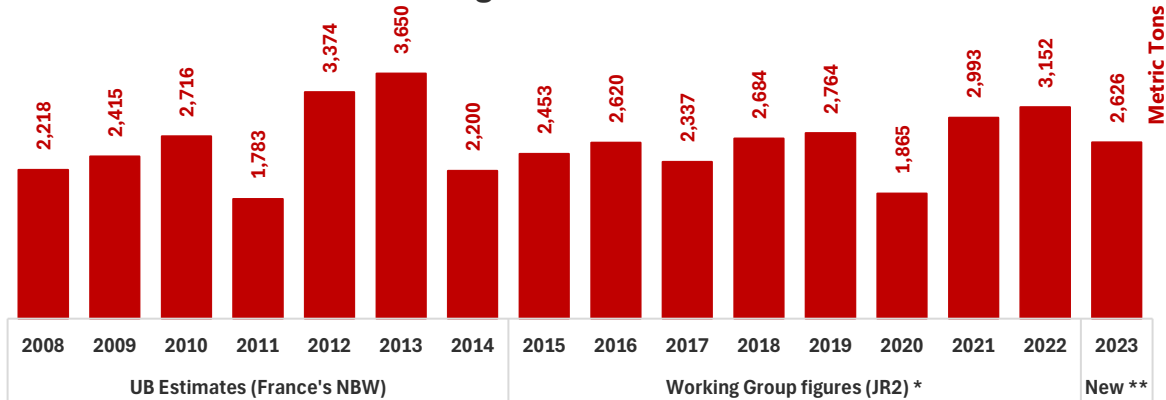


Figure 29. Northern blue whiting surimi production estimates. Source: GAPP, Plutus IQ. \*extrapolated + working group feedback.

## France's Northern Blue Whiting Surimi Production

(Est. by Quarter)

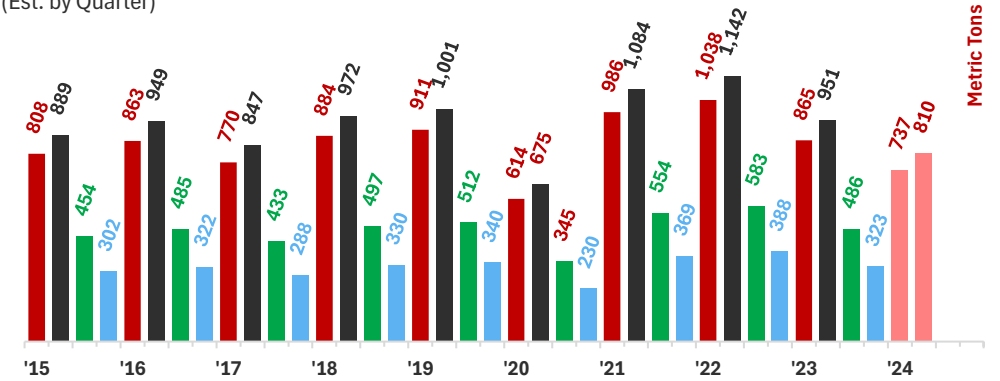


Figure 30. Northern blue whiting surimi production estimates. Source: GAPP, Plutus IQ. \*extrapolated + working group feedback, \*\*extrapolated for 2024.



# Tropical Surimi, Production and Price

When excluding China from the “Tropical” category, estimates of surimi production were down by about 9 percent year-over-year through Q1. The most significant decrease came from Itoyori, which declined nearly 32 percent compared to a year ago. Ribbon fish, a significant component of this category, was down nearly 9 percent year-over-year. Production of Eso (lizard fish) was down by only 3 percent but still below the previous three years.

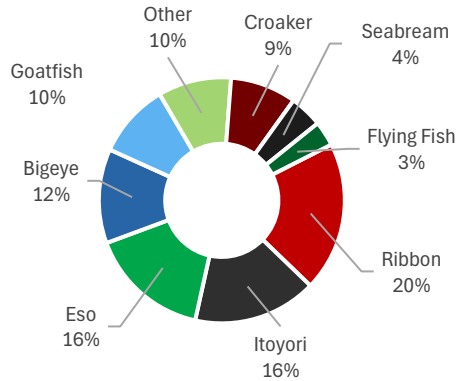


Figure 31. Tropical Surimi estimated breakdown by species. \*Does not include China.

thru Q1	2021	2022	'22 vs '21	2023	'23 vs '22	2024	'24 vs '23
Ribbon	14,694	16,401	11.6%	15,194	-7.4%	13,904	-8.5%
Itoyori	19,899	20,047	0.7%	16,846	-16.0%	11,490	-31.8%
Eso	12,566	13,903	10.6%	11,474	-17.5%	11,203	-2.4%
Bigeye	10,278	11,081	7.8%	8,927	-19.4%	8,759	-1.9%
Goatfish	8,049	8,246	2.4%	6,972	-15.4%	6,913	-0.8%
Other	7,789	7,710	-1.0%	7,012	-9.1%	6,807	-2.9%
Croaker	7,168	7,585	5.8%	5,987	-21.1%	6,142	2.6%
Seabream	3,967	3,529	-11.0%	2,916	-17.4%	3,047	4.5%
Flying Fish	2,867	2,992	4.4%	2,290	-23.5%	2,308	0.8%
<b>Total</b>	<b>87,277</b>	<b>91,494</b>	<b>4.8%</b>	<b>77,618</b>	<b>-15.2%</b>	<b>70,572</b>	<b>-9.1%</b>

Table 22. Tropical surimi production estimates. Year-to-date. Source: GAPP, US Customs, PlutusIQ. \*Does NOT include China.

Regarding price, using Itoyori as a proxy for Alaska Pollock surimi, the downtrend over the last year is clear. When expressed in Japanese Yen, prices are at or around the same level as in 2017. However, in US Dollars, Q1 prices for Alaska Pollock surimi and Itoyori are the lowest in at least nine years.

## Price Comparison

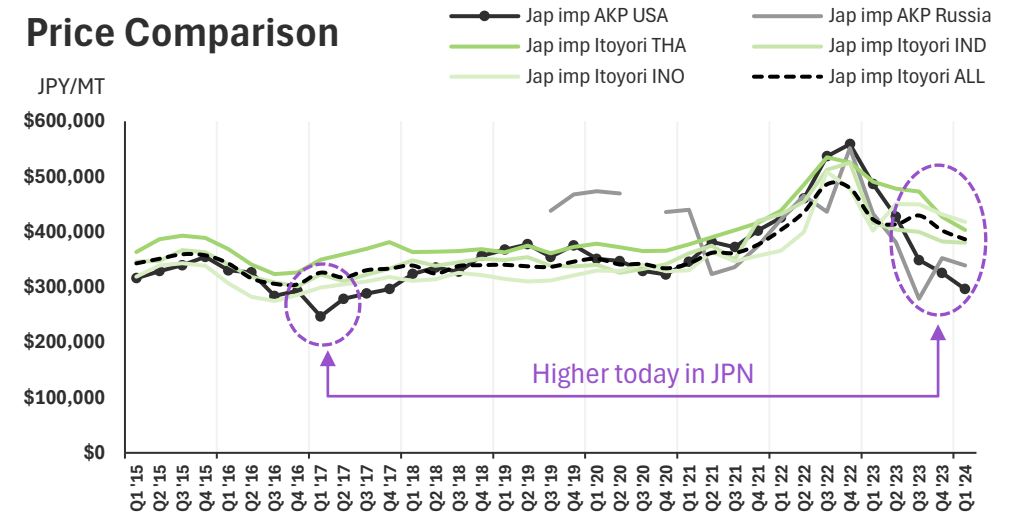


Figure 32. Itoyori vs. AK Pollock of Japan import JPN/mt comparison. Source: PlutusIQ, Q2 '24 data is incomplete.

## Price Comparison

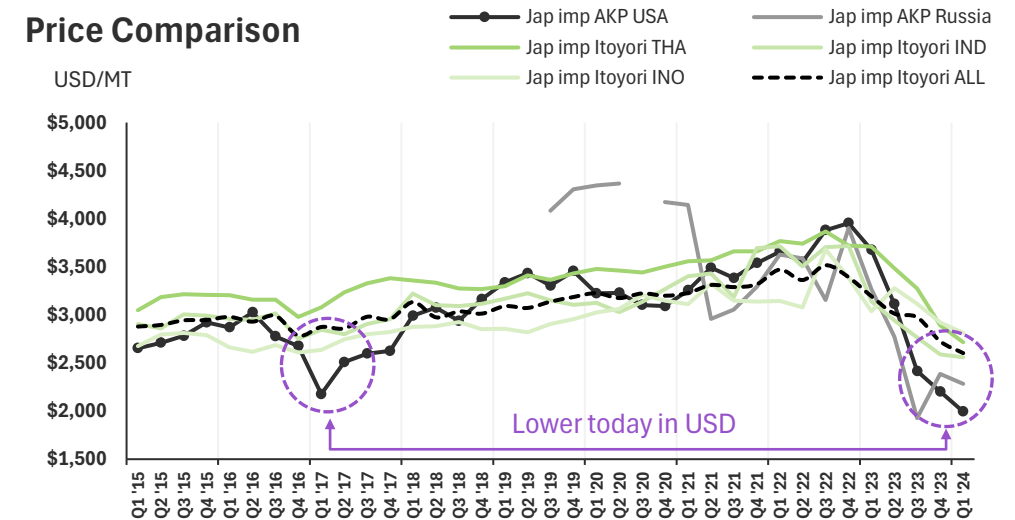


Figure 33. Itoyori vs. AK Pollock of Japan import USD/mt comparison. Source: PlutusIQ, Q2 '24 data is incomplete.

# Tropical Surimi Production, Thailand

Production estimates from Thailand suggest volumes rebounded in 2024 by about ~50 percent year-over-year in Q1. This is significant since Thailand was one of Japan's main suppliers. However, this country lost its main player role due to lower catches over the last two years. This increase brings Thailand back into the picture. Japan increased its imports from Thailand year-over-year but still has to compensate for the volumes lost in 2023.

Our estimates indicate Russia still imported ~500 metric tons of Thai surimi during Q1 2024. Overall, countries declaring imports from Thailand were up by nearly ~17 percent year-over-year in Q1.

Thailand's est. Production by Species thru Q1

Year	Itoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Seabream	Other	Total
2010	9,924	2,430	1,502	1,126	956	819	683	1,229	18,667
2011	7,973	2,456	1,518	1,138	966	828	690	1,242	16,811
2012	6,609	3,586	2,216	1,662	1,410	1,209	1,007	1,813	19,514
2013	4,885	2,191	1,354	1,016	862	739	616	1,108	12,770
2014	4,977	2,140	1,323	992	842	721	601	1,082	12,678
2015	5,351	1,769	1,093	820	696	596	497	894	11,717
2016	3,560	1,774	1,097	822	698	598	498	897	9,945
2017	3,235	1,321	817	612	520	445	371	668	7,990
2018	2,514	1,554	960	720	611	524	436	786	8,105
2019	2,919	1,305	806	605	513	440	366	660	7,613
2020	3,004	1,279	790	593	503	431	359	647	7,606
2021	3,229	1,213	964	482	383	27	663	856	7,818
2022	2,447	1,574	1,057	243	446	22	51	316	6,157
2023	1,674	859	531	398	338	290	241	434	4,765
2024	2,619	1,260	779	584	495	425	354	637	7,153

Table 22. Yearly estimates of Thailand's surimi production by species.

Thailand's est. Production by Species thru Q1

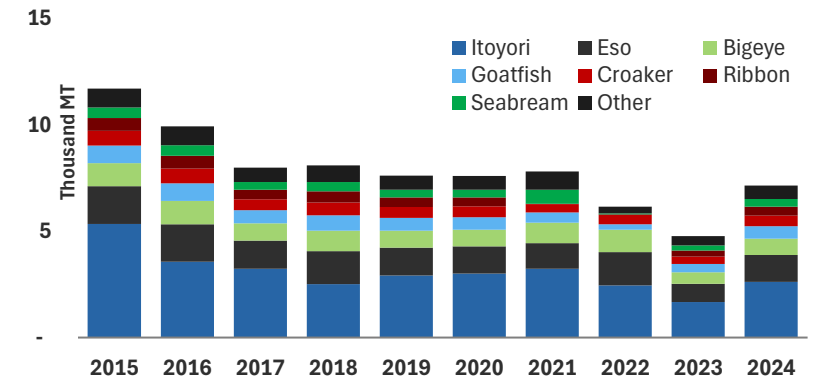


Figure 34. Yearly estimates of Thailand's surimi production by species.

Countries declaring surimi imports from Thailand from Q1 to Q1

Reporter Name	Species	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan	Barrac, Sea Breams, Kingclip	5	▼ 86.5%	4	▼ 20.0%	6	▲ 50.0%	4	▼ 33.3%	17	▲ 325.0%	45	▲ 164.7%	44	▼ 2.2%
	Itoyori	1,573	▼ 80.4%	2,075	▲ 31.9%	2,116	▲ 2.0%	2,200	▲ 4.0%	1,869	▼ 15.0%	825	▼ 55.9%	1,526	▲ 85.0%
	Other	3,288	▼ 77.2%	3,746	▲ 13.9%	3,366	▼ 10.1%	3,004	▼ 10.8%	2,638	▼ 12.2%	1,520	▼ 42.4%	2,390	▲ 57.2%
	Sardine, Other									12				503	▲ 26.5%
Russia	All	740	▼ 47.4%	504	▼ 31.9%	450	▼ 10.7%	372	▼ 17.3%	583	▲ 56.9%	398	▼ 31.8%	503	▲ 26.5%
S. Korea	All	504	▼ 72.4%	576	▲ 14.3%	336	▼ 41.7%	216	▼ 35.7%	600	▲ 177.8%	480	▼ 20.0%	336	▼ 30.0%
Malaysia*	All	51	▼ 90.3%	80	▲ 55.6%	101	▲ 25.8%	96	▼ 4.8%	124	▲ 28.9%	46	▼ 62.6%	68	▲ 47.6%
China	All	48	▼ 79.0%	150	▲ 71.3%	150	▲ 0.0%	257	▲ 71.3%	150	▼ 41.6%	408	▲ 172.0%	98	▼ 76.0%
Taiwan	All	9	▼ 90.6%	36	▲ 300.0%	162	▲ 350.0%	186	▲ 14.8%	144	▼ 22.6%	47	▼ 67.4%	197	▲ 319.1%
Hong Kong	All	36	▼ 75.3%	60	▲ 66.7%	89	▲ 48.3%	162	▲ 82.0%	136	▼ 16.0%	129	▼ 5.1%	94	▼ 27.1%
Canada	All	22		42	▲ 90.9%	80	▲ 90.5%	46	▼ 42.5%	94	▲ 104.3%	96	▲ 2.1%	196	▲ 104.2%
Philippines	All	90		21	▼ 76.7%	70	▲ 233.3%	37	▼ 47.1%	26	▼ 29.7%	64	▲ 146.2%		
New Zealand	All	21	▼ 73.4%	11	▼ 47.6%	28	▲ 154.5%	12	▼ 57.1%	12	▲ 0.0%	10	▼ 16.7%	12	▲ 20.0%
Lithuania	All			302		59	▼ 80.5%	25	▼ 57.6%			5		66	▲ 1220.0%
France	All	90	▼ 82.7%	201	▲ 123.3%									24	
Other												516			
<b>Total</b>		<b>6,449</b>	<b>▼ 76.6%</b>	<b>7,592</b>	<b>▲ 17.7%</b>	<b>6,989</b>	<b>▼ 7.9%</b>	<b>6,524</b>	<b>▼ 6.7%</b>	<b>6,370</b>	<b>▼ 2.4%</b>	<b>4,589</b>	<b>▼ 28.0%</b>	<b>5,344</b>	<b>▲ 16.5%</b>

Table 23. Countries declaring surimi imports from Thailand. Source: each country's customs, authority, PlutusIQ. Russian figures were imputed.

\*Malaysian figures were revised to reflect trade starting in June '22, multiplied by a constant to backfill prior data.

\*\*PlutusIQ reassessed previous estimates and revised historical data. Production estimates by species use an internal working group approximation calculated using a new in-house non-linear model. The estimates provided by the working group were collected in 2020 and updated through 2023.



# Tropical Surimi Production, India

Production estimates out of India suggest a significant decrease year-over-year, but above the average of the last nine years. These estimates decreased from 31 to 26 thousand metric tons year-over-year in Q1, or a ~15.6 percent decline.

Regarding trade, overall volumes from countries declaring imports from India were only ~5 percent lower year-over-year in Q1. However, given the similar levels relative to exports, we did not impute Russian values as we did for other producing countries. As a result, we omitted to calculate these values. Of notice were the declines from Japan, Taiwan, and Thailand and increases from South Korea, China, and Singapore.

\*\*PlutusIQ reassessed previous estimates and revised historical data. Production estimates by species use an internal working group approximation calculated using a new in-house non-linear model. The estimates provided by the working group were collected in 2020 and updated through 2023.

India's est. Production by Species thru Q1

Year	Itoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Other	Total
2015	4,232	2,686	1,781	1,068	-	5,609	1,679	17,055
2016	3,113	2,981	1,976	1,186	-	6,224	1,863	17,343
2017	2,422	4,566	3,027	1,816	-	9,534	2,854	24,219
2018	7,366	4,773	3,164	1,898	-	9,967	2,983	30,152
2019	2,482	4,777	3,167	1,900	-	9,975	2,986	25,287
2020	923	4,759	3,155	1,893	-	9,938	2,975	23,642
2021	3,133	5,386	3,570	2,142	-	11,246	3,366	28,842
2022	5,274	6,164	4,086	2,451	-	12,870	3,852	34,697
2023	3,388	5,880	3,898	2,339	-	12,278	3,675	31,457
2024	1,843	5,179	3,433	2,060	-	10,814	3,237	26,565

Table 24. Yearly estimates of India's surimi production by species.

India's est. Production by Species thru Q1

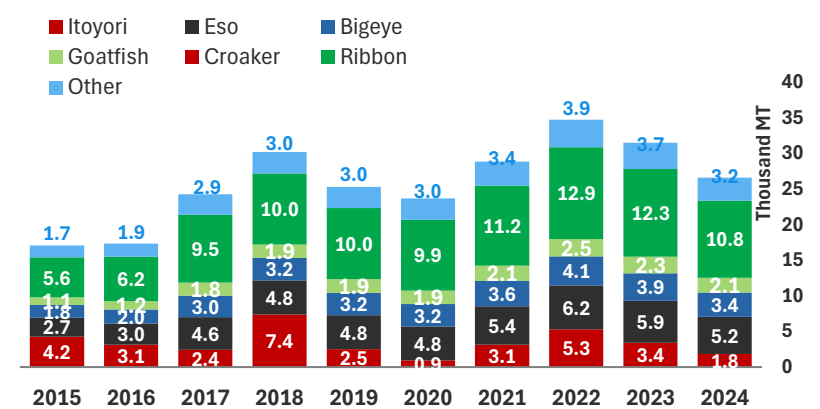


Figure 35. Yearly estimates of India's surimi production by species.

Countries declaring surimi imports from India from Q1 to Q1

Reporter Name	Species	Yearly Data													
		2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan	Itoyori	3,239	▼ 40.1%	1,081	▼ 66.6%	367	▼ 66.0%	1,520	▲ 314.2%	2,240	▲ 47.4%	1,292	▼ 42.3%	696	▼ 46.1%
	Other	10,832	▼ 67.2%	9,672	▼ 10.7%	8,667	▼ 10.4%	14,464	▲ 66.9%	14,564	▲ 0.7%	11,650	▼ 20.0%	10,064	▼ 13.6%
	Sardine, Other			25											
Taiwan	All	3,975	▼ 73.3%	2,785	▼ 29.9%	3,416	▲ 22.7%	4,453	▲ 30.4%	4,115	▼ 7.6%	4,574	▲ 11.2%	4,248	▼ 7.1%
Thailand	All	1,444	▼ 71.7%	1,951	▲ 35.1%	2,397	▲ 22.9%	4,975	▲ 107.6%	6,401	▲ 28.7%	3,721	▼ 41.9%	2,724	▼ 26.8%
	Other	203	▼ 55.4%	53	▼ 73.9%	234	▲ 341.5%	27	▼ 88.5%						
S. Korea	All	1,937	▼ 69.0%	1,659	▼ 14.4%	1,688	▲ 1.7%	1,331	▼ 21.1%	1,677	▲ 26.0%	1,141	▼ 32.0%	2,410	▲ 111.2%
Russia	All	3,446	▼ 58.9%	1,342	▼ 61.1%	656	▼ 51.1%	2,287	▲ 248.6%	761	▼ 66.7%				
Malaysia	All	984	▼ 81.6%	536	▼ 45.5%	1,097	▲ 104.6%	885	▼ 19.4%	863	▼ 2.4%	1,501	▲ 73.9%	979	▼ 34.8%
China	All	626	▼ 86.2%	587	▼ 6.2%	626	▲ 6.6%	627	▲ 0.2%	414	▼ 34.0%	753	▲ 81.9%	1,010	▲ 34.1%
Belarus*	All	885	▼ 79.4%	979	▲ 10.6%	1,695	▲ 73.1%	1,745	▲ 2.9%	2,475	▲ 41.8%				
Lithuania	All	280	▼ 84.2%	122	▼ 56.4%	332	▲ 172.1%			336		655	▲ 94.9%	645	▼ 1.5%
Singapore	All	367	▼ 71.8%	662	▲ 80.4%	906	▲ 36.9%	895	▼ 1.2%			83		810	▲ 875.9%
Spain	All	222	▼ 79.8%	220	▼ 0.9%	170	▼ 22.7%	25	▼ 85.3%	50	▲ 100.0%	48	▼ 4.0%	73	▲ 52.1%
Poland	All					144		288	▲ 100.0%	276	▼ 4.2%	420	▲ 52.2%	144	▼ 65.7%
Other		453	▼ 73.6%	308	▼ 32.1%	566	▲ 83.9%	588	▲ 4.0%	643	▲ 9.2%	923	▲ 43.6%	1,676	▲ 81.7%
<b>Total</b>		<b>28,893</b>	<b>▼ 69.1%</b>	<b>21,982</b>	<b>▼ 23.9%</b>	<b>22,961</b>	<b>▲ 4.5%</b>	<b>34,110</b>	<b>▲ 48.6%</b>	<b>34,815</b>	<b>▲ 2.1%</b>	<b>26,761</b>	<b>▼ 23.1%</b>	<b>25,479</b>	<b>▼ 4.8%</b>

Table 25. Countries declaring surimi imports from India. Source: each country's customs, authority, PlutusIQ.

\*Malaysian figures were revised to reflect trade starting in June '22, multiplied by a constant to backfill prior data.

# Tropical Surimi Production, Vietnam

Production estimates from Vietnam point to a significant decrease of ~23 percent year-over-year, from 34.1 to 29.6 thousand metric tons in Q1. This is significant since this places production estimates at the lowest level since at least 2015 for Q1.

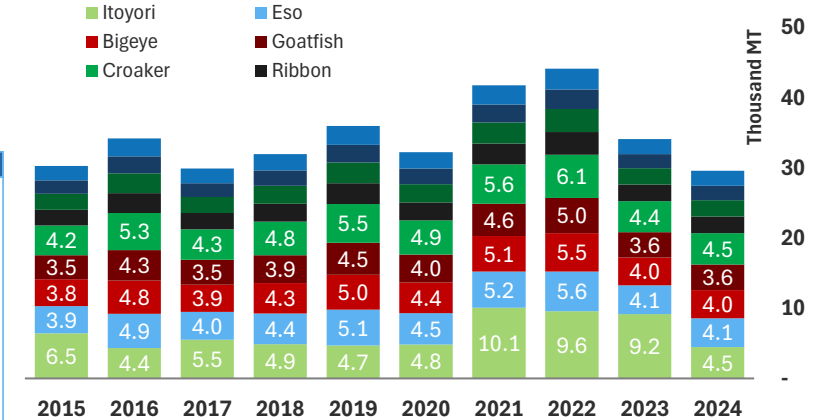
Regarding trade, countries declaring surimi imports from Vietnam fell by ~11 percent year over year. Imports by South Korea declined 7 percent year over year, while those by China increased by about ~12 percent year over year in Q1. Of note were imports by Indonesia, which increased by 30 percent, surpassing the 2,000 metric ton mark.

**Viet-Nam's est. Production by Species thru Q1**

	Itoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Seabream	Flying Fish	Other	Total
2015	6,462	3,887	3,801	3,461	4,228	2,250	2,250	1,918	2,046	30,302
2016	4,361	4,871	4,764	4,337	5,299	2,820	2,820	2,404	2,564	34,240
2017	5,527	3,985	3,898	3,548	4,335	2,307	2,307	1,966	2,097	29,971
2018	4,884	4,422	4,325	3,937	4,810	2,560	2,560	2,182	2,327	32,009
2019	4,718	5,102	4,990	4,543	5,550	2,954	2,954	2,518	2,685	36,013
2020	4,845	4,474	4,376	3,984	4,867	2,590	2,590	2,208	2,355	32,290
2021	10,087	5,170	5,057	4,603	5,624	2,993	2,993	2,551	2,721	41,801
2022	9,614	5,634	5,510	5,016	6,128	3,262	3,262	2,780	2,965	44,170
2023	9,210	4,067	3,978	3,621	4,424	2,355	2,355	2,007	2,141	34,157
2024	4,511	4,096	4,006	3,647	4,455	2,371	2,371	2,021	2,156	29,636

**Table 26. Yearly estimates of Vietnam's surimi production by species.**

**Viet-Nam's est. Production by Species thru Q1**



**Figure 36. Yearly estimates of Vietnam's surimi production by species.**

**Countries declaring surimi imports from Viet-Nam from Q1 to Q1**

Reporter Name	Species	Yearly Data													
		2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
S. Korea	All	12,133	▼ 76.8%	11,204	▼ 7.7%	12,155	▲ 8.5%	13,378	▲ 10.1%	11,391	▼ 14.9%	11,121	▼ 2.4%	10,317	▼ 7.2%
	Other	598	▼ 79.2%	219	▼ 63.4%	106	▼ 51.6%							3	
Thailand	All	6,695	▼ 76.3%	7,174	▲ 7.2%	7,025	▼ 2.1%	8,220	▲ 17.0%	10,298	▲ 25.3%	7,684	▼ 25.4%	7,402	▼ 3.7%
	Other	598	▼ 79.2%	219	▼ 63.4%	106	▼ 51.6%							3	
China	All	3,046	▼ 79.2%	4,241	▲ 39.2%	4,101	▼ 3.3%	5,702	▲ 39.0%	5,904	▲ 3.5%	3,621	▼ 38.7%	4,073	▲ 12.5%
	Barrac, Sea Breams, Kingclip	98	▼ 77.4%	57	▼ 41.8%	29	▼ 49.1%	96	▲ 231.0%	172	▲ 79.2%	61	▼ 64.5%	56	▼ 8.2%
Japan	Itoyori	562	▼ 78.7%	576	▲ 2.5%	403	▼ 30.0%	1,000	▲ 148.1%	971	▼ 2.9%	869	▼ 10.5%	362	▼ 58.3%
	Other	3,121	▼ 75.5%	3,821	▲ 22.4%	2,283	▼ 40.3%	3,144	▲ 37.7%	3,490	▲ 11.0%	2,354	▼ 32.6%	2,016	▼ 14.4%
Russia	All	1,244	▼ 81.5%	1,606	▲ 29.1%	1,037	▼ 35.4%	2,392	▲ 130.7%	2,665	▲ 11.4%	2,665	▲ 0.0%	1,578	▼ 40.8%
	Sardine, Other					10									
Malaysia*	All	1,452	▼ 74.0%	3,100	▲ 113.6%	1,110	▼ 64.2%	2,690	▲ 142.5%	2,821	▲ 4.9%	1,512	▼ 46.4%	934	▼ 38.3%
	Other	835	▼ 77.4%	1,236	▲ 48.0%	1,085	▼ 12.2%	1,423	▲ 31.2%	2,510	▲ 76.4%	843	▼ 66.4%	1,033	▲ 22.5%
Belarus	All	98	▼ 90.4%	665	▲ 578.6%	317	▼ 52.3%	456	▲ 43.8%	891	▲ 95.4%				
Lithuania	All	209	▼ 89.9%	209	▲ 0.0%	388	▲ 85.6%	404	▲ 4.1%	956	▲ 136.6%	518	▼ 45.8%	82	▼ 84.2%
Indonesia	All					100		494	▲ 394.0%	527	▲ 6.7%	1,806	▲ 242.7%	2,350	▲ 30.1%
	Other											175		100	▼ 42.9%
Other	All	1,918	▼ 70.9%	1,905	▼ 0.7%	2,141	▲ 12.4%	2,402	▲ 12.2%	-4	▼ 100.2%	1,984	▼ 47333.5%	908	▼ 54.2%
<b>Total</b>		<b>32,009</b>	<b>▼ 77.4%</b>	<b>36,013</b>	<b>▲ 12.5%</b>	<b>32,290</b>	<b>▼ 10.3%</b>	<b>41,801</b>	<b>▲ 29.5%</b>	<b>42,592</b>	<b>▲ 1.9%</b>	<b>35,213</b>	<b>▼ 17.3%</b>	<b>31,214</b>	<b>▼ 11.4%</b>

**Table 27. Countries declaring surimi imports from Vietnam. Source: each country's customs, authority, PlutusIQ.**

Russian figures were imputed.

\*Malaysian figures were revised to reflect trade starting in June '22, multiplied by a constant to backfill prior data.

\*\*PlutusIQ reassessed previous estimates and revised historical data. Production estimates by species use an internal working group approximation calculated using a new in-house non-linear model. The estimates provided by the working group were collected in 2020 and updated through 2023.

# Tropical Surimi Production, Indonesia

Production estimates from Indonesia increased by about ~6 percent year-over-year in Q1. However, despite this mild increase, volumes remain low compared to historical levels, pointing to a downward trend over the last nine years.

Regarding trade, countries declaring imports decreased about 12 percent year-over-year in Q1, with the most significant decrease coming from South Korea by about 25 percent.

Indonesia's est. Production by Species thru Q1

	Itoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Seabream	Flying Fish	Other	Total
2015	2,426	566	644	675	649	477	212	238	695	6,582
2016	2,794	683	776	815	783	575	256	288	839	7,808
2017	1,328	352	401	420	404	297	132	148	433	3,916
2018	1,259	328	373	392	377	277	123	138	403	3,671
2019	2,397	595	676	709	681	501	223	250	730	6,762
2020	2,065	651	740	777	746	548	244	274	800	6,845
2021	1,702	435	494	519	498	366	163	183	534	4,894
2022	812	231	263	276	265	195	87	97	284	2,511
2023	1,172	271	308	323	310	228	101	114	333	3,160
2024	1,086	307	349	366	352	258	115	129	377	3,339

Table 28. Yearly estimates of Indonesia's surimi production by species.

Indonesia's est. Production by Species thru Q1

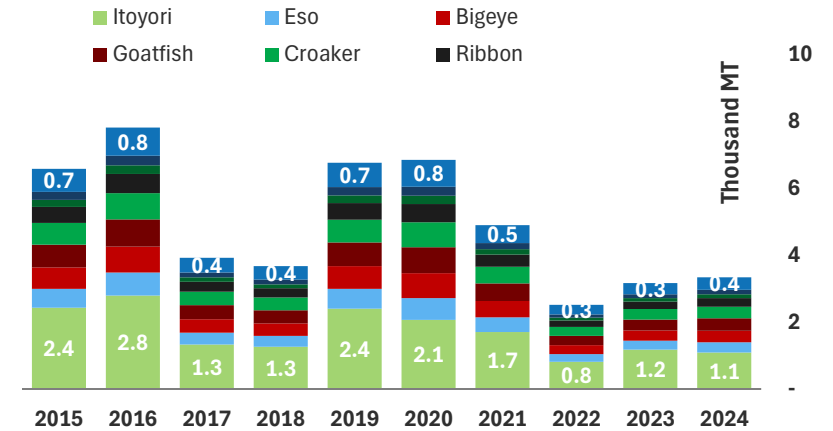


Figure 37. Yearly estimates of Indonesia's surimi production by species.

Countries declaring surimi imports from Indonesia from Q1 to Q1

Reporter Name	Species	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Malaysia	All	784	▼ 77.2%	1,122	▲ 43.2%	1,328	▲ 18.3%	1,857	▲ 39.8%	1,537	▼ 17.2%	988	▼ 35.7%	1,347	▲ 36.4%
S. Korea	All	672	▼ 84.9%	1,580	▲ 135.1%	1,680	▲ 6.3%	980	▼ 41.7%	986	▲ 0.6%	864	▼ 12.4%	648	▼ 25.0%
Japan	Itoyori	344	▼ 87.5%	442	▲ 28.5%	267	▼ 39.6%	493	▲ 84.6%	532	▲ 7.9%	132	▼ 75.2%	136	▲ 3.0%
	Other	827	▼ 75.5%	1,066	▲ 28.9%	491	▼ 53.9%	356	▼ 27.5%	498	▲ 39.9%	203	▼ 59.2%	222	▲ 9.4%
Taiwan	Sardine, Other	18	▼ 60.0%												
	All	481	▼ 75.8%	545	▲ 13.3%	598	▲ 9.7%	414	▼ 30.8%	216	▼ 47.8%	144	▼ 33.3%	316	▲ 119.4%
China	All	418	▼ 80.8%	1,624	▲ 288.5%	1,513	▼ 6.8%	1,305	▼ 13.7%	654	▼ 49.9%	529	▼ 19.1%	216	▼ 59.2%
Thailand	All	261	▼ 59.5%	1,045	▲ 300.4%	1,038	▼ 0.7%	969	▼ 6.6%	225	▼ 76.8%	50	▼ 77.8%	100	▲ 100.0%
	Other	6	▼ 90.2%	6	▲ 0.0%	1	▼ 83.3%			4		10	▲ 150.0%		
Hong Kong	All	54	▼ 59.1%	70	▲ 29.6%	54	▼ 22.9%	96	▲ 77.8%	72	▼ 25.0%	51	▼ 29.2%	113	▲ 121.6%
Australia	All	26	▼ 70.1%	47	▲ 80.8%	24	▼ 48.9%	29	▲ 20.8%	22	▼ 24.1%	27	▲ 22.7%	40	▲ 48.1%
Philippines	All	44		43	▼ 2.3%	54	▲ 25.6%	70	▲ 29.6%	36	▼ 48.6%	21	▼ 41.7%		
USA	All											285		166	▼ 41.8%
Singapore	All					3						18		68	▲ 277.8%
Other															
<b>Total</b>		<b>3,164</b>	<b>▼ 83.8%</b>	<b>6,498</b>	<b>▲ 105.4%</b>	<b>5,723</b>	<b>▼ 11.9%</b>	<b>4,737</b>	<b>▼ 17.2%</b>	<b>3,272</b>	<b>▼ 30.9%</b>	<b>2,334</b>	<b>▼ 28.7%</b>	<b>2,050</b>	<b>▼ 12.2%</b>

Table 29. Countries declaring surimi imports from Indonesia. Source: each country's customs, authority, PlutusIQ.

\*Malaysian figures were revised to reflect trade starting in June '22, multiplied by a constant to backfill prior data.

\*\*PlutusIQ reassessed previous estimates and revised historical data. Production estimates by species use an internal working group approximation calculated using a new in-house non-linear model. The estimates provided by the working group were collected in 2020 and updated through 2023.

# Tropical Surimi Production, Malaysia

Production estimates from Malaysia suggest a decrease of nearly ~20 percent year-over-year in Q1. This marks the lowest Q1 level since we started tracking production estimates, which are ultimately a function of trade.

Regarding trade, countries declaring imports from this country showed a decrease of ~28 percent, with the most significant decrease in volume coming out of Japan, which decreased by about ~14 percent.

Malaysia's est. Production by Species thru Q1

	Itoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Seabream	Flying Fish	Other	Total
2015	359	299	155	307	167	84	36	72	110	1,588
2016	348	290	151	297	162	81	35	70	107	1,541
2017	371	309	161	317	173	86	37	74	114	1,643
2018	243	202	105	208	113	57	24	49	75	1,075
2019	540	450	234	462	252	126	54	108	166	2,391
2020	223	186	97	191	104	52	22	45	69	988
2021	233	194	101	199	108	54	23	46	72	1,029
2022	291	147	76	151	82	41	18	35	54	895
2023	147	122	63	125	68	34	15	29	45	648
2024	118	98	51	101	55	27	12	24	36	521

Table 30. Yearly estimates of Malaysia's surimi production by species.

Malaysia's est. Production by Species thru Q1

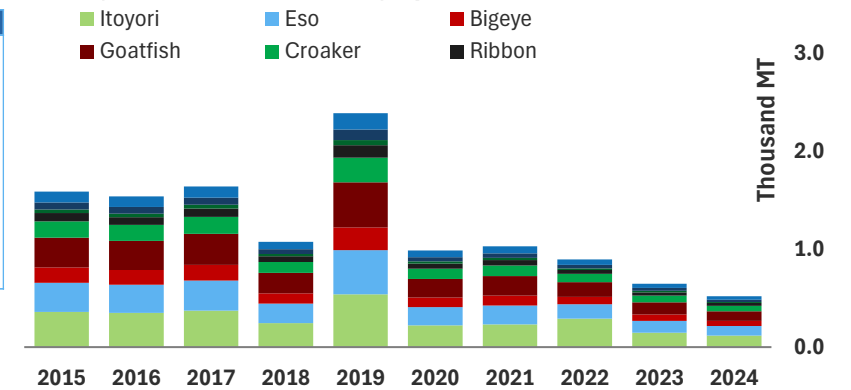


Figure 38. Yearly estimates of Malaysia's surimi production by species.

Countries declaring surimi imports from Malaysia from Q1 to Q1															
Reporter Name	Species	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan	Itoyori									70					
	Other	992	▼ 81.9%	1,022	▲ 3.0%	855	▼ 16.3%	762	▼ 10.9%	806	▲ 5.8%	507	▼ 37.1%	435	▼ 14.2%
	Sardine, Other							20		35	▲ 75.0%				
Indonesia	All							25		75	▲ 200.0%	100	▲ 33.3%		
Hong Kong	All	10				74		159	▲ 114.9%	43	▼ 73.0%	79	▲ 83.7%	26	▼ 67.1%
China	All	182	▼ 79.7%	142	▼ 22.0%	102	▼ 28.2%	305	▲ 199.0%	100	▼ 67.2%	227	▲ 127.0%	127	▼ 44.1%
Canada	All							34				70			
Australia	All									4		35	▲ 775.0%	37	▲ 5.7%
Taiwan	All			25		42	▲ 68.0%	42	▲ 0.0%						
S. Korea	All	24	▼ 91.0%	20	▼ 16.7%	65	▲ 225.0%	60	▼ 7.7%			48		96	▲ 100.0%
Thailand	All			74		25	▼ 66.2%								
	Other														
Philippines	All									23					
Singapore	All	41	▼ 37.9%			13		1	▼ 92.3%			24		68	▲ 183.3%
Other															
<b>Total</b>		<b>1,249</b>	<b>▼ 82.1%</b>	<b>1,283</b>	<b>▲ 2.7%</b>	<b>1,176</b>	<b>▼ 8.3%</b>	<b>1,408</b>	<b>▲ 19.7%</b>	<b>1,156</b>	<b>▼ 17.9%</b>	<b>1,090</b>	<b>▼ 5.7%</b>	<b>789</b>	<b>▼ 27.6%</b>

Table 31. Countries declaring surimi imports from Malaysia. Source: each country's customs, authority, PlutusIQ. \*Malaysian figures were revised to reflect trade starting in June '22, multiplied by a constant to backfill prior data.

Disclaimer: Trade data for Malaysia sometimes matches between countries declaring imports and official domestic data exports. We used total export figures as a function for \*\*production and used countries declaring imports mainly for trade—although both data sets are included for all analyzed countries.

\*\*PlutusIQ reassessed previous estimates and revised historical data. Production estimates by species use an internal working group approximation calculated using a new in-house non-linear model. The estimates provided by the working group were collected in 2020 and updated through 2023.

# Tropical Surimi Production, Pakistan

Production estimates from Pakistan indicate a decrease of about ~5 percent year-over-year in Q1. This level is close to the second-largest volume estimate, and while the overall trend over the last nine years is upward, volumes have plateaued since 2020.

Regarding trade, countries declaring imports point to a ~3 percent decrease year-over-year in Q1. The two largest markets, Thailand and South Korea registered year-over-year decreases of ~2 and ~42 percent, respectively. Of note, imports by China grew significantly from ~452 to ~837 metric tons year-over-year in Q1.

Pakistan's est. Production by Species thru Q1

	Itoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Seabream	Flying Fish	Other	Total
2015	470	211	106	106	396	-	159	106	264	1,818
2016	304	48	24	24	91	-	36	24	61	613
2017	814	33	16	16	61	-	24	16	41	1,022
2018	1,248	84	42	42	158	-	63	42	105	1,784
2019	892	120	60	60	225	-	90	60	150	1,657
2020	641	315	158	158	591	-	236	158	394	2,649
2021	1,326	153	77	77	287	-	115	77	191	2,301
2022	1,503	129	64	64	242	-	97	64	161	2,324
2023	1,171	253	127	127	475	-	190	127	317	2,786
2024	1,088	244	122	122	457	-	183	122	305	2,641

Table 32. Yearly estimates of Pakistan's surimi production by species.

Pakistan's est. Production by Species thru Q1

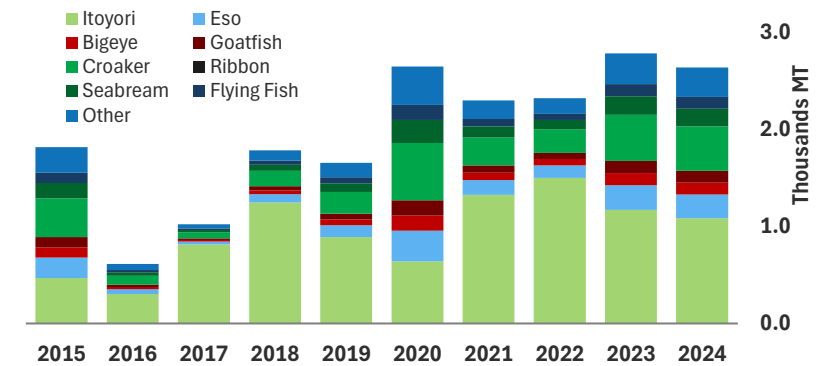


Figure 39. Yearly estimates of Pakistan's surimi production by species.

Countries declaring surimi imports from Pakistan from Q1 to Q1

Reporter Name	Species	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Thailand	All	576	▼ 51.0%	770	▲ 33.7%	1,239	▲ 60.9%	1,107	▼ 10.7%	1,159	▲ 4.7%	1,056	▼ 8.9%	1,032	▼ 2.3%
	Other							122							
S. Korea	All	1,045	▼ 74.1%	714	▼ 31.7%	528	▼ 26.1%	675	▲ 27.8%	800	▲ 18.5%	1,032	▲ 29.0%	601	▼ 41.8%
Japan	Itoyori	242	▼ 82.0%	160	▼ 33.9%	227	▲ 41.9%	384	▲ 69.2%	559	▲ 45.6%	72	▼ 87.1%	168	▲ 133.3%
	Other			128		147	▲ 14.8%	72	▼ 51.0%	97	▲ 34.7%	108	▲ 11.3%	60	▼ 44.4%
China	All	90	▼ 90.8%	101	▲ 12.2%	810	▲ 702.0%	343	▼ 57.7%	272	▼ 20.7%	452	▲ 66.2%	837	▲ 85.2%
Malaysia	All	73	▼ 71.9%	72	▼ 1.4%	49	▼ 31.9%	128	▲ 161.2%	72	▼ 43.8%	172	▲ 138.9%	72	▼ 58.1%
Hong Kong	All					23		48	▲ 108.7%	21	▼ 56.3%	24	▲ 14.3%		
Indonesia	All														
Taiwan	All														
Philippines	All														
Other												50		99	▲ 98.0%
<b>Total</b>		<b>2,026</b>	<b>▼ 74.3%</b>	<b>1,945</b>	<b>▼ 4.0%</b>	<b>3,023</b>	<b>▲ 55.4%</b>	<b>2,879</b>	<b>▼ 4.8%</b>	<b>2,980</b>	<b>▲ 3.5%</b>	<b>2,966</b>	<b>▼ 0.5%</b>	<b>2,869</b>	<b>▼ 3.3%</b>

Table 33. Countries declaring surimi imports from Pakistan. Source: each country's customs, authority, PlutusIQ. \*Malaysian figures were revised to reflect trade starting in June '22, multiplied by a constant to backfill prior data.

Disclaimer: For Pakistan, we included the table that includes Pakistan exports by destination and the production table. Again, exports are a function of production. Still, since we are assuming that nearly 100 percent of production is exported out of this country, we could not cross-examine countries reporting imports and this country's exports before 2020. Still, they are a decent indicator to see, but we only included exports in this report.

\*\*PlutusIQ reassessed previous estimates and revised historical data. Production estimates by species use an internal working group approximation calculated using a new in-house non-linear model. The estimates provided by the working group were collected in 2020 and updated through 2023.



# Tropical Surimi Production, Myanmar

Production estimates from Myanmar show an ~11 percent increase year-over-year in Q1. This level marks the third highest level since we started tracking these estimates and also points to a plateau in 2022. Since production is a direct proxy of trade, countries declaring imports are essentially the same; these decreased by ~11 percent year-over-year in Q1.

Myanmar's est. Production by Species thru Q1

	Itoyori	Eso	Bigeeye	Goatfish	Croaker	Ribbon	Seabream	Flying Fish	Other	Total
2015	93	10	10	17	165	5	6	6	30	342
2016	148	12	12	21	204	6	7	7	37	455
2017	96	10	10	18	171	5	6	6	31	354
2018	82	17	17	30	285	8	10	10	52	511
2019	207	21	21	36	347	9	13	13	63	730
2020	99	16	16	28	269	7	10	10	49	503
2021	190	16	16	28	267	7	10	10	49	592
2022	105	25	25	44	421	11	15	15	77	739
2023	86	22	22	39	371	10	14	14	68	645
2024	225	19	19	34	327	9	12	12	59	717

Table 34. Yearly estimates of Myanmar's surimi production by species.

Myanmar's est. Production by Species thru Q1

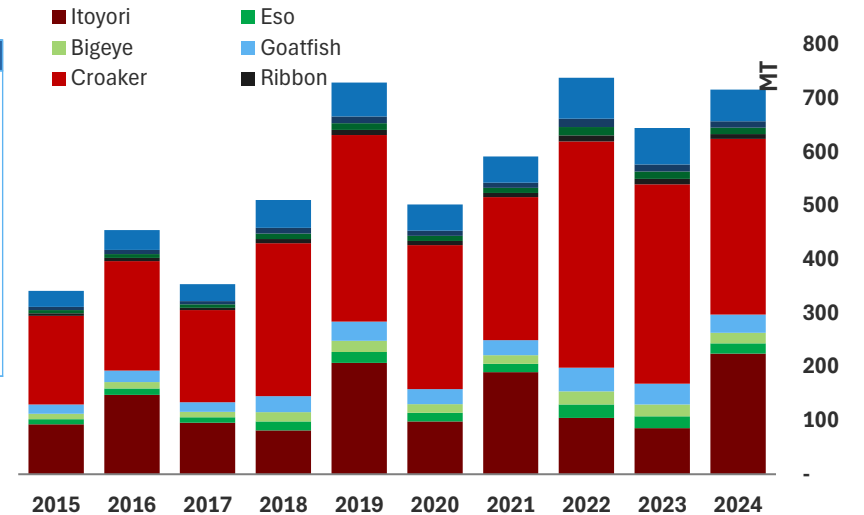


Figure 40. Yearly estimates of Myanmar's surimi production by species.

Disclaimer: Myanmar's production is calculated using import data from declaring countries as Myanmar does not publish trade data

\*\*PlutusIQ reassessed previous estimates and revised historical data. Production estimates by species use an internal working group approximation calculated using a new in-house non-linear model. The estimates provided by the working group were collected in 2020 and updated through 2023.

Countries declaring surimi imports from Myanmar from Q1 to Q1

Reporter Name	Species	Yearly Production (MT)													
		2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20	2022	'22 vs. '21	2023	'23 vs. '22	2024	'24 vs. '23
Japan	Barrac, Sea Breams, Kingclip	25	▼ 21.9%	23	▼ 8.0%	13	▼ 43.5%			10		19	▲ 90.0%	8	▼ 57.9%
	Itoyori	43	▼ 92.9%	180	▲ 318.6%	95	▼ 47.2%	222	▲ 133.7%	93	▼ 58.1%	76	▼ 18.3%	187	▲ 146.1%
	Other	239	▼ 51.1%	188	▼ 21.3%	67	▼ 64.4%	121	▲ 80.6%	185	▲ 52.9%	96	▼ 48.1%	116	▲ 20.8%
Taiwan	All	1		24	▲ 2300.0%	76	▲ 216.7%	95	▲ 25.0%	228	▲ 140.0%	76	▼ 66.7%	61	▼ 19.7%
Thailand	All	53	▼ 52.3%	157	▲ 196.2%	19	▼ 87.9%	19	▲ 0.0%	148	▲ 678.9%	118	▼ 20.3%		
	Other							43				24		84	▲ 250.0%
S. Korea	All	150	▼ 77.8%	132	▼ 12.0%	209	▲ 58.3%	77	▼ 63.2%	39	▼ 49.4%	95	▲ 143.6%	58	▼ 38.9%
Singapore	All											58		95	▲ 63.8%
China	All			25						25		25	▲ 0.0%	70	▲ 180.0%
Other				1		24	▲ 2300.0%	15	▼ 37.5%	11	▼ 26.7%	58	▲ 427.3%	38	▼ 34.5%
<b>Total</b>		<b>511</b>	<b>▼ 75.8%</b>	<b>730</b>	<b>▲ 42.9%</b>	<b>503</b>	<b>▼ 31.1%</b>	<b>592</b>	<b>▲ 17.7%</b>	<b>739</b>	<b>▲ 24.8%</b>	<b>645</b>	<b>▼ 12.7%</b>	<b>717</b>	<b>▲ 11.2%</b>

Table 35. Countries declaring surimi imports from Myanmar. Source: each country's customs, authority, PlutusIQ.

# Sardine Surimi Production and Trade

## Peru to Japan

Since it is assumed that all Peruvian exports of Peruvian sardine surimi are a production function, we will refer to them interchangeably.

Japanese imports of Peruvian sardine surimi decreased ~67 percent in Q1 compared to the same quarter last year. When bundling “other” surimi and “sardine” surimi, overall Japanese imports of Peruvian surimi were down by ~32 percent year-over-year in Q1.

## Sardine surimi, to Japan, Q1

- Japan importing Sardine, Other surimi from Peru
- Japan importing, total surimi from Peru
- Japan importing Other surimi from Peru
- Japan importing Sardine, Other surimi from all countries
- Peru exporting All surimi to Japan

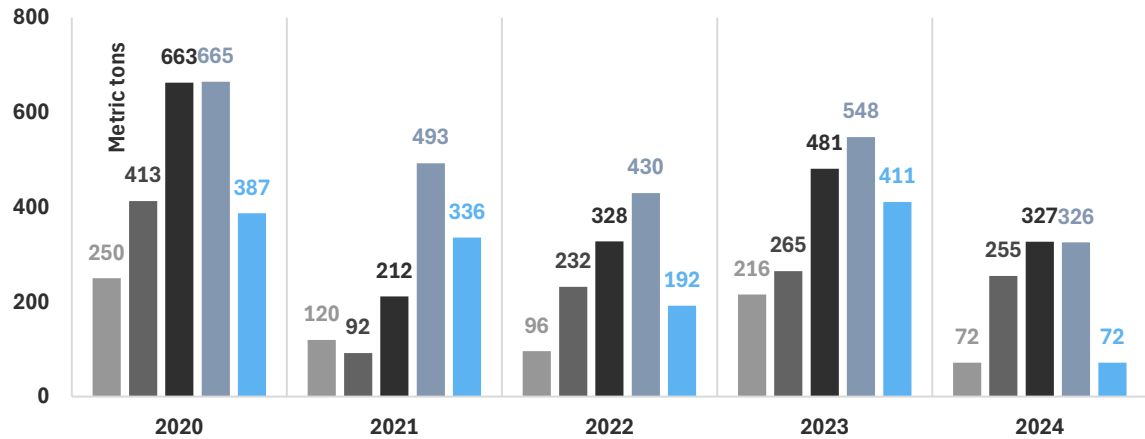


Figure 41. Peruvian sardine surimi trade, specifically to Japan and other markets. Source: each country's customs, PlutusIQ.



# China, Surimi Production Estimates and Trade

Although we were able to calculate estimates for China's production, we could not break them down by species for tropical surimi. For carp, we made some assumptions based on price.

These estimates suggest that surimi production from China decreased slightly by about ~4 percent compared to 2023 in Q1. Tropical surimi production estimates suggest a decrease of roughly ~21 year-over-year in Q1, while carp estimates show an increase of nearly 24 percent during the same period.

Japanese imports of Chinese surimi show a contraction of about 18 percent in Q1 2024 compared to 2023.

## Surimi Production Estimates, China Q1

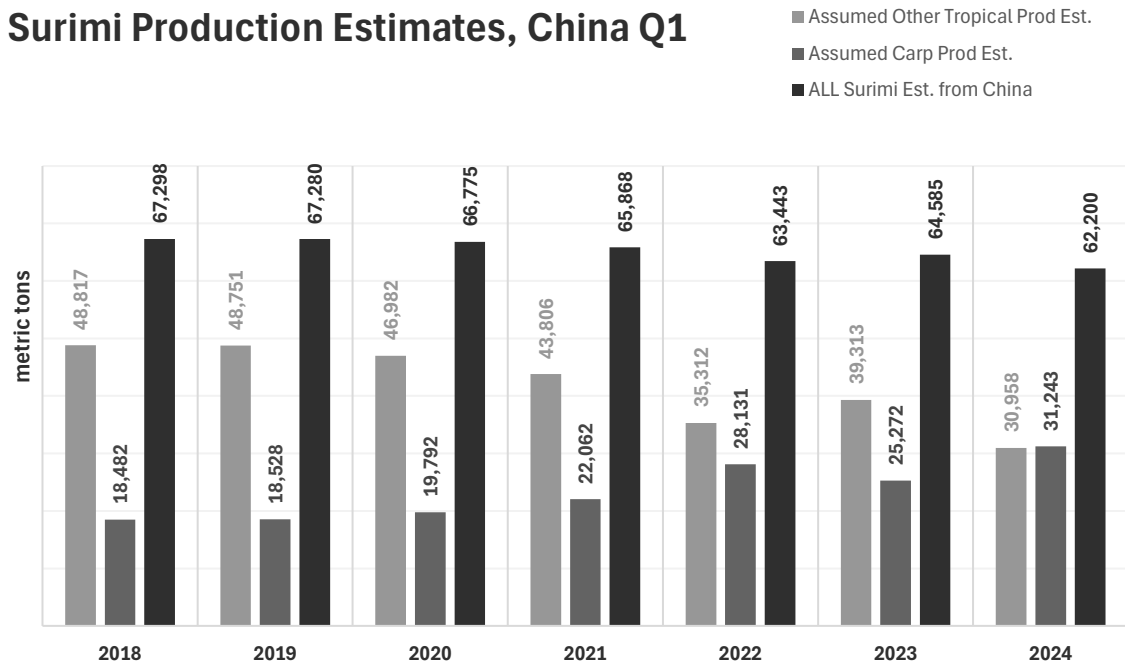


Figure 42. Production estimates of Chinese surimi. Source: Customs, PlutusIQ.

## Surimi Imports from China Q1

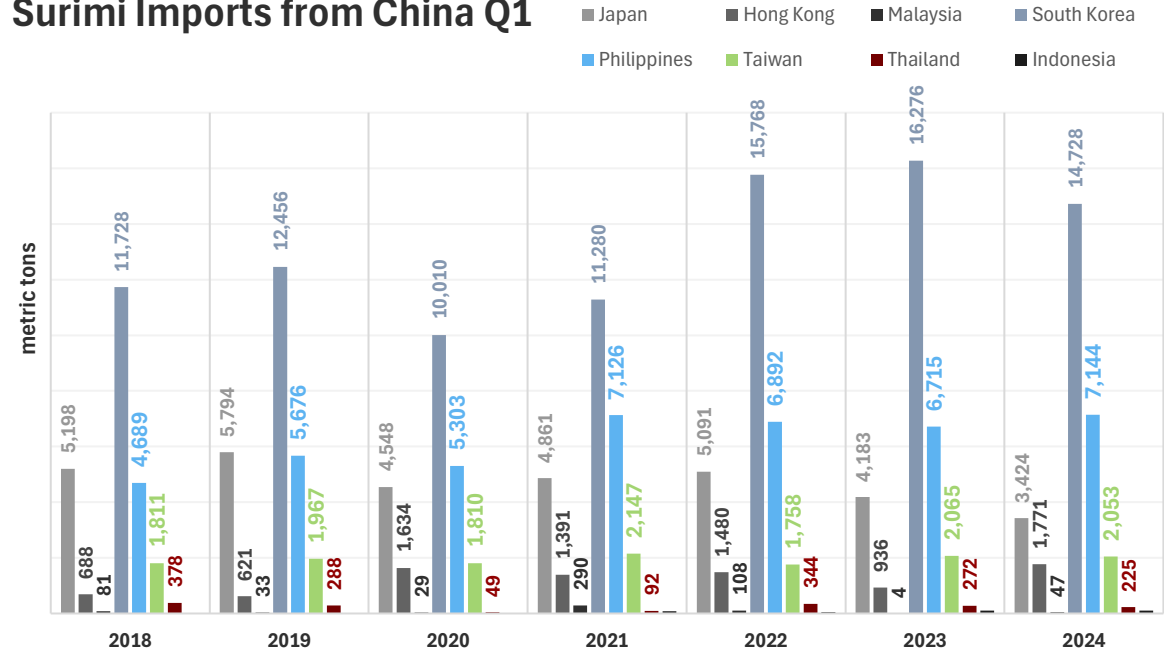


Figure 43. Countries declaring imports of Chinese surimi. Source: Customs, PlutusIQ.

# Russian Surimi, Japanese and other imports

In this new iteration of the report, we recalculated these trade figures to represent the growth in production from “official” sources that point to higher levels compared to international trade. These figures show that Russian production in Q1 '24 reached ~16 thousand metric tons, or roughly 50 percent above the levels estimated a year ago. Please read below for context relative to the estimates shown and described above.

## Russian Production of Alaska Pollock Surimi (Est.)

Source: GAPP Surimi Tracker, Importing countries' customs authority

Thousand MT

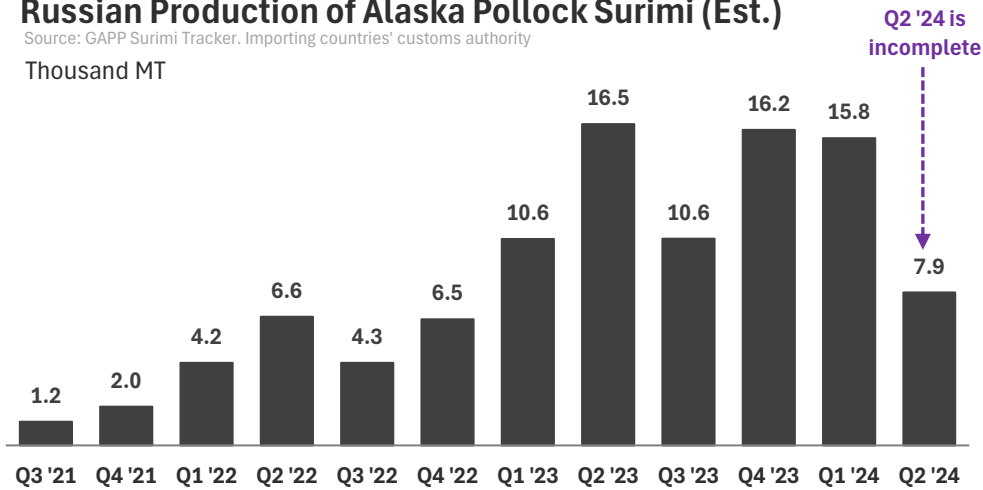


Figure 44. Production estimates of Russian pollock surimi. Source: Customs, PlutusIQ. \*Q2 '24 is incomplete

According to a presentation given late last year by the Deputy CEO of Russian Fish Company, Russian surimi paste production in 2023 was 54,000 mt and forecasted to grow to 70,000 mt in 2024. From late 2021 through December 2022, total trade data accounted for about 22 thousand metric tons of Russian Pollock surimi, which matches figures released by the Pollock Catchers Association.

However, it is difficult to confirm the 2023 production when looking at international trade data. For example, some categories disclose if it is surimi,

while others only disclose "Meat, whether minced or not," a category as "Minced, other," and "other."



For example, there have been significant increases in imports in categories that may include surimi paste, such as "Minced, other." In 2023, imports from Russia under these categories for all countries totaled ~57.6 thousand metric tons.

If labeled only “surimi,” the number would be around 24 thousand metric tons, while the rest would be considered “meat.” The difference could be product that stays in the Russian domestic market or within categories we are not capturing. There could also be other explanations.

Using countries declaring imports from Russia—since Russia is not making their trade data available—we noticed considerable increases in pollock surimi trade over the last several quarters. Finally, we will still monitor trade data as this will still be helpful for the overall trend.

## Surimi Imports by Declaring countries from Russia

Source: GAPP Surimi Tracker, Importing countries' customs authority

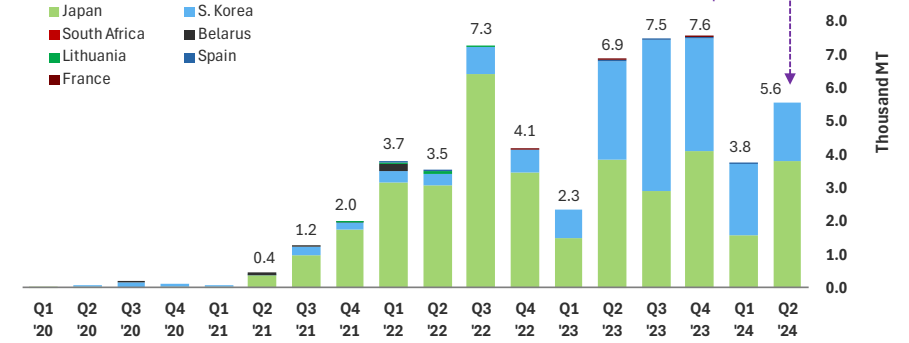


Figure 45. Countries declaring imports of Russian pollock surimi. Source: Customs, PlutusIQ. Q2 '24 is incomplete.

## Meat Imports by Declaring countries from Russia

Source: GAPP Surimi Tracker, Importing countries' customs authority

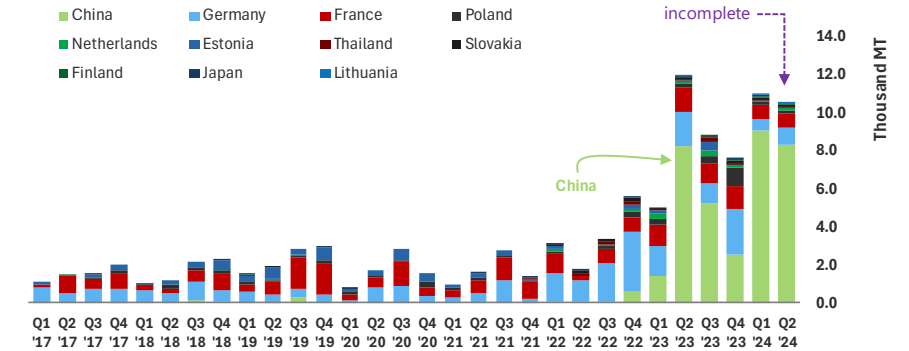


Figure 46. Countries declaring imports of Russian pollock “meat”. Source: Customs, PlutusIQ. Q2 '24 is incomplete.



# Notices, Disclaimers, and More

## About PlutusIQ

PlutusIQ offers bespoke solutions for the commodities industry, harnessing advanced quantitative and econometric approaches to deliver valuable insights and strategies. Our team combines extensive industry knowledge with expertise in pricing dynamics and macroeconomic analysis, enabling us to provide tailored solutions that give our clients a competitive edge. From market trend analysis and risk assessment to price modeling, PlutusIQ empowers businesses to make informed decisions in the complex and ever-evolving commodities landscape. We are committed to helping our clients navigate challenges and capitalize on opportunities through data-driven, customized approaches.

## Contact PlutusIQ

Please contact, Managing Director, Humberto Godinez (humberto.godinez@gmail.com or 646-645-4572) for additional information.

## Report Terms and Conditions

The information and data contained herein are intended solely for the confidential and exclusive use of members of the Association of Genuine Alaska Pollock Producers (GAPP). All GAPP Members expressly agree that they will not sell, communicate, or give any of said information or data to any other person, firm, or corporation, including any governmental agent or agencies whatsoever, and any news distributing or communications company or service outside the scope of the original agreement.

The use of data for contractual or other purposes is beyond the publishers' control, and they will in no case assume any responsibility for such use. They represent an accurate picture of current business in the publishers' judgment, but they are not "official" in any sense of the word. The publishers disclaim and do not assume responsibility for any damages, alleged or otherwise, that may result or claim to have resulted from any use made by any person or any reliance made by any person upon any of the statements of data appearing at any time herein.

While the data contained in this report is gathered from reliable sources, accuracy and completeness cannot be guaranteed. The publisher does not give investment advice or act as an investment advisor. All data, information, & opinions are subject to change without notice. Do not copy or redistribute this information without permission.

