# UrnerBarry

### Surimi Paste Supply Track Executive Summary

Prepared by Urner Barry Consulting for the Genuine Alaska Pollock Producers, GAPP



- Global surimi production estimates suggest an increase of about 7 percent in 2021 or about 60K metric tons from a reduced 2020 due to the pandemic.
- Alaska pollock surimi production surged nearly 10 percent to about 195K metric tons.
- Production estimates of Japanese pollock surimi show a decrease of about 15 percent compared to 2020, totaling approximately 40 thousand metric tons.
- Tropical surimi production—including China—surged 8 percent at about 568 thousand metric tons, surpassing prepandemic levels by about 14 thousand metric tons
- Itoyori surimi production estimates suggest an increase of 27 percent compared to 2020 totaling 84 thousand metric tons.
- Production estimates of eso and ribbon fish surimi—excluding China—suggest a decrease of 3 and 15 percent, respectively.
- Pacific whiting surimi production estimates suggest a flat 2021 compared to 2020 at about 38 thousand metric tons.
- Production estimates of hoki and southern blue whiting surimi suggest a 12 and 3 percent contraction compared to last year.

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, destinations, etc. 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." Don't hesitate to 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.

Angel Rubio, Sr. Analyst arubio@urnerbarry.com Akash Pandey, Data Scientist apandey@urnerbarry.com Chris Ashley, Senior VP cashley@urnerbarry.com

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# World Production through Q4, end of year



Global surimi production estimates suggest an increase of about 7 percent in 2021 compared to last year. While 7 percent may seem quite large for a market this size, we must consider that production dipped the previous year due to the pandemic. If we compare it to 2019, production in 2021 only increased by 2 percent.

Alaska Pollock surimi production increased by 10 percent compared to 2020 but remained below 2019. , Production estimates of itoyori surimi surged 27 percent from the previous year and reached their highest yearly level at about 84 thousand metric tons. When aggregating species by their primary category, we notice that "tropical" surimi bounced back 8 percent from last year, increasing its relative weight on the world stage to about 63 at about 570 thousand metric tons. Conversely, Japanese pollock production dropped from almost 47 thousand metric tons in 2020 to about 40 thousand metric tons in 2021.

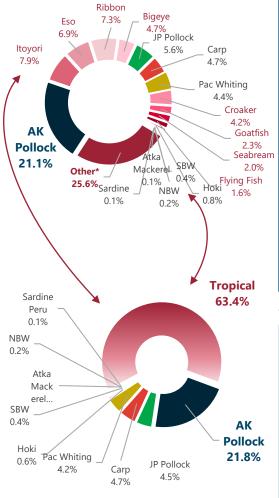


Figure 1 and 2. Pie chart of world surimi production by species and category. Source Urner Barry Consulting, GAPP.

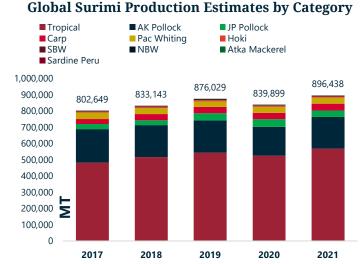


Figure 0. Overall surimi production estimates by species' category. Source: Customs, Urner Barry Consulting, GAPP.

	2017	2018	Y-o-Y % Chg	2019	Y-o-Y % Chg	2020	Y-o-Y % Chg	2021	Y-o-Y % Chg
AK Pollock	207,334	196,218	- 5.4%	199,451	+1.6%	177,542	- 11.0%	195,010	+9.8%
Itoyor	65,412	70,614	+8.0%	71,243	+0.9%	66,539	- 6.6%	84,710	+27.3%
Eso	60,910	61,992	+1.8%	67,872	+9.5%	57,861	- 14.7%	56,316	- 2.7%
Ribbon	54,271	60,363	+11.2%	59,423	- 1.6%	61,511	+3.5%	51,985	- 15.5%
Bigeye	39,527	45,348	+14.7%	42,323	- 6.7%	39, 140	- 7.5%	49,460	+26.4%
JP Pollock	31,890	29,602	- 7.2%	42,620	+44.0%	46,981	+10.2%	40,186	- 14.5%
Carp	29,755	38,822	+30.5%	39,428	+1.6%	39,566	+0.4%	41,933	+6.0%
Pac Whiting	39,489	37,626	- 4.7%	34,312	- 8.8%	37,073	+8.0%	37,863	+2.1%
Croaker	24,631	29,538	+19.9%	33, 594	+13.7%	35,323	+5.1%	31,156	- 11.8%
Goatfish	24,545	18,857	- 23.2%	19,417	+3.0%	19,704	+1.5%	39,230	+99.1%
Seabream	13,156	18, 145	+37.9%	17,849	- 1.6%	16,997	- 4.8%	14,911	- 12.3%
Flying Fish	9,976	13,682	+37.2%	14,542	+6.3%	13,237	- 9.0%	10,959	- 17.2%
Hoki	5,659	6,300	+11.3%	7,251	+15.1%	6,377	- 12.1%	5,610	- 12.0%
SBW	4,209	4,043	- 4.0%	4,414	+9.2%	3,608	- 18.3%	3,484	- 3.4%
NBW	2,271	2,666	+17.4%	2,666	-	1,876	- 29.6%	1,481	- 21.1%
Atka Mackerel	156	711	+356.6%	766	+7.8%	1,041	+35.9%	1,676	+61.0%
Sardine	124	224	+80.6%	1,080	+382.1%	640	- 40.7%	719	+12.3%
Other*	189,333	198,392	+4.8%	217,777	+9.8%	214,884	- 1.3%	229,749	+6.9%
Total	802,649	833,143	+3.8%	876,029	+5.1%	839,899	- 4.1%	896,438	+6.7%

Table 1. World surimi production estimates by species. Source: Urner Barry Consulting, GAPP.

	2017	2018	Y-o-Y % Chg	2019	Y-o-Y % Chg	2020	Y-o-Y % Chg	2021	Y-o-Y % Chg
Tropical	481,763	516,931	+7.3%	544,041	+5.2%	525,196	- 3.5%	568,476	+8.2%
AK Pollock	207,334	196,218	- 5.4%	199,451	+1.6%	177,542	- 11.0%	195,010	+9.8%
JP Pollock	31,890	29,602	- 7.2%	42,620	+44.0%	46,981	+10.2%	40,186	- 14.5%
Carp	29,755	38,822	+30.5%	39,428	+1.6%	39, 566	+0.4%	41,933	+6.0%
Pac Whiting	39,489	37,626	- 4.7%	34,312	- 8.8%	37,073	+8.0%	37,863	+2.1%
Hoki	5,659	6,300	+11.3%	7,251	+15.1%	6,377	- 12.1%	5,610	- 12.0%
SBW	4,209	4,043	- 4.0%	4,414	+9.2%	3,608	- 18.3%	3,484	- 3.4%
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Sardine Peru	124	224	+80.6%	1,080	+382.1%	640	- 40.7%	719	+12.3%
Total	802,649	833, 143	+3.8%	876,029	+5.1%	839,899	- 4.1%	896,438	+6.7%

Other Species\* is included under tropical surimi, including China

Table 2. World surimi production estimates by species' category. Source: Urner Barry Consulting, GAPP.



# **Alaska Pollock Surimi Production**



Production of Alaska pollock surimi ended 2021 nearly 10 percent above levels reached in 2020. However, total output in 2021 is still below pre-pandemic levels seen from 2017 through 2019.

We noticed a substantial increase in Q3 compared to the last three years, only to see Q4 dip significantly. Production in 2017 and 2018 appeared to show a similar pattern.

	<b>US Productio</b>	n, Alaska P	ollock Surimi (	MT)					
	2017	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Q1	71,352	78,451	+ 9.9%	86,026	+ 9.7%	73,647	-14.4%	59,033	- <b>19.8</b> %
Q2	16,763	26,448	+ 57.8%	13,639	<b>-48.4%</b>	14,912	+ 9.3%	32,804	+ 120.0%
Q3	111,827	86,666	-22.5%	82,858	-4.4%	69,935	<b>-15.6%</b>	95,932	+ 37.2%
Q4	7,392	4,653	-37.1%	16,928	+ 263.8%	19,048	+ 12.5%	7,241	<b>-62.0</b> %
Total	207,334	196,218	-5.4%	199,451	+ 1.6%	177,542	-11.0%	195,010	+ 9.8%
YTD	207,334	196,218	-5.4%	199,451	+ 1.6%	177,542	-11.0%	195,010	+ 9.8%

Table 3. Alaska Pollock Surimi Production by Quarter. Source: NOAA Fisheries, Urner Barry. Q4 2021 data is complete.

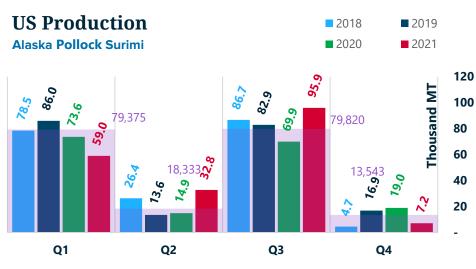


Figure 3. Alaska Pollock Surimi Production by Quarter. Source: NOAA, Urner Barry. Q4 2021 data is complete.

### **US Production**



Figure 5. Alaska Pollock Surimi Production by Quarter, linear. Source: NOAA Fisheries, Urner Barry. \*Q 2021 data is incomplete.

Alaska Pollock Surimi from week 1 to week 53



Figure 4. Total Alaska Pollock Surimi Production and YTD through week 32. Source: NOAA Fisheries, Urner Barry Consulting.





# Alaska Pollock Surimi Trade (Imports)

<u>UBC</u>

Production of Alaska pollock surimi ended 2021 nearly 10 percent above levels reached in 2020. However, total output in 2021 is still below pre-pandemic levels seen from 2017 through 2019.

We noticed a substantial increase in Q3 compared to the last three years, only to see Q4 dip significantly. Production in 2017 and 2018 appeared to show a similar pattern.

Countries declaring imports of Alaska pollock surimi increased by over 5 percent in 2021. Imports in Q3 and Q4 showed an increase of 13 percent compared to last year. Total volume added about 154 thousand metric tons, which is still lower than the volumes seen in 2019.

Although Japanese imports of Alaska pollock surimi increased by 10 percent compared to 2020, we must consider the significant decrease in volumes of this market in 2020. Therefore, compared to 2019, Japanese imports of U.S. Alaska pollock surimi are still down by about 14 percent. South Korea's imports surged 5 percent to about 24 thousand metric tons. Imports from Spain increased by 15 percent compared to 2020, totaling nearly 7 thousand metric tons.

Alaska Po	ollock Surimi Im	ports	*YTD fro	m (Q1 to Q4)			
All Countr	ies						
	2018	2019	'18 vs. '19	2020	'19 vs. '20	2021	'20 vs. '21
Q1	24,349	18,726	-23.1%	15,333	-18.1%	17,201	+ 12.2%
Q2	56,801	57,757	+ 1.7%	53,638	-7.1%	49,340	-8.0%
Q3	42,550	34,814	-18.2%	30,683	<b>-11.9%</b>	34,694	+ 13.1%
Q4	53,111	47,683	-10.2%	46,338	-2.8%	52,598	+ 13.5%
Total	176,811	158,980	-10.1%	145,992	-8.2%	153,833	+ 5.4%
*YTD	176,811	158,980	-10.1%	145,992	-8.2%	153,833	+ 5.4%

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

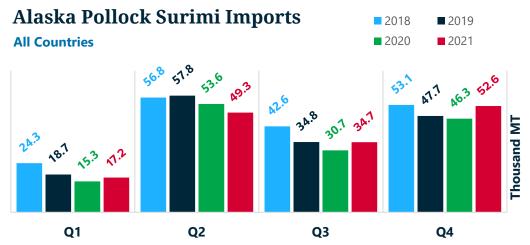
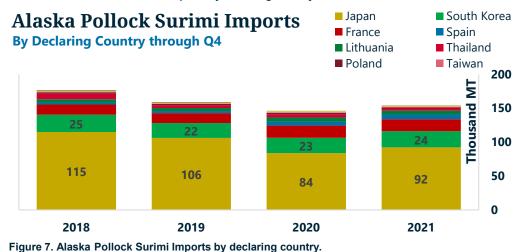


Figure 6. Alaska Pollock Surimi Imports. Aggregate of declaring countries by quarter.

Alaska Pollock	Surimi Imports		(Q1 to Q4)				
By Declaring Co	untry through Q4						
	2018	2019	'18 vs. '19	2020	'19 vs. '20	2021	'20 vs. '21
Japan	114,967	106,260	-7.6%	83,719	-21.2%	92,104	+ 10.0%
South Korea	25,403	21,781	-14.3%	22,730	+ 4.4%	24,006	+ 5.6%
France	15,206	14,749	-3.0%	17,954	+ 21.7%	17,650	-1.7%
Spain	2,847	2,990	+ 5.0%	5,941	+ 98.7%	6,840	+ 15.1%
Lithuania	4,835	4,541	- <b>6.1</b> %	6,040	+ 33.0%	5,731	-5.1%
Thailand	8,172	4,309	-47.3%	4,816	+ 11.8%	3,187	-33.8%
Poland	2,100	1,522	-27.5%	2,126	+ 39.7%	1,732	-18.5%
Taiwan	1,198	974	-18.7%	897	- <b>7.9</b> %	1,184	+ 32.0%
Norway	955	1,011	+ 5.9%	1,315	+ 30.1%	1,063	-19.2%
Belarus	535	328	-38.7%	176	-46.3%	276	+ 56.8%
Ukrain	593	515	-13.2%	278	-46.0%	60	-78.4%
Total	176.811	158.980	-10.1%	145,992	-8.2%	153.833	+ 5.4%

Table 5. Alaska Pollock Surimi Imports by declaring country.

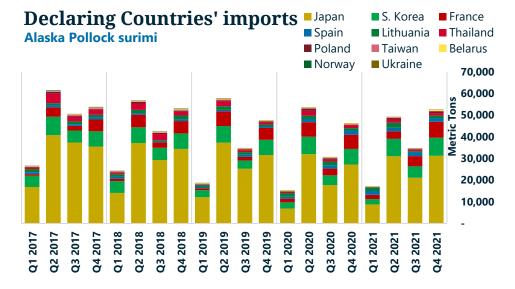


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# Alaska Pollock Surimi Trade (Imports), cont.





When using the declared value by the importing country, we notice a considerable increase in price per metric ton in 2021. In the case of Japan, by far the largest market in terms of volume, prices have hovered around record highs for three straight quarters. South Korea and Thailand also show a similar trend.

Figure 8. Alaska Pollock Surimi Imports. Linear imports by declaring countries. Q4 2021 data is complete.

### **Declaring Countries' imports vs. U.S. Exports**

Alaska Pollock surimi ----Imports ----Exports

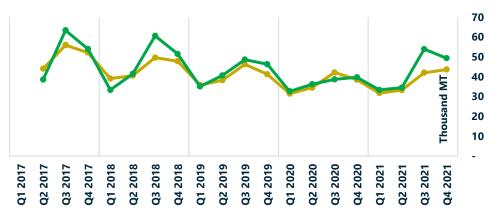


Figure 9. Alaska Pollock Surimi Imports vs. U.S. Alaska Pollock Surimi Exports. Smoothed average.

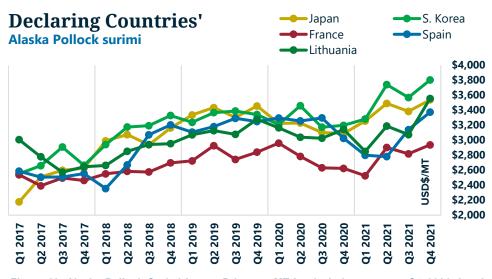


Figure 10. Alaska Pollock Surimi Import Price per MT by declaring country. Q4 2021 data is complete.





# Alaska Pollock Surimi Trade (U.S. Exports)



U.S. customs in Q3, figures in Q4 contracted by about 21 percent compared to the same period last year. Overall exports increased nearly 10 percent compared to 2020 but remained well below the volumes reached in 2019 and 2018. When comparing destinations, we believe it is of more value to look at countries declaring imports for a better assessment.

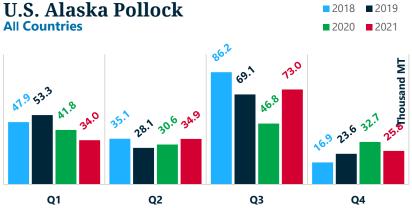


Figure 11. Alaska Pollock Surimi Exports. Aggregate of destination countries by quarter.

### **U.S. Alaska Pollock Surimi Exports**

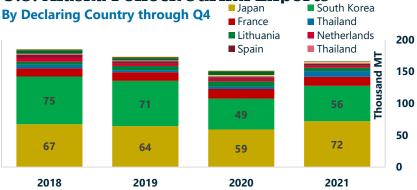


Figure 12. Alaska Pollock Surimi Exports by destination country.

	imi Exports	*YT	O from (Q1 to			
2018	2019	'18 vs. '19	2020	'19 vs. '20	2021	'20 vs. '21
47,863	53,299	+ 11.4%	41,806	-21.6%	34,010	-18.6%
35,070	28,123	- <b>19.8</b> %	30,634	+ 8.9%	34,944	+ 14.1%
86,180	69,145	-19.8%	46,755	-32.4%	72,953	+ 56.0%
16,885	23,564	+ 39.6%	32,705	+ 38.8%	25,762	-21.2%
185,998	174,131	-6.4%	151,900	-12.8%	167,669	+ 10.4%
185,998	174,131	-6.4%	151,900	-12.8%	167,669	+ 10.4%
	tries 2018 47,863 35,070 86,180 16,885 185,998	2018         2019           47,863         53,299           35,070         28,123           86,180         69,145           16,885         23,564           185,998         174,131	2018         2019         '18 vs. '19           47,863         53,299         + 11.4%           35,070         28,123         -19.8%           86,180         69,145         -19.8%           16,885         23,564         + 39.6%           185,998         174,131         -6.4%	20182019'18 vs. '19202047,86353,299+ 11.4%41,80635,07028,123-19.8%30,63486,18069,145-19.8%46,75516,88523,564+ 39.6%32,705185,998174,131-6.4%151,900	20182019'18 vs. '192020'19 vs. '2047,86353,299+ 11.4%41,806-21.6%35,07028,123-19.8%30,634+ 8.9%86,18069,145-19.8%46,755-32.4%16,88523,564+ 39.6%32,705+ 38.8%185,998174,131-6.4%151,900-12.8%	20182019'18 vs. '192020'19 vs. '20202147,86353,299+ 11.4%41,806-21.6%34,01035,07028,123-19.8%30,634+ 8.9%34,94486,18069,145-19.8%46,755-32.4%72,95316,88523,564+ 39.6%32,705+ 38.8%25,762185,998174,131-6.4%151,900-12.8%167,669

Table 6. Alaska Pollock Surimi Exports (U.S.) by quarter. U.S. Customs, Urner Barry.

.S. Alaska Poll	ock Surimi E	kports		(Q1 to Q4)			
By Declaring Co	ountry through	n Q4					
	2018	2019	'18 vs. '19	2020	'19 vs. '20	2021	'20 vs. '2
Japan	67,433	64,308	-4.6%	59,000	-8.3%	72,199	+ 22.49
South Korea	74,870	71,111	-5.0%	48,547	-31.7%	55,546	+ 14.4%
France	12,793	13,557	+ 6.0%	15,007	+ 10.7%	14,088	- <b>6.1</b> %
Thailand	5,435	3,437	<b>-36.8</b> %	3,966	+ 15.4%	9,007	+ 127.1%
Lithuania	4,814	6,354	+ 32.0%	8,141	+ 28.1%	5,211	-36.0%
Netherlands	6,858	4,069	<b>-40.7%</b>	3,907	-4.0%	3,074	-21.3%
Spain	3,914	3,215	- <b>17.9</b> %	2,791	-13.2%	3,035	+ 8.7%
Thailand	2,043	1,433	-29.9%	2,013	+ 40.5%	1,837	-8.7%
China		113		1,049	+ 828.3%	941	-10.3%
Taiwan	5,431	3,618	-33.4%	5,794	+ 60.1%	790	-86.4%
India	1,453	1,984	+ 36.5%	1,174	-40.8%	400	- <b>65.9</b> %
Total	185,998	174,131	- <b>6.4</b> %	151,900	-12.8%	167,669	+ 10.4%

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





### **Japanese Pollock Surimi**

Despite a considerable increase in Japanese pollock surimi production last year, 2021 estimates indicate a decrease of about 15 percent, from 47 thousand metric tons to 40 thousand metric tons. However, production out of Hokkaido in Q4 shows a considerable increase compared to the last three years.

Surimi inventory levels also appear to be recovering from record lows and ending stocks in December 2021 surpassed 43 thousand metric tons.

### **Japanese Pollock Surimi Production**

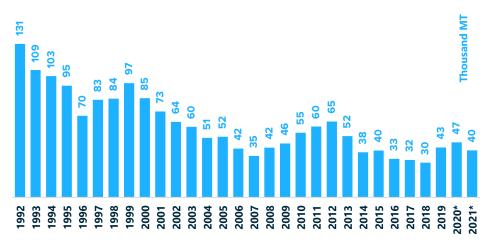


Figure 13. Japanese surimi production estimates. FAO, Japan MOF, Tom Asakawa, TA Pacific Co., and Kambako News, Urner Barry Consulting.

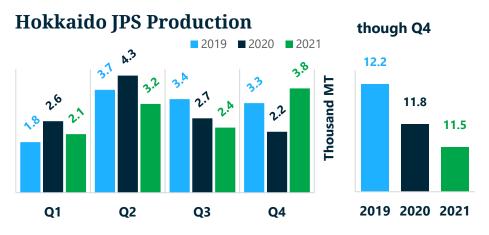


Figure 14. Hokkaido, Japanese pollock surimi production, Tom Asakawa, TA Pacific Co., and Kambako News, Urner Barry. Q4 2021 data is complete

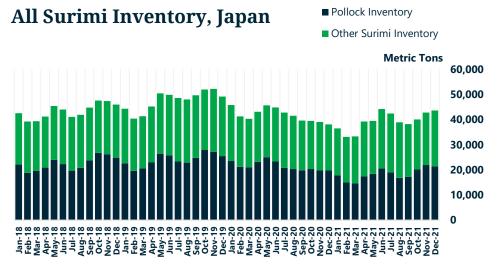


Figure 15. All surimi inventory in Japan. Tom Asakawa, TA Pacific Co., Japan MOF. Urner Barry. Monthly through April 2021.





## Japanese Atka Mackerel Surimi, Tom Asakawa



According to our estimates, although nearly insignificant compared to Japanese pollock volumes. Atka mackerel surimi production has increased considerably over the last few years, more noticeably into Q4 of 2021 at about 843 metric tons. Such an increase is consistent with production numbers for Hokkaido, which ended 2020 around 32 percent above last vear's.

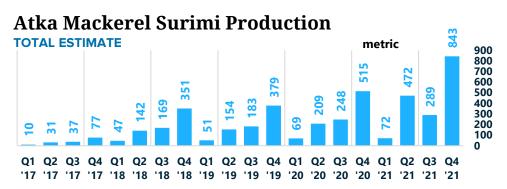


Figure 16. Japanese Atka Mackerel Harvest. FAO, Japan MOF, Tom Asakawa, TA Pacific Co., and Kambako News, Urner Barry.

### Atka Mackerel Surimi Production



Figure 17. Hokkaido, Atka Mackerel surimi production, Tom Asakawa, TA Pacific Co., and Kambako News, Urner Barry.

### 2021 Surimi Consumption Trend in Japan

by Tom Asakawa

The weather is getting warm, and tourists are increasing. During spring break, reservations for domestic flights are up 50% for Japan Airlines and 40% for All Nippon Airlines from a year ago, quickly recovering to 70% of the pre-pandemic 2019 level. This trend is expected to increase foodservice and souvenir sales, including local specialty surimi products.

National brand surimi product manufacturers announced earlier this year to raise prices in March and April due to rising surimi prices, package costs, and transportation charges, which will impact sales at supermarkets. In 2021, annual spending per household of two family members or more was 8542 yen (\$69.96), down 1% from 2020 and up 2% from 2019.

#### Pollock TAC and catch in 2021

In February, the Fishery Agency of Japan held a consultation meeting and approved 250,500 MT Alaska pollock TAC for Fishery Year (FY) 2022, down by 1.3% from 253,900 MT for FY 2021. In the 2021 calendar year, the total pollock catch was 160,325 MT, up 4.1% from the previous year.

#### **Pollock exports**

Japan's only export destination of fresh Alaska pollock is South Korea. In 2021, Japan exported 1,600 MT, down 2.1% from 2020 but down by 24.4% from 2146 MT in 2019, likely due to COVID. Japan's frozen pollock exports in 2021 totaled 11,411 MT, up 38.4% from the previous year. The primary destination was China, with 10,810 MT.

#### **Pollock imports**

Japan's total imports of frozen pollock in 2021 was 357 MT, down by 27.4%. While the United States had been the most crucial supplier through 2020, followed by Russia, it reversed in 2021, and Japan imported 273 MT from Russia and 83 MT from the United States.

#### Surimi imports

Japan imported 215,289 MT of frozen surimi, up 11.2% from 2020. The United States was the largest supplier with 95,869 MT, up 8.7%; India 39,468 MT, up 20.9%, Vietnam 18,798 MT, up 33.3%, Indonesia 3,108 MT, up 2.0%; China 19,642 MT, up 16.5%; Russia 3,091 MT, up 5.7 times; Thailand 27,737 MT, down 5.3%; and Malaysia 2,586 MT, down 44.9%. Russia's pollock surimi exports spiked in 2021, but

#### **Pollock surimi exports**

In 2021, Japan exported 1,166 MT of frozen pollock surimi, importers of which were China with 570 MT, Russia 456 MT, and Thailand 140 MT.

#### Surimi product exports

Japan's surimi product exports totaled 12,981 MT in 2021, up 11.5% year-on-year. Top destination was the United States with 4,330 MT, followed by Hong Kong 3,371 MT, China 1,994 MT. According to Kamaboko News, Japan's surimi product exports are growing steadily, and manufacturers will focus on more exports in the future.

#### Surimi product productions

2021 Surimi product production was 453,102 MT, up 10.4% from a year ago. This was the first time since 2017 to reach the 450,000 MT level. In December 2021, productions increased by two digits for all product categories.





# **Pacific Whiting Surimi**

Production estimates of pacific whiting surimi suggest a slight decrease of about two percent compared to last year. Production estimates also suggest considerable increases in Q3 and Q4 compared to the previous two years.

Another round of changes in how regional offices of the NMFS report this information complicated this process further. 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**

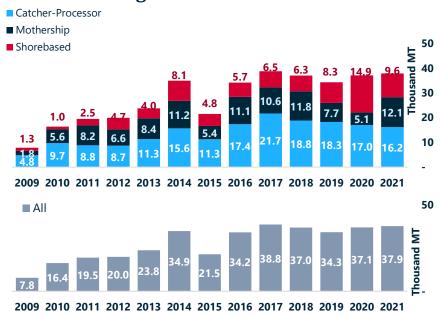
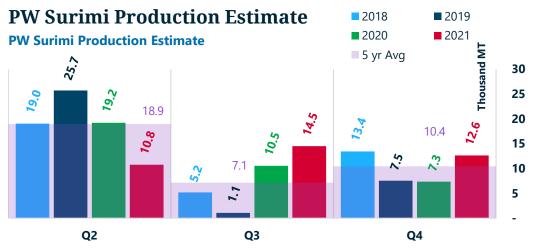


Figure 18. Pacific Whiting Surimi Production. NOAA Fisheries, Northwest Fisheries Science Center, and UB Consulting estimates for \*2020 and \*2021



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.

Disclaimer: There have been no updates

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.

Figure 19. PW Surimi Production Estimate. NOAA, Northwest Fisheries Science Center, Urner Barry Consulting. \*Q2 2021 through May only.

UB Estimate	ed Produ	ction, Pa	acific Whiti	**YTD					
	2017	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Q1									
Q2	14,504	19,021	+ 31.1%	25,717	+ 35.2%	19,191	-25.4%	10,763	-43.9%
Q3	11,134	5,177	-53.5%	1,068	- <b>79.4</b> %	10,541	+ 886.5%	14,484	+ 37.4%
Q4	13,851	13,429	- <b>3</b> .1%	7,527	-43.9%	7,341	-2.5%	12,616	+ 71.9%
Total (UB Est.)	39,489	37,626	-4.7%	34,312	-8.8%	37,073	+ 8.0%	37,863	+ 2.1%
*Official thru '18	38,784	37,010	-4.6%	34,312	-7.3%	37,073	+ 8.0%	37,863	
**YTD	39,489	37,626	-4.7%	34,312	-8.8%	37,073	+ 8.0%	37,863	+ 2.1%

\* UB Estimates

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

 Fisheries Science Center, Urner Barry Consulting.

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# Pacific Whiting Surimi Trade (Imports)



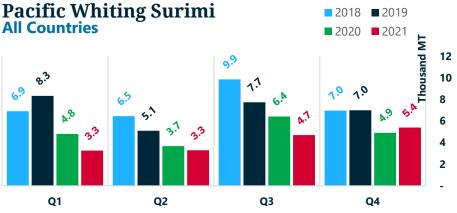
Countries declaring imports of pacific whiting surimi in 2021 declined steeply compared to 2020. Such a decrease departs from an overall recovery trend seen for most species, especially Alaska pollock, where trade showed a recovery in 2021.

Imports of pacific whiting surimi decreased by nearly 16 percent year-over-year, with Lithuania, Spain, and Japan contracting 11, 7, and 15 percent, respectively.

Although imports increased in Q4 compared to last year, overall volume levels remain well below pre-pandemic times. Prices remain hovering record-highs.

Pacific Wh All Countrie	iting Surimi lı s	mports	*YTD fror	n (Q1 to Q4)			
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Q1	6,912	8,339	+ 20.6%	4,817	-42.2%	3,269	-32.1%
Q2	6,452	5,101	- <b>20.9</b> %	3,680	- <b>27.9</b> %	3,291	-10.6%
Q3	9,876	7,745	-21.6%	6,424	-17.1%	4,699	-26.9%
Q4	6,976	7,008	+ 0.5%	4,911	- <b>29.9</b> %	5,398	+ 9.9%
Total	30,216	28,193	- <b>6.7</b> %	19,832	-29.7%	16,657	-16.0%
*YTD	30,216	28,193	-6.7%	19,832	-29.7%	16,657	-16.0%

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





Pacific Whiti	ng Surimi Imports	*	(Q1 to Q4)				
By Declaring C	ountry						
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Spain	11,612	10,401	-10.4%	6,827	-34.4%	6,033	- <b>11.6</b> %
Lithuania	7,731	7,269	-6.0%	6,134	-15.6%	5,669	- <b>7.6</b> %
Japan	6,203	5,706	-8.0%	2,822	-50.5%	2,392	-15.2%
Poland	1,720	1,988	+ 15.6%	1,337	-32.7%	1,060	-20.7%
France	860	1,232	+ 43.3%	1,737	+ 41.0%	871	-49.9%
Canada	414	435	+ 5.1%	343	-21.1%	396	+ 15.5%
Taiwan	683	342	-49.9%	103	<b>-69.9</b> %	229	+ 122.3%
Latvia	11	68	+ 518.2%	133	+ 95.6%	7	<b>-94.7%</b>
S. Korea	982	741	-24.5%	391	-47.2%		
*Total	30,216	28,193	<b>-6.7</b> %	19,832	- <b>29.7</b> %	16,657	-16.0%

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

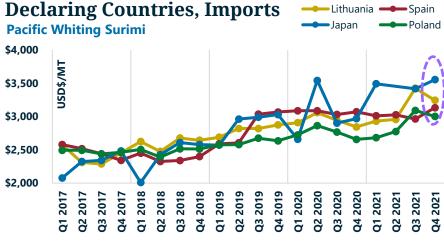


Figure 21. PW surimi import \$/MT—each country's customs, Urner Barry Consulting.





# Pacific Whiting Surimi Trade (Exports)



U.S. export data shows a very different picture from countries declaring imports. In 2021, export data showed a 128 percent increase compared to 2020, from 5 thousand to 12.5 thousand metric tons. At these levels, volumes exported in 2021 are similar to those shipped in 2018.

Pacific W All Countri	/hiting Surimi Ex	ports	*YTD fro	m (Q1 to Q4)			
An Countin	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Q1	1,914	782	-59.1%	495	-36.7%	1,801	+ 263.8%
Q2	4,488	2,350	<b>-47.6</b> %	1,779	-24.3%	3,218	+ 80.9%
Q3	2,310	4,016	+ 73.9%	859	-78.6%	741	-13.7%
Q4	3,421	1,115	- <b>67.4</b> %	2,383	+ 113.7%	6,810	+ 185.8%
Total	12,133	8,263	-31.9%	5,516	-33.2%	12,570	+ 127.9%
*YTD	12,133	8,263	-31.9%	5,516	-33.2%	12,570	+ 127.9%

Tables 11. Pacific Whiting surimi Exports. All countries. U.S. Customs, Urner Barry Consulting.

Pacific W	/hiting Surimi B	xports					
	Spain						
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Q1	726					716	
Q2	1,767	1,360	-23.0%	781	<b>-42.6</b> %	1,821	+ 133.2%
Q3	344	916	+ 166.3%				
Q4	1,999	120	-94.0%	1,228	+ 923.3%	2,696	+ 119.5%
Total	4,836	2,396	-50.5%	2,009	-16.2%	5,233	+ 160.5%
YTD	4,836	2,396	-50.5%	2,009	-16.2%	5,233	+ 160.5%

Table 12. Pacific Whiting surimi exports to Spain. Source: U.S. Customs, Urner Barry Consulting.

Pacific Whiting By Reported Desti			*(Q1 to Q4)				
-)	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Spain	4,836	2,396	-50.5%	2,009	-16.2%	5,233	+ 160.5%
Netherlands	1,505	819	-45.6%	1,276	+ 55.8%	4,649	+ 264.3%
Canada	2,205	1,845	-16.3%	440	<b>-76.2%</b>	1,254	+ 185.0%
S. Korea	551	834	+ 51.4%	482	-42.2%	732	+ 51.9%
Thailand	559	22	<b>-96.1</b> %	129	+ 486.4%	331	+ 156.6%
India	2,152	279	-87.0%	134	-52.0%	211	+ 57.5%
Lithuania		212				117	
France		1,655		977	-41.0%	32	<b>-96.7</b> %
China							
*Total	12,133	8,263	-31.9%	5,516	-33.2%	12,570	+ 127.9%

Table 13. Pacific Whiting surimi exports by country U.S. Customs, Urner Barry Consulting.

### **Pacific Whiting Surimi**

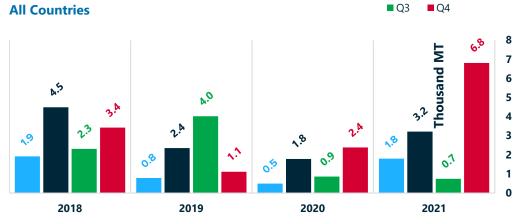


Figure 22. Pacific Whiting surimi exports by quarter. U.S. Customs, Urner Barry Consulting.

Such disparity between countries declaring imports and U.S. export data shows a massive disconnect in how these export codes are reported for this species. But it also tells us that compared to surimi, production figures could be overstated, and imports and exports underreported—aside from being misreported. It is not easy to assess this data from a pure analysis perspective. Still, the relatively decent correlation between landings and surimi production released in the past by the regional offices from the NMFS suggests production figures estimates are likely to be closer to real numbers.

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Q2

01



# Southern Blue Whiting and Hoki Surimi Production

#### **SBW**

Production of southern blue whiting surimi decreased about 3 percent in 2021 compared to last year. Such a decrease is a departure from some other primary species, which saw a recovery in 2021 from 2020. Production from Argentina decreased a further 25 percent in 2021 from an already 10 percent decrease in 2020. nearly 3 percent compared to last year. Production from Chile increased significantly to make up for some of Argentina's contraction, but it was not enough to offset an overall decline.

### Hoki

Total

Compared to last year, Hoki surimi production also declined, showing a similar decrease of 12 percent. Production from Argentina fell about 25 percent, or about one thousand metric tons, compared to 2020. Compared to pre-pandemic times, volumes in 2021 were lower by approximately 1,500 metric tons. The only bright spot in Hoki surimi production was New Zealand, which managed to increase its output by 21 percent, recovering to pre-pandemic levels.

From a trend perspective, the overall trend of Hoki surimi production remains slightly downward.

Southern Blue Whiting Surimi

Argentina

Chile

2020

8

**Q4 2020** 

Q1 2021 Q2 2021 2021

Q3 2020

Q1 2020

Figure 23. Southern Blue Whiting surimi estimated production by

	urimi Prod	uction	*YTD from (Q1 to Q4)						
2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20			
767	952	+ 24.2%	934	-1.9%	1,199	+ 28.4%			
696	1,004	+ 44.2%	865	- <b>13.9</b> %	695	-19.6%			
463	823	+ 77.8%	690	-16.1%	521	-24.5%			
2,117	1,635	-22.8%	1,119	-31.5%	1,069	-4.5%			
4,043	4,414	+ 9.2%	3,608	-18.3%	3,484	-3.4%			
4,043	4,414	+ 9.2%	3,608	-18.3%	3,484	-3.4%			
	s 2018 767 696 463 2,117 4,043	s 2018 2019 767 952 696 1,004 463 823 2,117 1,635 4,043 4,414	2018         2019         '19 vs. '18           767         952         + 24.2%           696         1,004         + 44.2%           463         823         + 77.8%           2,117         1,635         -22.8%           4,043         4,414         + 9.2%	S         2018         2019         '19 vs. '18         2020           767         952         + 24.2%         934           696         1,004         + 44.2%         865           463         823         + 77.8%         690           2,117         1,635         -22.8%         1,119           4,043         4,414         + 9.2%         3,608	S         2018         2019         '19 vs. '18         2020         '20 vs. '19           767         952         + 24.2%         934         -1.9%           696         1,004         + 44.2%         865         -13.9%           463         823         + 77.8%         690         -16.1%           2,117         1,635         -22.8%         1,119         -31.5%           4,043         4,414         + 9.2%         3,608         -18.3%	S         2018         2019         '19 vs. '18         2020         '20 vs. '19         2021           767         952         + 24.2%         934         -1.9%         1,199           696         1,004         + 44.2%         865         -13.9%         695           463         823         + 77.8%         690         -16.1%         521           2,117         1,635         -22.8%         1,119         -31.5%         1,069           4,043         4,414         + 9.2%         3,608         -18.3%         3,484			

Table 14. Southern Blue Whiting surimi estimated production.

Southern Blue	Whiting Suri	mi Productio	n	(Q1 to Q4)								
Production by Country												
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20					
Argentina	2,753	3,235	+ 17.5%	2,917	<b>-9.8</b> %	2,171	-25.6%					
Chile	898	813	<b>-9.5</b> %	204	<b>-74.9%</b>	999	+ 389.7%					
New Zealand	392	366	-6.6%	487	+ 33.1%	314	-35.5%					
Total	4,043	4,414	+ 9.2%	3,608	-18.3%	3,484	-3.4%					

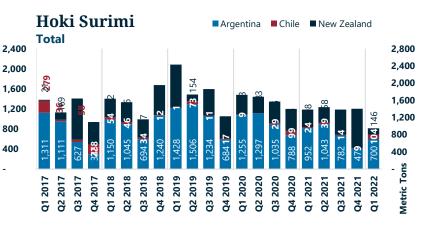
Table 15. Southern Blue Whiting surimi estimated production by country, year-todate.

Hoki Surin All Countri	ni Production es			*YTD from	(Q1 to Q4)		
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Q1	1,636	2,431	+ 48.6%	1,727	-29.0%	1,384	-19.9%
Q2	1,557	1,733	+ 11.3%	1,680	-3.0%	1,440	-14.3%
Q3	1,155	1,859	+ 60.9%	1,570	-15.6%	1,384	-11.9%
Q4	1,952	1,228	-37.1%	1,400	+ 14.0%	1,402	+ 0.2%
Total	6,300	7,251	+ 15.1%	6,377	-12.1%	5,610	-12.0%
*YTD	6,300	7,251	+ 15.1%	6,377	-12.1%	5,610	-12.0%

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

Hoki Surimi Pro										
Production by Country										
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20			
Argentina	4,129	4,852	+ 17.5%	4,375	- <b>9.8</b> %	3,256	-25.6%			
Chile	146	102	-30.1%	137	+ 34.3%	86	-37.2%			
New Zealand	2,025	2,297	+ 13.4%	1,865	-18.8%	2,268	+ 21.6%			
Total	6,300	7,251	+ 15.1%	6,377	-12.1%	5,610	-12.0%			

Table 17 . Hoki surimi estimated production by country. Each country's customs, Urner Barry Consulting.



#### Figure 24. Hoki surimi production estimates. Each country's customs, Urner Barry Consulting. \*Q4 2021 data is incomplete.

Disclaimer: Southern blue whiting (SBW) and Hoki surimi production were assumed as 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

Q4 2021 2022

5

8

New Zealand

**Metric Tons** 

Q3 2022

2022

3

2022

2

Use Chilean exports as declared, which are divided by species

8 8

Use New Zealand exports as declared, which are also divided by species.



2017 2018 2018 2018 2018 Q1 2019 2019 2019 Q4 2019

4 5 3 8

country. \*Q2 2021 data is incomplete.

2

2017

ĉ

2017

3

201



# Southern Blue Whiting and Hoki Surimi Trade



Surimi Imports from A	Argentina			*(Q1 to Q4)			
Countries Im	porting from:	Argentina					
	2018		'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Japan	5,818	7,090	+ 21.9%	6,165	-13.0%	4,795	-22.2%
Russian Federation	1,040	900	-13.5%	1,031	+ 14.6%	439	-57.4%
Spain							
Belarus	24	72	+ 200.0%	96	+ 33.3%	168	+ 75.0%
South Africa		25				25	
*Total	6,882	8,087	+ 17.5%	7,292	<b>-9.8</b> %	5,427	-25.6%

Table 18. Surimi imports from Argentina by country.



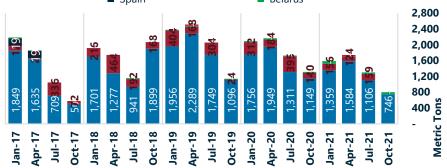


Figure 25. SBW and Hoki Surimi imports from Argentina. \*Q2 2021 data is incomplete.

urimi Imports from C	Chile			*(Q1 to Q4)			
Countries Im	porting from:	Chile					
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Japan	3,149	2,846	<b>-9.6</b> %	2,040	-28.3%	2,441	+ 19.7%
<b>Russian Federation</b>	66	163	+ 147.0%	43	- <b>73.6</b> %	205	+ 376.7%
Spain							
Belarus	25						
*Total	3.240	3.009	-7.1%	2.083	-30.8%	2.646	+ 27.09

#### Table 19. Surimi imports from Chile by country.

Surimi Imports from N Countries Im	New Zealand	ew Zealand		*(Q1 to Q4)						
	2018	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20			
Japan South Africa		780 40	+ 85.3%	753	-3.5%	578 20	-23.2%			
*Total	421	820	+ 94.8%	753	-8.2%	598	-20.6%			

Table 20. Surimi imports from New Zealand by country.

#### Countries importing from Chile All Surimi Total

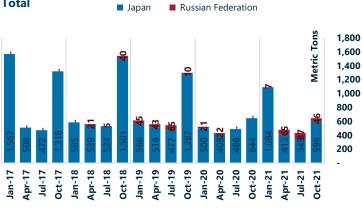


Figure 26. Surimi imports from Chile by country.

### Imports from Argentina:

Because trade figures are a function of production, countries declaring imports from Argentina would have naturally shown a decrease of about 25 percent. We observed that Japanese imports of Argentinean surimi decreased by about 22 percent when looking at the destinations. Russian imports also declined compared to last year.

### Imports from Chile:

Conversely, countries declaring imports from Chile increased significantly, mainly since 2020 was such a low year compared to prepandemic times. Compared to the previous year, Japanese imports of Chilean surimi surged 65 percent, surging above prepandemic levels.

#### Imports from New Zealand:

Countries declaring imports from New Zealand, mainly Japan, declined significantly in 2021 compared to 2020. We suggest looking at exports declared by New Zealand in the adjacent files further to investigate some of the discrepancies in HS codes.

### Countries importing from New Zealand All Surimi



#### Figure 27. Surimi imports from New Zealand by country.

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# Northern Blue Whiting Surimi Production, France



Surimi \*\*production estimates from the working group out of France are shown below. Production in 2020 fell to the lowest level since about 2012, and thus far in 2021, the number is even lower by about 400 metric tons

### France's Northern Blue Whiting Surimi Production



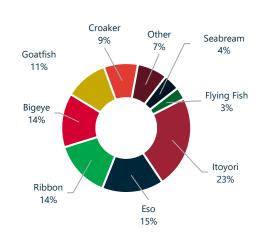
Figure 28. Northern blue whiting surimi production estimates. Source: GAPP, Urner Barry Consulting.

Countries ir	nporting from France from Q1	to Q4							Disclaimer: **Production estimates
	Metric Tons	2015	2016	2017	2018	2019	2020	2021	
nbw surimi	Japan	408	670	854	679	958	239	551	internal working group
	Belarus	-	-	-	168	379	293	429	
	China (People's Republic of)	24	-	48	166	119	-	24	
	Spain	-	-	-	-	87	26	34	an in-house non-linear
	Poland	-	-	-	-	-	-	116	model. The estimates provided by the
	Other	-	-	-	-	35	2	-	working group were
	Total	432	671	903	1,014	1,577	561	1,155	·

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

# **Tropical Surimi**

Production of tropical surimi increased in 2021 from a noticeable dip in 2020, primarily caused by the pandemic. Prices of Itoyori, the main substitute species for AK pollock surimi, remain firm and reached record highs in Q4 in nominal terms.



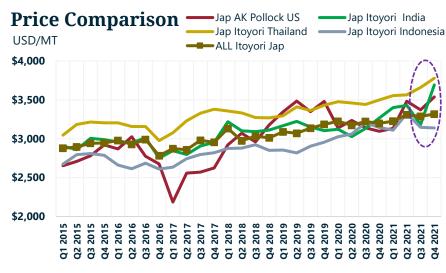


Figure 29. Tropical Surimi estimated breakdown by species. \*Does not include China.

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Figure 30. Itoyori vs. AK Pollock of Japan import \$/mt comparison. Source: Urner Barry Consulting



# Tropical Surimi, Thailand

Thailand's surimi production estimates indicate a decrease of about 13 percent compared to last year. Almost all species experienced a decline, particularly Itoyori, which decreased by about 10 percent, or about 1.5 thousand metric tons, compared to last year.

In terms of trade, volumes from countries declaring importing surimi from Thailand decreased by only 2.5 percent. Japanese imports of Thai itoyori surimi remained relatively flat at about 8.5 thousand metric tons. Imports from Russia, the secondlargest market, declined only by about 5 percent.

At a superficial glance, it makes sense that prices from Itoyori, a vital substitute for AK pollock surimi, continue to increase and reach backto-back quarterly record-highs amid overall lower production figures from this country. As a result, it makes sense for Japanese buyers to look elsewhere, particularly where the resource appears available, like in India.

#### Thailand's estimated Production by Species (Imports and Exports) thru Q4

Ye	ear	ltoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon Se	ea Bream	Other	Total
20	10	36,857	11,896	9,451	5,529	3,620	3,751	581	4,968	76,653
20	11	31,930	11,095	8,815	4,825	3,439	3,524	542	7,327	71,497
20	12	23,580	10,447	8,300	7,240	3,173	4,090	3,112	7,375	67,317
20	13	21,436	7,835	5,684	4,583	2,430	1,532	2,107	4,876	50,483
20	14	22,189	8,454	6,717	3,550	2,625	3,451	2,209	5,280	54,474
20	15	18,127	6,812	5,412	4,721	2,110	1,309	1,182	4,222	43,894
20	16	15,083	6,230	4,950	3,559	1,896	2,950	2,364	3,114	40,146
20	17	11,680	4,706	3,739	2,562	1,457	1,788	1,071	3,322	30,325
20	18	10,425	4,742	3,310	3,287	1,471	2,526	2,035	2,764	30,559
20	19	11,549	4,869	3,344	3,375	1,486	2,037	1,400	3,318	31,378
20	20	13,233	5,186	3,414	2,904	1,579	3,273	1,405	2,425	33,419
20	21	11,972	4,523	3,593	2,548	1,373	981	2,015	2,139	29,144

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

### Thailand's estimated Production by Species (Imports and Exports) thru Q4

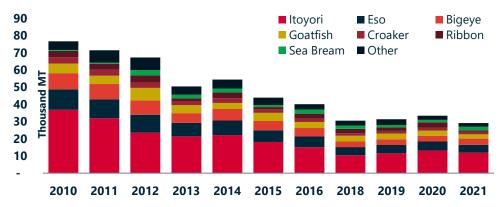


Figure 31. Yearly estimates of Thailand's surimi production by species.

Countries declari	ing surimi imports from T	hailand fr	om Q1 to (	<b>Q</b> 4											
Reporter Name	Species														
		2015	'15 vs. '14	2016	'16 vs. '15	2017	'17 vs. '16	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Japan	Barrac, Sea Breams, Kingclip	62	▼ 49.6%	61	▼ 1.6%	37	▼ 39.3%	25	▼ 32.4%	14	▼ 44.0%	21	▲ 50.0%	37	▲ 76.2%
	Itoyori	11,505	▼ 14.0%	10,507	▼ 8.7%	8,022	▼ 23.7%	7,242	▼ 9.7%	8,319	▲ 14.9%	8,580	▲ 3.1%	8,634	▲ 0.6%
	Other	18,837	▼ 9.3%	18,790	▼ 0.2%	14,391	▼ 23.4%	14,638	<b>▲</b> 1.7%	15,037	▲ 2.7%	13,307	▼ 11.5%	12,107	▼ 9.0%
	Sardine, Other			34		2	▼ 94.1%	3	▲ 50.0%					7	
Russia	All	5,084	▼ 7.5%	2,711	▼ 46.7%	1,406	▼ 48.1%	2,133	▲ 51.7%	2,841	▲ 33.2%	3,541	▲ 24.6%	3,351	▼ 5.4%
S. Korea	All	3,104	▼ 6.4%	2,779	▼ 10.5%	1,824	▼ 34.4%	1,464	▼ 19.7%	1,147	▼ 21.7%	1,627	<b>▲</b> 41.8%	1,248	▼ 23.3%
Malaysia	All	474		536	▲ 13.1%	529	▼ 1.3%	573	▲ 8.3%	1,021	▲ 78.2%	978	▼ 4.2%	847	▼ 13.4%
China	All	618	▼ 2.5%	532	▼ 13.9%	229	▼ 57.0%	504	▲ 120.1%	348	▼ 31.0%	846	▲ 143.1%	1,063	▲ 25.7%
Taiwan	All	367	▼ 30.0%	227	▼ 38.1%	96	▼ 57.7%	91	▼ 5.2%	306	▲ 236.3%	702	▲ 129.4%	825	<b>▲</b> 17.5%
France	All	538	▲ 3.5%	380	▼ 29.4%	520	▲ 36.8%	470	▼ 9.6%	307	▼ 34.7%				
Hong Kong	All	230	<b>▲</b> 16.8%	163	▼ 29.1%	146	▼ 10.4%	174	▲ 19.2%	344	<b>▲</b> 97.7%	487	<b>▲</b> 41.6%	595	▲ 22.2%
New Zealand	All	991	▼ 19.1%	278	▼ 71.9%	79	▼ 71.6%	61	▼ 22.8%	82	▲ 34.4%	68	▼ 17.1%	39	▼ 42.6%
Lithuania	All	14	▼ 97.3%			54		379	▲ 601.9%	442	▲ 16.6%	256	▼ 42.1%	215	▼ 16.0%
Philippines	All							378		348	▼ 7.9%	122	▼ 64.9%	235	▲ 92.6%
Canada	All	22	▼ 78.4%	128	▲ 481.8%			104		250	▲ 140.4%	222	▼ 11.2%	278	▲ 25.2%
Other		409	▼ 52.2%	494	▲ 20.8%	238	▼ 51.8%	218	▼ 8.4%	289	▲ 32.6%	308	▲ 6.6%	35	▼ 88.6%
Total		42,255	▼ 11.3%	37,620	▼ 11.0%	27,573	▼ 26.7%	28,457	▲ 3.2%	31,095	<b>▲ 9.3%</b>	31,065	▼ 0.1%	29,516	▼ 5.0%

Table 23. Countries declaring surimi imports from Thailand. Source: each country's customs, authority, UB Consulting.

\*\*UB Consulting developed a model to estimate total production figures. Thereafter, production estimates by species use an internal working group approximation that was then calculated using an in-house non-linear model. The estimates provided by the working group were collected in 2020.





# Tropical Surimi, India

According to our surimi production estimates, volumes out of India increased by about 12 percent in 2021 compared to 2020, reaching record-high volumes at about 104 thousand metric tons.

Production estimates of itoyori surimi jumped from about four thousand metric tons in 2020 to over 12 thousand metric tons in 2021. This increase is significant given the production decrease seen out of Thailand. As a result, it makes sense that prices for Itoyori in Japan remain strong.

Aside from resource availability, it is not unreasonable to suggest that these high prices incentivize efforts to increase the production of itoyori surimi relative to other species.

#### India's estimated Production by Species thru Q4

Year	ltoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Other	Total
2015	11,254	14,780	7,591	2,724	-	24,874	4,692	65,915
2016	8,920	16,212	8,277	2,988	-	28,867	7,199	72,463
2017	14,321	25,621	11,769	4,246	-	39,485	7,517	102,958
2018	18,140	20,772	11,403	4,245	-	40,713	8,674	103,947
2019	8,936	23,786	10,628	3,901	-	38,379	9,514	95,145
2020	3,881	22,659	12,347	5,278	-	39,757	8,406	92,328
2021	12,372	20,611	15,020	8,584	-	36,333	11,157	104,078

Table 24. Yearly estimated surimi production from India by species.

### India's estimated Production by Species thru Q4

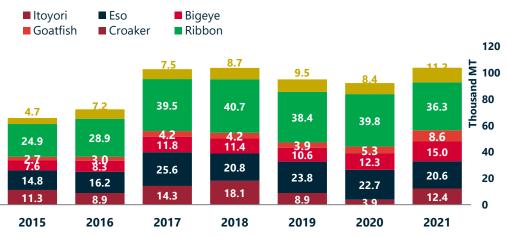


Figure 32. Yearly estimated surimi production from India by species

ountries declarir	ng surimi impo	orts from I	ndia from	Q1 to Q4											
Reporter Name	Species														
		2015	'15 vs. '14	2016	'16 vs. '15	2017	'17 vs. '16	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '2
Japan	ltoyori	6,534	▼ 24.6%	4,058	▼ 37.9%	5,410	▲ 33.3%	6,837	▲ 26.4%	3,600	▼ 47.3%	1,442	▼ 59.9%	4,763	▲ 230.39
	Other	31,643	▲ 25.0%	29,266	▼ 7.5%	32,999	<b>▲</b> 12.8%	32,589	▼ 1.2%	35,938	▲ 10.3%	31,217	▼ 13.1%	34,705	▲ 11.29
	Sardine, Other							10		67	▲ 570.0%				
Taiwan	All	11,734	<b>▲</b> 14.3%	13,018	▲ 10.9%	14,890	▲ 14.4%	17,432	<b>▲</b> 17.1%	15,476	▼ 11.2%	14,881	▼ 3.8%	13,906	▼ 6.69
Russia	All	2,340	▼ 21.9%	6,885	▲ 194.2%	8,383	<b>▲</b> 21.8%	9,695	<b>▲</b> 15.7%	6,695	▼ 30.9%	3,802	▼ 43.2%	5,754	▲ 51.39
Thailand	Gogies	218	▼ 20.7%	627	<b>▲</b> 187.6%	5,099	▲ 713.2%	5,277	▲ 3.5%	6,896	<b>▲</b> 30.7%	8,173	<b>▲</b> 18.5%	14,538	▲ 77.99
	Other	419	▼ 78.9%	520	▲ 24.1%	455	▼ 12.5%	273	▼ 40.0%	157	▼ 42.5%	416	▲ 165.0%	75	▼ 82.09
S. Korea	All	4,236	▲ 61.9%	3,328	▼ 21.4%	6,249	▲ 87.8%	7,021	▲ 12.4%	6,306	▼ 10.2%	5,894	▼ 6.5%	5,422	▼ 8.09
Belarus	All	2,780	▲ 3.4%	3,134	<b>▲</b> 12.7%	4,304	▲ 37.3%	4,839	▲ 12.4%	4,713	▼ 2.6%	5,085	▲ 7.9%	4,532	▼ 10.99
Malaysia	All	630		1,061	▲ 68.4%	5,336	▲ 402.9%	4,963	▼ 7.0%	2,769	▼ 44.2%	4,104	▲ 48.2%	3,642	▼ 11.39
China	All	1,718	▼ 10.4%	1,532	▼ 10.8%	4,541	▲ 196.4%	4,038	▼ 11.1%	3,643	▼ 9.8%	2,934	▼ 19.5%	2,119	▼ 27.8
Singapore	All	25		75	▲ 200.0%	1,303	▲ 1637.3%	1,732	▲ 32.9%	3,014	▲ 74.0%	2,905	▼ 3.6%	2,250	▼ 22.55
Lithuania	All	1,066	▼ 10.8%	2,538	▲ 138.1%	1,774	▼ 30.1%	1,478	▼ 16.7%	1,286	▼ 13.0%	658	▼ 48.8%	980	▲ 48.99
Spain	All	164	▲ 13.9%	1,242	▲ 657.3%	1,100	▼ 11.4%	655	▼ 40.5%	535	▼ 18.3%	492	▼ 8.0%	367	▼ 25.49
Indonesia	All	130	▲ 73.3%	120	▼ 7.7%	1,125	▲ 837.5%	250	▼ 77.8%	50	▼ 80.0%	325	▲ 550.0%	479	<b>▲</b> 47.49
Other		434	▲ 5.1%	576	▲ 32.7%	593	▲ 3.0%	626	▲ 5.6%	819	▲ 30.8%	1,348	▲ 64.6%	2,100	▲ 55.8
Total		64,071	<b>▲ 9.5%</b>	67,980	<b>▲ 6.1%</b>	93,561	<b>▲ 37.6%</b>	97,715	<b>▲ 4.4%</b>	91,964	▼ 5.9%	83,676	▼ 9.0%	95,632	▲ 14.3°

Table 25. Countries declaring surimi imports form India. Source: each country's customs, authority, UB Consulting

\*\*UB Consulting developed a model to estimate total production figures. Thereafter, production estimates by species use an internal working group approximation that was then calculated using an in-house non-linear model. The estimates provided by the working group were collected in 2020.





# Tropical Surimi, Vietnam

Vietnam's \*\*production estimates suggest an increase of 20 percent compared to 2020, marking this country as the largest surimi exporter at about 194 thousand metric tons.

All the main markets indicate a significant increase in trade, mainly from Thailand, Japan, and Russia; Japan declared almost a 50 percent increase in itoyori surimi imports from Vietnam. These figures are consistent to offset the continued decline in production from Thailand.

#### Vietnam's Estimated Production by Species thru Q4

	ltoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon S	Seabream I	-lying Fish	Other	Total
2015	30,940	18,468	22,997	17,546	20,311	9,003	13,668	9,318	7,820	150,070
2016	21,591	23,785	17,356	16,968	16,568	12,815	12,725	10,851	10,165	142,825
2017	24,588	25,034	19,448	15,087	17,971	10,430	10,430	8,807	9,907	141,702
2018	25,240	30,501	25,519	8,202	22,950	13,871	13,871	11,799	12,088	164,040
2019	30,980	31,387	21,149	8,635	25,788	14,823	14,823	12,619	12,489	172,693
2020	32,386	22,952	18,975	8,601	27,178	14,177	14,177	11,344	11,831	161,622
2021	44,109	26,334	28,008	25,833	25,319	12,229	11,628	9,690	10,649	193,799

Table 26. Yearly estimated surimi production from India by species.

### Vietnam's Estimated Production by Species thru Q4

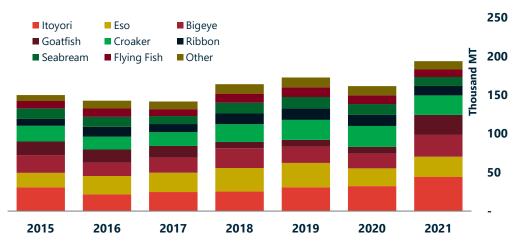


Figure 33. Yearly estimates of Vietnam's surimi production by species.

Reporter Name	Species														
		2015	'15 vs. '14	2016	'16 vs. '15	2017	'17 vs. '16	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
S. Korea	All	56,273	▲ 1.5%	53,020	▼ 5.8%	52,191	▼ 1.6%	62,954	▲ 20.6%	57,246	▼ 9.1%	53,115	▼ 7.2%	55,555	▲ 4.6%
Thailand	Gogies	25,674	<b>▲</b> 41.7%	24,852	▼ 3.2%	28,221	▲ 13.6%	35,193	▲ 24.7%	31,064	▼ 11.7%	31,086	▲ 0.1%	38,652	▲ 24.3%
	Other	3,194	▲ 22.4%	2,851	▼ 10.7%	2,880	<b>▲</b> 1.0%	1,804	▼ 37.4%	438	▼ 75.7%	119	▼ 72.8%	50	▼ 58.0%
China	All	14,352	▼ 24.0%	11,542	▼ 19.6%	14,610	▲ 26.6%	18,871	▲ 29.2%	25,183	▲ 33.4%	27,963	<b>▲</b> 11.0%	28,872	▲ 3.3%
Japan	eams, Kingclip	903	▼ 4.8%	535	▼ 40.8%	434	▼ 18.9%	771	▲ 77.6%	366	▼ 52.5%	392	▲ 7.1%	377	▼ 3.8%
	ltoyori	3,367	▼ 7.2%	2,388	▼ 29.1%	2,640	▲ 10.6%	2,604	▼ 1.4%	3,075	▲ 18.1%	2,864	▼ 6.9%	4,274	<b>4</b> 9.2%
	Other	12,961	▼ 1.2%	13,496	<b>▲</b> 4.1%	12,716	▼ 5.8%	14,309	<b>▲</b> 12.5%	14,380	▲ 0.5%	11,237	▼ 21.9%	14,526	▲ 29.3%
	Sardine, Other	397	▲ 467.1%	82	▼ 79.3%	20	▼ 75.6%	4	▼ 80.0%	20	<b>4</b> 00.0%	30	▲ 50.0%	7	▼ 76.7%
Russia	All	6,937	▲ 52.2%	8,059	▲ 16.2%	6,740	▼ 16.4%	6,308	▼ 6.4%	9,612	▲ 52.4%	7,427	▼ 22.7%	12,771	▲ 72.0%
Malaysia	All	6,165	▲ 45.9%	5,441	▼ 11.7%	6,810	▲ 25.2%	7,311	▲ 7.4%	8,916	▲ 22.0%	8,788	▼ 1.4%	13,391	▲ 52.4%
Taiwan	All	6,396	▼ 1.7%	5,340	▼ 16.5%	3,698	▼ 30.7%	4,567	▲ 23.5%	5,712	▲ 25.1%	5,945	<b>▲</b> 4.1%	7,490	▲ 26.0%
France	All	6,884	▲ 32.2%	4,898	▼ 28.8%	1,444	▼ 70.5%	564	▼ 60.9%	781	▲ 38.5%	637	▼ 18.4%	404	▼ 36.6%
Indonesia	All	1,869	▲ 1.1%	3,323	▲ 77.8%	2,298	▼ 30.8%	968	▼ 57.9%	1,948	▲ 101.2%	1,373	▼ 29.5%	2,687	<b>▲</b> 95.7%
Philippines	All							2,325		5,141	▲ 121.1%	3,223	▼ 37.3%	2,651	▼ 17.7%
Ukraine	All	880	▼ 0.9%	1,218	▲ 38.4%	1,544	▲ 26.8%	1,742	▲ 12.8%	2,550	▲ 46.4%	2,275	▼ 10.8%	2,599	▲ 14.2%
Other		3,803	▼ 28.4%	5,780	▲ 52.0%	5,456	▼ 5.6%	3,745	▼ 31.4%	6,261	▲ 67.2%	5,148	▼ 17.8%	9,493	▲ 84.4%
Total	ʻ	150,055	▲ 6.1%	142,825	▼ 4.8%	141,702	▼ 0.8%	164,040	▲ 15.8%	172,693	▲ 5.3%	161,622	▼ 6.4%	193,799	▲ 19.9%

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

\*\*UB Consulting developed a model to estimate total production figures. Thereafter, production estimates by species use an internal working group approximation that was then calculated using an in-house non-linear model. The estimates provided by the working group were collected in 2020.





# Tropical Surimi, Indonesia

Surimi \*\*production estimates from Indonesia suggest a steep decline of about 37 percent in 2021 compared to 2020, decreasing nearly 13 thousand metric tons.

At nearly 21 thousand metric tons, these levels are similar to those registered in 2017, yet they are the lowest since at least 2015. Further, according to our estimates, surimi production of all species experienced a decline.

In terms of trade, volumes from countries declaring imports declined by about 23 percent compared to last year. Although minimal in volume, it is interesting that Japanese imports of itoyori from this country increased by about 33 percent, or 400 metric tons. Imports declared by Malaysia contracted 4 percent or about 300 metric tons.

#### Indonesia's Estimated Production by Species thru Q4

	ltoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon S	eabream F	lying Fish	Other	Total
2015	10,103	3,322	2,572	916	3,047	3,226	1,108	2,422	3,479	30,195
2016	11,200	4,053	3,405	1,783	3,304	3,554	1,434	1,432	2,880	33,044
2017	7,481	2,858	3,164	439	2,597	1,976	799	439	2,207	21,960
2018	9,030	3,209	3,667	824	2,668	2,628	1,372	1,150	2,135	26,683
2019	12,136	4,567	5,494	685	3,425	3,358	685	1,162	2,740	34,251
2020	10,648	4,471	3,027	660	4,115	3,639	660	1,280	4,504	33,004
2021	8,996	2,492	1,813	453	2,266	2,039	453	453	1,813	20,777

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

### **Indonesia's Estimated Production by Species thru Q4**

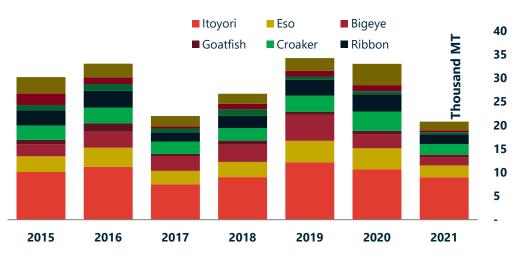


Figure 34. Yearly estimates of Indonesia's surimi production by species.

Reporter Name	Species														
		2015	'15 vs. '14	2016	'16 vs. '15	2017	'17 vs. '16	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '2
Malaysia	All	6,714		6,701	▼ 0.2%	3,431	▼ 48.8%	4,223	▲ 23.1%	5,263	▲ 24.6%	8,198	▲ 55.8%	7,868	▼ 4.0%
Japan	Itoyori	3,749	▲ 7.4%	2,472	▼ 34.1%	2,760	<b>▲</b> 11.7%	1,766	▼ 36.0%	1,425	▼ 19.3%	1,217	▼ 14.6%	1,626	▲ 33.6%
	Other	4,972	▲ 26.4%	4,885	▼ 1.7%	3,372	▼ 31.0%	3,988	▲ 18.3%	2,963	▼ 25.7%	1,830	▼ 38.2%	1,481	▼ 19.1%
	Sardine, Other	5	▼ 44.4%	16	▲ 220.0%	45	▲ 181.3%	29	▼ 35.6%	4	▼ 86.2%				
S. Korea	All	6,312	▲ 10.0%	6,391	<b>▲</b> 1.3%	4,459	▼ 30.2%	3,810	▼ 14.6%	5,005	▲ 31.4%	5,647	▲ 12.8%	4,311	▼ 23.79
China	All	1,975	▼ 32.8%	2,426	▲ 22.8%	2,179	▼ 10.2%	3,479	▲ 59.7%	5,791	▲ 66.5%	7,255	▲ 25.3%	3,253	▼ 55.2%
Taiwan	All	3,850	▼ 27.5%	2,901	▼ 24.6%	1,986	▼ 31.5%	2,437	▲ 22.7%	2,574	▲ 5.6%	2,629	▲ 2.1%	1,764	▼ 32.9%
Thailand	Gogies	1,712	<b>▲</b> 1131.7%	2,522	<b>▲</b> 47.3%	644	▼ 74.5%	1,233	<b>▲</b> 91.5%	3,745	▲ 203.7%	2,703	▼ 27.8%	2,163	▼ 20.0%
	Other	330	▲ 189.5%	152	▼ 53.9%	61	▼ 59.9%	16	▼ 73.8%	49	▲ 206.3%	12	▼ 75.5%	4	▼ 66.7%
Hong Kong	All	184	▲ 64.3%	288	▲ 56.5%	132	▼ 54.2%	178	▲ 34.8%	268	▲ 50.6%	288	▲ 7.5%	329	▲ 14.2%
Australia	All	277	▲ 14.9%	227	▼ 18.1%	87	▼ 61.7%	108	▲ 24.1%	89	▼ 17.6%	92	▲ 3.4%	165	▲ 79.3%
Philippines	All							249		264	▲ 6.0%	198	▼ 25.0%	207	<b>▲</b> 4.5%
Singapore	All	198		64	▼ 67.7%	227	▲ 254.7%			76		104	▲ 36.8%		
Canada	All	41	▼ 33.9%	72	▲ 75.6%	61	▼ 15.3%	50	▼ 18.0%	25	▼ 50.0%				
Other		30	▼ 90.8%	87	▲ 190.0%	60	▼ 31.0%	58	▼ 3.3%	5	▼ 91.4%	9	▲ 80.0%	25	<b>177.8</b> 9
Total		30,349	▲ 35.4%	29,204	▼ 3.8%	19,504	▼ 33.2%	21,624	<b>▲ 10.9%</b>	27,546	▲ 27.4%	30, 182	▲ 9.6%	23,196	▼ 23.19

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

\*\*UB Consulting developed a model to estimate total production figures. Thereafter, production estimates by species use an internal working group approximation that was then calculated using an in-house non-linear model. The estimates provided by the working group were collected in 2020.





# Tropical Surimi, Malaysia

Surimi \*\*production estimates for Malaysia suggest a steep drop of 40 percent or about 3.4 thousand metric tons compared to 2020 to roughly 5.1 thousand metric tons. Production from this country has been on a steady declining trend since 2015..

In terms of trade, volumes from countries declaring imports from Malaysia in 2021 decreased by about 40 percent compared to a year ago. Japanese imports of Malaysian surimi are down nearly 40 percent compared to a year ago.

#### Malaysia's Estimated Production by Species thru Q4

	ltoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon Se	eabream Fl	ying Fish	Other	Total
2015	2,011	2,117	1,102	2,117	1,051	772	386	212	817	10,585
2016	1,873	1,971	1,026	1,971	979	719	359	197	761	9,857
2017	1,460	1,536	800	1,536	763	560	280	154	593	7,682
2018	1,542	1,623	845	1,623	806	592	296	162	626	8,114
2019	2,061	2,169	1,129	2,169	1,077	791	395	217	837	10,845
2020	1,643	1,729	900	1,729	859	631	315	173	667	8,645
2021	1,089	1,140	367	1,140	367	367	160	212	315	5,158

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

### Malaysia's Estimated Production by Species thru Q4

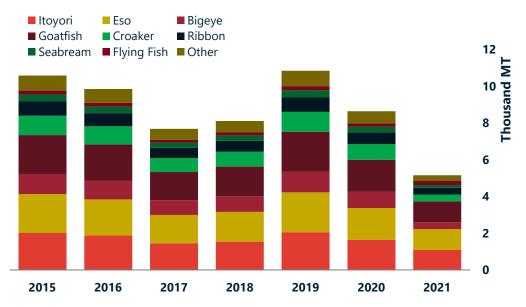


Figure 35. Yearly estimates of Malaysia's surimi production by species.

Reporter Name	Species														
		2015	'15 vs. '14	2016	'16 vs. '15	2017	'17 vs. '16	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Japan	ltoyori	24	▼ 90.1%			48						36			
	Other	8,251	▼ 0.7%	6,485	▼ 21.4%	5,489	▼ 15.4%	4,546	▼ 17.2%	4,734	<b>▲</b> 4.1%	4,661	▼ 1.5%	2,586	▼ 44.5%
	Sardine, Other									44		57	▲ 29.5%	32	▼ 43.9%
China	All	955	▲ 4.6%	915	▼ 4.2%	897	▼ 2.0%	971	▲ 8.2%	933	▼ 3.9%	929	▼ 0.4%	623	▼ 32.9%
S. Korea	All	280	▼ 30.0%	456	▲ 62.9%	268	▼ 41.2%	300	▲ 11.9%	251	▼ 16.3%	1,106	▲ 340.6%	330	▼ 70.29
Thailand	Gogies	279	▼ 29.9%	96	▼ 65.6%			24		574	▲ 2291.7%	25	▼ 95.6%		
	Other			19											
Hong Kong	All	80	▲ 196.3%	29	▼ 63.8%			10		127	<b>▲</b> 1170.0%	315	<b>▲</b> 148.0%	365	▲ 15.9%
Taiwan	All	202	▲ 17.4%	122	▼ 39.6%	164	▲ 34.4%	25	▼ 84.8%	91	▲ 264.0%	78	▼ 14.3%	66	▼ 15.49
Singapore	All	65	▼ 59.4%	92	<b>4</b> 1.5%	66	▼ 28.3%	114	▲ 72.7%	48	▼ 57.9%	40	▼ 16.7%	36	▼ 10.09
Canada	All					34		34	▲ 0.0%	60	▲ 76.5%	34	▼ 43.3%	34	▲ 0.09
Philippines	All							33							
Malaysia	All							11							
Australia	All	1		4	▲ 300.0%					5					
Other				52								75		175	▲ 133.39
Total		10,137	▼ 4.6%	8,270	▼ 18.4%	6,966	▼ 15.8%	6,068	▼ 12.9%	6,867	▲ 13.2%	7,356	▲ 7.1%	4,247	▼ 42.3%

#### Table 31. Countries declaring surimi imports from Malaysia. Source: each country's customs, authority, UB Consulting

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

\*\*Production estimates by species use an internal working group approximation that was then calculated using an in-house non-linear model. The estimates provided by the working group were collected in 2020.





# Tropical Surimi, Pakistan

Pakistan's surimi production estimates suggest an eye-opening 38 percent increase in 2021 compared to 2020. While this number could be relatively skewed due to the disruption caused by the pandemic, production in 2021 surpassed the record-high registered in 2017.

In terms of trade, volumes from countries declaring imports from Pakistan show an increase of about 16.5 percent year-over-year. Of notice is the significant growth of Japanese imports of itoyori, adding nearly 1,500 metric tons.

#### Pakistan's Estimated Production by Species thru Q4

	Itoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon Se	abream Fl	ying Fish	Other	Total
2015	2,084	417	208	208	417	-	208	208	417	4,168
2016	1,782	334	167	167	220	-	167	167	334	3,337
2017	5,468	1,068	534	534	776	-	534	534	1,235	10,684
2018	5,804	1,055	528	528	528	-	528	528	1,055	10,552
2019	5,138	1,000	500	500	671	-	500	500	1,189	9,997
2020	4,317	791	395	395	426	-	395	395	791	7,905
2021	5,738	1,113	557	557	608	-	608	557	1,164	10,899

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

#### Itoyori Eso 12 Bigeye Goatfish Croaker Ribbon 10 Thousands M1 Seabream Flying Fish Other 8 6 4 2 0 2015 2016 2021 2017 2018 2019 2020

### **Pakistan's Estimated Production by Species thru Q4**

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

Reporter Name	Species														
		2015	'15 vs. '14	2016	'16 vs. '15	2017	'17 vs. '16	2018	'18 vs. '17	2019 '19	) vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
S. Korea	All	4,681	▲ 14.8%	3,228	▼ 31.0%	4,040	▲ 25.2%	3,449	▼ 14.6%	2,371 🔻	31.3%	1,955	▼ 17.5%	2,421	▲ 23.8%
Thailand	Gogies	398	▲ 468.6%	142	▼ 64.3%	1,175	▲ 727.5%	3,074	▲ 161.6%	3,647 🔺	18.6%	2,748	▼ 24.7%	3,487	▲ 26.9%
	Other	48	▼ 78.4%	33	▼ 31.3%	19	▼ 42.4%					10		167	▲ 1570.0%
Japan	ltoyori	938	▲ 1.3%	472	▼ 49.7%	1,347	▲ 185.4%	1,336	▼ 0.8%	979 🔻	26.7%	559	▼ 42.9%	1,414	▲ 153.0%
	Other	34	▼ 87.4%	16	▼ 52.9%			122		444 🔺	263.9%	305	▼ 31.3%	312	▲ 2.3%
China	All			34		983	▲ 2791.2%	1,102	▲ 12.1%	2,440 🔺	121.4%	2,169	▼ 11.1%	1,038	▼ 52.1%
Malaysia	All	152		212	▲ 39.5%	260	▲ 22.6%	348	▲ 33.8%	374	▲ 7.5%	247	▼ 34.0%	473	<b>▲</b> 91.5%
Hong Kong	All					25				46		90	<b>▲</b> 95.7%	132	▲ 46.7%
Taiwan	All	43	▼ 14.0%					24		24	▲ 0.0%				
Singapore	All					25						25			
Indonesia	All														
Other															
Total		6,294	▲ 11.2%	4,137	▼ 34.3%	7,874	▲ 90.3%	9,455	▲ 20.1%	10,325	<b>▲</b> 9.2%	8,108	▼ 21.5%	9,444	▲ 16.5%

#### Table 33. Pakistan exports by species. Source: Pakistan's customs, authority, UB Consulting

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.

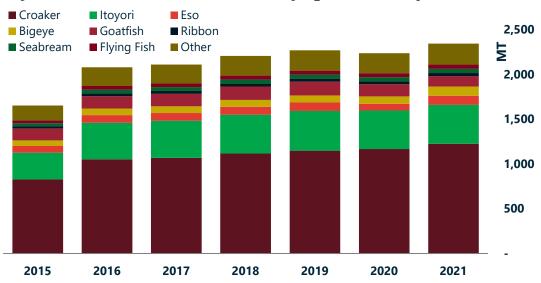
\*\*Production estimates by species use an internal working group approximation that was then calculated using an in-house non-linear model. The estimates provided by the working group were collected in 2020.





# Tropical Surimi, Myanmar

Myanmar's surimi production estimates show an increase of 5 percent year-over-year. This increase suggests recovery after a decline of about 1.5 percent in 2020, likely caused by the pandemic. Current figures align with pre-pandemic averages at about 2,300 metric tons year-over-year. We noticed how Japanese imports of Myanmar's itoyori surimi decreased by about 100 metric tons from a trade perspective.



### Myanmar's Estimated Production by Species thru Q4



#### Myanmar's Estimated Production by Species thru Q4

	ltoyori	Eso	Bigeye	Goatfish	Croaker	Ribbon	Seabream	Flying Fish	Other	Total
2015	299	75	63	133	826	25	33	33	165	1,652
2016	408	87	73	138	1,051	31	42	42	208	2,078
2017	415	87	74	140	1,067	32	42	42	211	2,110
2018	432	90	77	149	1,115	33	44	44	221	2,206
2019	444	94	79	153	1,147	34	45	45	227	2,269
2020	432	74	82	137	1,166	34	45	45	224	2,236
2021	434	103	103	116	1,224	35	47	47	234	2,343

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

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

<b>Countries declar</b>	ing surimi imports from N	Ayanmar f	rom Q1 to Q	4											
Reporter Name	Species														
		2015	'15 vs. '14	2016	'16 vs. '15	2017	'17 vs. '16	2018	'18 vs. '17	2019	'19 vs. '18	2020	'20 vs. '19	2021	'21 vs. '20
Japan	Barrac, Sea Breams, Kingclip					32		65	▲ 103.1%	54	▼ 16.9%	50	▼ 7.4%	22	▼ 56.0%
	Itoyori	515	▼ 2.1%	584	▲ 13.4%	604	▲ 3.4%	582	▼ 3.6%	575	▼ 1.2%	529	▼ 8.0%	434	▼ 18.0%
	Other	361	▼ 44.3%	400	▲ 10.8%	489	▲ 22.3%	664	▲ 35.8%	625	▼ 5.9%	494	▼ 21.0%	500	▲ 1.2%
S. Korea	All	466	▲ 261.2%	863	▲ 85.2%	675	▼ 21.8%	573	▼ 15.1%	511	▼ 10.8%	506	▼ 1.0%	330	▼ 34.8%
Thailand	Gogies			131		111	▼ 15.3%	176	▲ 58.6%	277	▲ 57.4%	57	▼ 79.4%	38	▼ 33.3%
	Other	83										257		498	<b>▲</b> 93.8%
Taiwan	All							63		157	▲ 149.2%	247	▲ 57.3%	456	▲ 84.6%
China	All	173	▼ 57.1%			55		63	▲ 14.5%	50	▼ 20.6%	19	▼ 62.0%	19	▲ 0.0%
Malaysia	All	46		78	▲ 69.6%	112	<b>▲</b> 43.6%			9		64	▲ 611.1%	9	▼ 85.9%
Other		8	▼ 57.9%	22	▲ 175.0%	32	▲ 45.5%	20	▼ 37.5%	11	▼ 45.0%	13	▲ 18.2%	37	▲ 184.6%
Total		1,652	▼ 4.2%	2,078	▲ 25.8%	2,110	<b>▲</b> 1.5%	2,206	<b>▲</b> 4.5%	2,269	▲ 2.9%	2,236	▼ 1.5%	2,343	<b>▲</b> 4.8%

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

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

\*\*Production estimates by species use an internal working group approximation that was then calculated using an in-house non-linear model. The estimates provided by the working group were collected in 2021.





# 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.

We can notice that Japanese imports of Peruvian sardine surimi are up from 640 metric tons in 2020 to 719 metric tons in 2021, or 12 percent. However, this number is considerably lower than in 2019, when production surpassed the 1000 metric ton mark for the year. We have not noticed a seasonal pattern yet.

### Japan importing Sardine, Other surimi from Peru

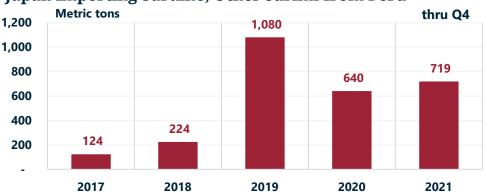


Figure 38. Japanese imports of sardine surimi from Peru. Source: Japan's customs, UB Consulting

### Japan importing Sardine, Other surimi from Peru

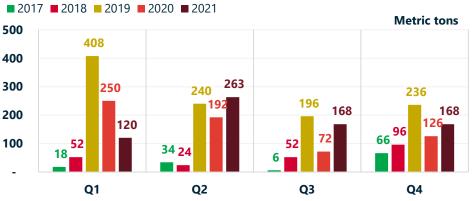
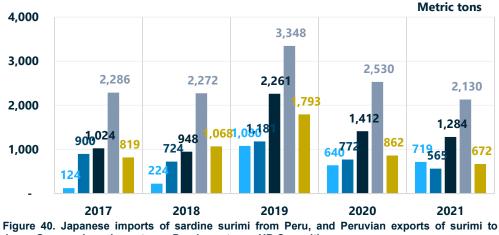


Table 39. Japanese imports of sardine surimi from Peru. Source: Japan's customs, UB Consulting

### Sardine surimi, to Japan, Total

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



Japan Source: Japan's customs, Peru's customs, UB Consulting





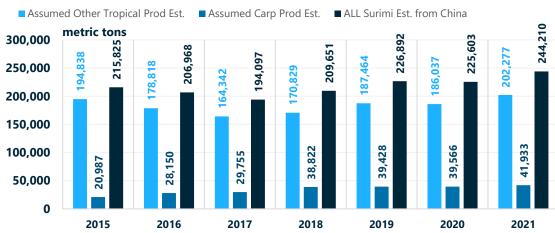
# China, Surimi Production Estimates and Trade



Although we were able to make some 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 follows an upward linear trend; in other words, surimi production is growing for carp and tropical surimi. In 2021, tropical and carp surimi production rose 9 and 6 percent compared to a year ago. This increase represents a recovery from a slight decrease last year due to the pandemic.

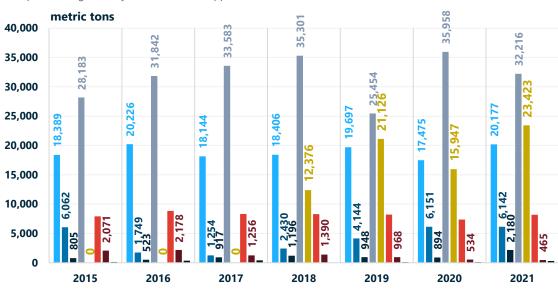
The Philippines' imports of Chinese surimi continue to register substantial gains year-over-year. Japanese imports of Chinese surimi increased 15 percent in 2021, breaking the downward trend over the last five years. Malaysian imports of Chinese surimi increased substantially to over 2 thousand metric tons.



### Surimi Production Estimates, China Total

Figure 41. Production estimates of Chinese surimi. Source: Customs, UB Consulting.

### Surimi Imports from China Total



■ Japan ■ Hong ■ Malaysia ■ Korea ■ Philippines ■ Taiwan ■ Thailand ■ Indonesia

Figure 42. Countries declaring imports of Chinese surimi. Source: Customs, UB Consulting.





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Urner Barry Consulting provides tailored solutions to identify growth opportunities within the fast-paced protein commodity sectors. Combining the expertise of our analytical team, our warehouse of proprietary and trusted data, and unparalleled insight into market forecasting.

### **Contact Urner Barry**

Please contact, Senior Vice President, Chris Ashley (cashley@urnerbarry.com or 732-240-5330) for additional product or subscription related services in the surimi or associated seafood markets and industries.

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Angel Rubio, Sr. Analyst arubio@urnerbarry.com

Akash Pandey, Data Scientist apandey@urnerbarry.com

Chris Ashley, Senior VP cashley@urnerbarry.com



