

World Marketing Trends In Surimi And Surimi-Based Products

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The supply system for surimi in Japan is now changing, to reflect alterations in the international market for this product. Demand for surimi has been on the increase; not only in Japan but also in the USA, Europe, South Korea, Taiwan, Southeast Asia and the USSR. The demand has been mainly for imitation crab stick (ICS) and for products such as fish ball and fried or steamed fish cake. In short, surimi has become an "international commodity".

In 1988, consumption of surimi in Japan was half a million mt but has been decreasing year by year since then, because of a shortfall of supply in Japan, presently estimated at around 350,000 mt. This has been caused by (a) a decrease in the number of large-scale trawlers in Japan, and (b)

increased demand for fish fillet products in the USA, and for imitation crab sticks in South Korea and in Europe.

In 1990 Japanese trawlers produced a total of 54,000 mt surimi in the open ocean in Bering Sea and off New Zealand, as shown in Table 1. The question of how many Japanese trawlers will be permitted to operate in 1991, will be settled by nation-to-nation negotiations.

In 1990, Japanese shore plants produced surimi, not only from Alaska pollack (86%) but also from Atka mackerel, scad, salmon, sardine and others (14%). In 1991, the proportion from Alaska pollock will level off while that from other species will increase (Table 2).

Table 1. Estimated demand for surimi in Japan, 1991.

Produce from	'91 Estimate Quantity	'90 Actual Quantity	91/90 (%)	Projected Future Trend
Unit : mt				
Japan:				
on board	25,000	54,000	46	A big decrease
on shore	200,000	185,000	108	A slight increase
*JV USSR-JAP	10,000	6,500	154	Big increase
USA(**pw)	10,000	13,500	74	Depends on fillet market
IMPORT FROM:				
USA	80,000	125,500	64	Depends on fillet market
	(60,000-100,000)			
Thailand	20,000	20,000	100	Level off or a little decrease
Argentina	6,000	6,000	100	Level off or slight increase
Total	351,000	410,500	85	

* JV = Joint venture, ** pw = Pacific whiting

Table 2. Main fish species for surimi production.

Species	Fishing Ground	Use & Trait	Market Rank
Alaska pollack	Bering Sea, Sea of Japan, Okhotsk	Commonly used for all surimi based products	*A
Pacific whiting (hake)	Off USA west coast	Started to produce in '89; surimi has good gel strength	B-
Polar cod	Off south of NZ and off Argentina	Best whiteness, can get high quality surimi-based product	A
NZ hoki	NZ and south of Australia	Good whiteness and gel strength	*B
Threadfin bream	South China Sea and Indian Sea	No black membrane and tissue	*C
Chilean mackerel (scad)	Off-shore Chile	Good taste, white-grey meat colour	C
Yellow croaker	East & South China Sea	Best gel-strength	A
White croaker	East China Sea	Better gel-strength and whiteness	B
<i>Merluccius</i> spp.	Atlantic ocean off NZ	Good whiteness, quality similar to hoki and pollack	B

* A = Best *B = Better *C = Good

As for Japan - USSR joint ventures, the number of Soviet surimi factory ships stands at four, an increase of 3 over 1990 (Table 5). As a result, an increase in exports of USSR surimi may be expected. The exact total depends on developments in the Soviet domestic market.

In 1990, Japan-USA-Canada joint ventures produced 13,500 mt surimi, mainly from Pacific whiting. This year, American fishing boats will operate independently; Japan has ceased joint ventures with the USA but will continue joint ventures with Canada.

In Thailand, prospects for the use of threadfin bream in surimi production have not changed for the better and, as a result, Thai surimi plants are operating at 60% capacity. More recently, these plants have been using their own surimi to make imitation crab stick; there are now four plants in Thailand doing this.

In Argentina, there will be one more joint-venture factory ship, making surimi from Polar cod and scad.

Surimi Market In Japan And In The World

The United States exerts a strong influence on the world surimi market. The U.S. fish fillet market has now become more stable and South Korean and European imitation crab stick plants are offering good price for USA surimi. As a result, total imports of USA surimi into Japan will be reduced in 1991 compared with last year.

Supply and demand for surimi are now so tight that, since the end of last year, a buyer's market has become a seller's market. U.S. sellers are offering Alaska pollack surimi at ¥360/kg for SA grade, ¥330/kg for FA grade and ¥300/kg for A

Table 3. Surimi-based product plants in Japan.

No. of Worker	<i>Kamaboko</i> Plant	Fish Sausage Plant
Total	2,525	57
1	97	1
2	454	4
3	343	1
4	244	3
5 - 9	628	8
10 - 29	471	5
30 - 49	134	6
50 - 99	89	9
100 -299	52	14
300 up	13	6

grade. These prices are too high for most Japanese buyers, and only South Korean buyers and US domestic users are accepting the surimi.

In the USA, there are 24 surimi processing ships and eight shore plants with a total maximum production capability of 170,000 - 200,000 mt. This year an estimated 40,000 mt of product will go to the USA domestic market, leaving 80,000 mt for export to Japan, 25,000 mt for South Korea, 7,500 mt for Europe and 2,500 mt for Taiwan.

The outlook for the surimi market this year is for continued steady market prices supported by strong world demand for surimi especially for use by the imitation crab stick industry. In Japan itself, however, the local demand is still strong for *kamaboko*, which engages tens of thousands of workers, and for fish sausage (Table 3).

Imitation Crab Sticks

As mentioned earlier, surimi has now become an international commodity used primarily for the manufacture of products such as imitation crab sticks, lobster, scallop, clam, shrimp, and now smoked salmon, other seafoods, Frankfurt sausage and others. These are surimi-based products and surimi has come to be known as the hot dog of the

seafood business. As a result, demand for surimi as a raw material has increased in the USA and Europe.

The first Japanese-French joint-venture factory for processing of ICS in France started in February of 1991 and to this date there are 3 plants in operation. In France the consumption of ICS in 1990 was 8,000 mt compared with only 1,000 mt five years ago. Total consumption of ICS in Europe including Italy, Spain and England was about 30,000 mt last year.

ICS was first introduced to the U.S.A. about 10 years ago and at that time the consumption was only 3,000 mt. In 1990 surimi-based products consumption will exceed 70,000 mt but the export of ICS from Japan to the U.S.A. has been sharply decreasing year by year (Table 4).

Recently, more than 90% of surimi consumed in the U.S.A. was produced within the USA (Table 5). Demand for surimi in Japan is now around 400,000 mt per year, but the quantity available is now decreasing. However, the consumption in other countries is increasing and is estimated to be about 100,000 mt per year. The Soviet Union plans to build surimi plants in the near future and to export surimi and surimi-based products to Europe.

Table 4. Production & consumption of surimi-based products in U.S.A. (mt).

Year	Production	Import from Japan	Consumption
1985	9,000	32,100	41,300
1986	17,900	26,200	44,000
1987	29,000	18,800	51,000
1988	47,700	8,700	61,100
1989	64,000	5,000	68,400

Table 5. Surimi plants (on board & shore) and its output in the world for 1986 - 1991.

Country	JAPAN		USA		KOREA		THAILAND		USSR		JOINT VENTURE	Output
	Ship/Output	Shore/Output	Ship/Output	Shore/Output	Ship/Output	Shore/Output	Ship/Output	Shore/Output	Ship/Output	Shore/Output	Output	
1986	22/101	39/248	-	-	6/9	-	-	3/15	-	-	-	127
1987	21/64	38/220	3/5	3/7	8/13	-	-	5/20	-	-	-	143
1988	41/85	37/202	8/25	4/27	9/14	-	-	8/25	-	-	-	114
1989	39/96	37/201	16/45	5/35	10/9	-	-	11/25	1/9	-	-	57
1990	31/54	37/185	24/95	7/65	11/6	-	-	12/25	1/6	-	-	20
1991	28/25	37/200	24/100	8/80	8/5	-	-	15/30	4/20	-	-	15

Frozen surimi was first developed in Japan in 1959, and a rapid modernization and rationalization of the production systems in the fish-paste products industry in Japan have since been strongly promoted.

up operations. Implementation of the 200-mile zone policy by the USA had resulted in the phasing-out of Japan's fishery operations in the Bering Sea area.

Mr Sakiura also reported that from 1986 to 1988, Japan had engaged in a joint venture with the USA for the production of surimi, and from 1989 to 1991 had been conducting a similar operation with the USSR.

Asked about one worker surimi-based businesses, Mr Sakiura explained that these are single proprietorship ventures which concentrate on the production of fried fish cake sold at outlets near the operator's home.

Discussion

Asked why there was decreasing data reported concerning on-board surimi plants in Japan, Mr Sakiura said he believed that limitations imposed by 200-mile economic zones have caused Japanese trawlers to give