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# Tuna in the international market for seafood

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**SUMMARY** – Tuna is one of the major products in seafood international trade. World tuna landings are around 3.5 million tonnes per year. All tuna fishing countries are involved in international trade. One third of the tuna production is exported as fresh, chilled or frozen fish. The main final markets for tuna are in USA, Japan and the European Union, like for most seafood products. The tuna industry is more and more concentrated, with a very limited number of actors at the marketing level. While the market for canned tuna is stabilized in Europe and recessing in the US, the market for fresh or frozen tuna has good perspectives of development.

**Key words:** Tuna, seafood, international trade.

**RESUME** – "Le thon sur le marché international des aliments de la mer". Le thon est un des produits majeurs du commerce international des produits de la mer. La production mondiale de thon atteint 3,5 millions de tonnes par an. Tous les pays producteurs sont impliqués dans le commerce international. Un tiers de la production de thon est exportée sous forme de poisson frais ou congelé. Les principaux marchés finaux sont au Japon, aux USA et en Union Européenne, comme pour la plupart des produits de la mer. L'industrie thonière est de plus en plus concentrée, avec un très petit nombre d'acteurs au niveau commercial. Tandis que le marché de la conserve de thon est stable en Europe et en réduction aux USA, le marché du thon frais ou congelé apparaît prometteur.

**Mots-clés :** Thon, produits de la mer, commerce international.

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## World tuna production

Tuna is one of the major products in seafood international trade. It accounts for 4% to 5% of the world fisheries and aquaculture production for human consumption.

World tuna landings are around 3.5 million tonnes per year. In spite of an increasing fishing effort throughout the last decade, the landings have been quite stable from 1990 to 1997. Nevertheless, some variations can occur from one year to another and between the different fishing zones. The last three years have been much above the average with a production reaching 4 million tonnes (Table 1).

Table 1. World tuna production by countries (1000 tonnes) (source: FAO Globefish, 2001)

	1995	1996	1997	1998	1999
Japan	628	547	630	659	578
Indonesia	261	298	303	395	414
Taiwan	363	382	354	460	405
Spain	285	252	243	234	306
USA	224	206	205	217	217
Philippines	171	171	177	200	204
Ecuador	58	75	113	116	199
Korea	218	196	212	255	182
France	175	165	138	127	154
Others	1024	1030	1132	1151	1304
<i>Total</i>	<i>3407</i>	<i>3322</i>	<i>3507</i>	<i>3814</i>	<i>3963</i>

The main fishing zones are the Pacific Ocean (65%), the Indian ocean (22%) and the Atlantic ocean (12%). Eastern Central Pacific and Western Indian are the zones where tuna fisheries have recently expanded most.

The commercial name tuna is used for many species, the most important of which are skipjack (2 million t), yellowfin (1.3 million t), bigeye (400,000 t), albacore (252,000 t) and bluefin (80,000 t). Skipjack landings have increased by 80% over the last decade (Table 2). Because of its large size, colour, texture and fat content, bluefin is sought-after and commands a higher price than any other tuna. The Mediterranean bluefin tuna fishery accounts for less than 1% of the total world tuna production.

Table 2. World tuna production by species (1000 tonnes) (source: FAO Globefish, 2001)

	1995	1996	1997	1998	1999
Skipjack	1655	1584	1613	1884	1976
Yellowfin	1115	1083	1213	1252	1258
Bigeye	374	370	387	382	400
Albacore	191	198	217	230	252
Bluefin	72	87	77	66	77
<i>Total</i>	<i>3407</i>	<i>3322</i>	<i>3507</i>	<i>3814</i>	<i>3963</i>

## International trade of tuna

Tuna accounts for more than 10% of the world seafood international trade, and ranks second behind shrimp. All tuna fishing countries are involved in international trade. Three main products that are part of the processing chain of tuna are exchanged: whole raw tuna, tuna loins and canned tuna (Josupeit, 2000).

One third of the tuna production is exported as fresh or frozen fish. Within this category, 10% only is fresh and 90% is frozen. The main exporting countries of fresh and frozen tuna are in decreasing value Taiwan, Korea, Spain, France, Japan and Indonesia (Table 3). Indonesia and Taiwan are specialised in fresh tuna exports flown out by air.

Table 3. Exports of fresh and frozen tuna in million US\$ (1999) (source: FAO Globefish, 2001)

	Value	Share
Taiwan	1190	42%
Korea	292	10%
Spain	254	9%
France	121	4%
Japan	112	4%
Indonesia	107	4%
Others	757	27%
<i>Total</i>	<i>2832</i>	

The main importing countries are by far Japan, then Thailand, USA and Spain (Table 4). Except in Japan where the main use of imported tuna is raw sashimi, these imports are mainly directed to the canning industry. Japan is the first importer of fresh tuna (70,000 tonnes per year). Europe is importing more and more loins because they require less manpower than whole frozen tuna in the canning industry.

As for canned tuna, the main exporting countries are Thailand, Philippines, Ivory Coast and Spain. In spite of a limited fleet, Thailand has become the first exporting country of canned tuna and plays a

major role in production and trade of cans and of loins for other processing countries (Peckham, 1998). Ecuador and Columbia are the main suppliers of loins on the market.

Table 4. Imports of fresh and frozen tuna in millions US\$ (1999) (source: FAO Globefish, 2001)

	Value	Share
Japan	1307	39%
Thailand	724	22%
USA	237	7%
Italy	125	4%
Singapore	99	3%
Spain	87	3%
Others	746	22%
<i>Total</i>	<i>3325</i>	

### The main markets for tuna

The main final markets for tuna are in the triad, i.e. USA, Japan and European Union, like for most seafood products. Japan is by far the first market with more than 600,000 t per year, mainly fresh or frozen. The Japanese market depends on imports since almost 300,000 t are imported each year (Table 5).

Table 5. Imports of tuna by Japan in 1999 (tonnes) (source: Tanabe, 2000)

	Fresh	Frozen
Skipjack	167	76,087
Albacore	397	1,790
Yellowfin	33,405	71,739
Bigeye	24,085	108,831
Bluefin	9,452	9,301
<i>Total</i>	<i>67,506</i>	<i>267,748</i>

The first species on the Japanese market are skipjack, then bigeye and yellowfin. Bluefin is the most desired and expensive species, but in limited volumes. Bluefin market share is only 3% in volume and 10% in value.

The sashimi market is the most important in Japan for tuna and amounts to 500,000 tonnes per year. This market is more and more supplied by frozen tuna, especially for supermarket sales. Fresh tuna imports (70,000 tonnes per year) represent only 25% of the total tuna imports in volume. These imports of fresh tuna which are transported by air are composed of yellowfin (50%), bigeye (30%) and bluefin (15%). The import price of yellowfin and of bigeye is around 5 US\$/kg while the import price for bluefin is around 20 US\$/kg. The price of imported bluefin depends on the origin, with a premium for Spanish farmed bluefin tuna (35 US\$/kg).

The American market which used to be focused on canned yellowfin is more and more eager to buy fresh and frozen tuna, as a substitute to beef steak. Thailand is the main supplier of USA for cans, and Ecuador for loins. There is a drop in the can consumption, with a transfer from can to pouch.

The European market revolves around canned tuna, with a consumption assessed to 500,000 t per year. The four main European markets are Italy, Spain, France and United Kingdom. The market for fresh tuna, mainly albacore and bluefin, is expanding, based on the catering sector, but still marginal and located along the coast. In France, there are more and more imports of IQF tuna steaks from liners operating in the Central Pacific ocean (French Polynesia and New Caledonia).

## Evolution of the tuna market

The tuna industry is more and more concentrated, with a very limited number of actors at the marketing level. These firms have heavily invested in the production and processing sectors, with consequences on the profitability in case of bad economic context. Nevertheless, the tuna market has been able to cope with the Japanese economic recession thanks to the diversity of its outlets: different products (cans, pouches, fresh steaks, ready meals) and different markets (USA, Japan, Europe).

After two years of extremely low prices, the tuna market stabilised in 2001 at a level considered economically viable by the operators, thanks to voluntary fishing bans (Fig. 1). Prices of canning material are expected to stay stable at the present levels, while the sashimi market depends on the quality of the fish and of the demand in Japan.

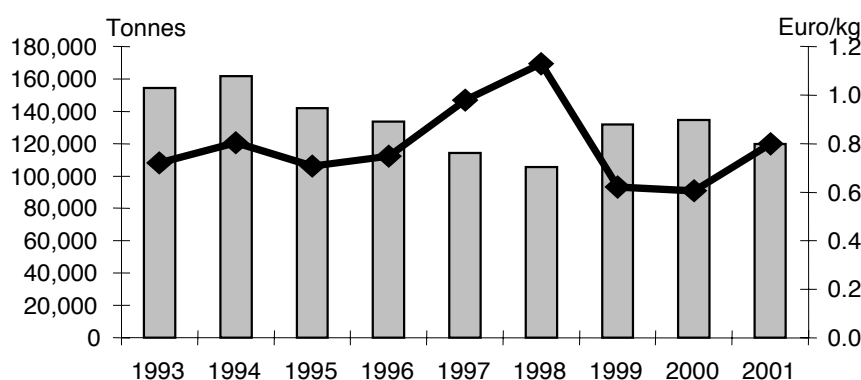


Fig. 1. French frozen tuna landings and price 1993-2001 (source: OFIMER).

## New products for new markets?

While the market for canned tuna is stabilised in Europe and receding in the US, the market for fresh or frozen tuna has good perspectives of development. After a long period of recession, the Japanese sashimi market is improving in volume, although not in price. But the mad cow crisis which has strongly hit the Japanese beef market will likely induce more consumer purchase transfers towards poultry and pork than towards fish on the long term (Katsuyama, 2000). In France, for instance, the positive impact of the mad cow crisis on the market for fresh fish has lasted only six months. That is the reason why the sashimi Japanese market which relies more and more on cheap frozen tuna may not be the only target for farmed bluefin tuna on the long term.

In Europe, the consumption of fresh and frozen fillets of fish has been increasing for the last ten years at a moderate but regular pace, thanks to the development of new species from fisheries like hoki, orange roughy, Nile perch or from aquaculture like tilapia. This market is a wide market of several hundred of thousand tonnes, but with heavy price constraints since the wholesale price of fresh fillets of fish has to be under 6 to 7 US\$/kg.

Indeed, in a situation of saturation of proteins, there is a strong competition between meat and fish products. Therefore, fish has to prove it has a good value for price in terms of sanitary quality, traceability, cooking easiness and nutritional composition. On the European market for fish, a real qualitative effort is required to increase the market share of tuna, as well for fresh products as for processed products. These efforts have to focus on onboard handling and stocking, standardisation, labelling and marketing.

## References

Globefish (2001). *Commodity Update: Tuna*. FAO, Rome.

- Josupeit, H. (2000). An overview of the global tuna trade. In: *Tuna 2000 Bangkok: Papers of the 6<sup>th</sup> INFOFISH World Tuna Trade Conference*, Bangkok (Thailand), 25-27 May 2000. Infofish, Kuala Lumpur.
- Katsuyama, K. (2000). Economic recession and the tuna industry. In: *Tuna 2000 Bangkok: Papers of the 6<sup>th</sup> INFOFISH World Tuna Trade Conference*, Bangkok (Thailand), 25-27 May 2000. Infofish, Kuala Lumpur.
- Peckham, C. (1998). Trade in tuna. *Seafood International*, Nov. 98: 41-45.
- Tanabe, R. (2000). The tuna market in Japan. In: *Tuna 2000 Bangkok: Papers of the 6<sup>th</sup> INFOFISH World Tuna Trade Conference*, Bangkok (Thailand), 25-27 May 2000. Infofish, Kuala Lumpur.