The international trade in marine ornamental fish

By AP Surtida

The ornamental fish trade has an established trading system worldwide. Bassleer (1994) gave a brief inside view about the trade and its main markets. He noted that just like food fish, ornamental or aquarium fish consist of both freshwater and marine species, wild-caught and cultured versions, as well as temperate and tropical varieties. In the trade, 2% are temperate or "coldwater" fish, 98% are tropical fish; 90% are freshwater, 10% marine, and 0.1% brackishwater fish.

The market consists of 99% home hobbyists and 1% public aquaria and research institutes.

The market for ornamental fish can usually be found in high-density industrial areas with cool climate. Examples are countries like: Germany, the Netherlands, France, Japan and the US.

Bassleer further stated that the total wholesale trade value of live ornamental fish is estimated at US\$900 million, freight and packing charges not included. Freight charges constitute up to 50% of the total value of the cost of the fish product. Estimated retail value is US\$3 billion.

Bassleer illustrated the industrial chain which "constructs" the price as follows:



The importer/wholesaler plays a vital role as the link between producer and consumer.

The high price of the ornamental fish is controlled by quality, because the products are all live fish. And only perfect, good, and healthy fish have a market value. The extra cost of quality control in a fish house (both at export and import level) with good water management and trained staff thus adds to the value of the fish.

Here's a factual price comparison between food fish and ornamental fish, and marine and freshwater ornamental fish: pines to supplement their own limited supply and variety. Other markets supplied by the Philippines include: Canada, England, Germany, Belgium, Italy, Spain, France, Australia, Sweden, Switzerland, Australia, Japan, Thailand, and the US.

In 1998, the Philippines exported 5,444,793 kg of live ornamental fish with a value of US\$6,396,100 million (Natl Statistics Office). For Indonesia, the USA is the leading importer of marine ornamen-

Food	Ornamental	Marine	Freshwater
fish	fish	ornamental	ornamental
US\$3 per kg	US\$300 per kg	US\$1,000 per kg	US\$100 per kg

The largest import markets for tropical fish in 1995 (Nambiar and Singh 1997) were:

- European Union--US\$ 96 million
- Japan--US\$ 71 million
- United States--US\$ 49 million

Statistics show that 50% of supply comes from Asia with an estimated 80% pond-raised freshwater fish, 15% marine wild-caught fish and 5% fresh- and brackishwater wild-caught fish (Bassleer 1994).

The rest of the supply comes from South America (30%), Africa, and the Caribbean.

In Asia, the Philippines and Indonesia are the biggest suppliers of marine wild-caught fish. Sri Lanka also exports marine wild-caught fish which constitute about 75% of their export volume.

In the Philippines, the export of marine ornamental fish has been in existence for about 35 years. The Philippines supplies about 70% of the world's marine tropical fish, comprising 340 known species of fishes (Ty 1989). Many of its Asian neighbors like Singapore, Hong Kong and Taiwan have to import from the Philip-

tal fish. Bali is the leading exporter with US\$2 million export value in 1993 for marine ornamental fish. In 1995, Indonesia's total ornamental fish exports was US\$6 million (Dwiponggo 1996).

Sri Lanka has 300 varieties of marine ornamental fish (Madhu 1996). Divers based in Dehiwala, Beruwela, Weligama or anywhere along Sri Lanka's coastline have helped establish a US\$2 million export industry. Lumbini is Sri Lanka's market leader for ornamental fish (Madhu 1996). About 1,000 to 1,200 boxes of ornamental fish from Lumbini go to 40 destinations in 26 countries, bringing Sri Lanka US\$100,000 per month in foreign exchange. The US is the biggest importer. Lumbini has an annual turn over that exceeds a million dollars.

According to recent World Trade Organization (WTO) statistics, global trade in ornamental fish expanded in 1995 by more than 8% (Nambiar and Singh 1997). The European Union (EU) accounts for approximately 40% of global trade in all products. Trade between EU member states alone accounts for 25% of global trade, making the EU the world's leading trade block, a fact to remember also in the orna-

mental fish trade.

The value of the world's ornamental/aquarium industry which includes manufacturing and provides the market with aquarium-related goods such as aquariums, filters, pumps, heaters, lighting equipment, medicines, books, etc. is estimated at 10 times as much as the total retail value of the ornamental fish. The total value of the ornamental trade, therefore, reaches the incredible sum of over US\$30 billion annually (Tomey 1997)!

The ornamental fish trade (marine and freshwater) all over the world provides for the livelihood of millions of people, in the Western industrialized world as well as in the tropical developing countries.

But inspite of the rosy picture, the ornamental fish industry is not without its problems (Fish Mail, June 1992). Among them are:

- Fish losses during capture and transit to importing countries is alarmingly high. On a global basis, losses are thought to be not less than 50%. About 20-30% die during transport due to lack of care on the part of collectors, exporters and importers. Losses from Southeast Asia are the lowest, about 5% while those from South America is about 30%. African consignment suffer even greater losses.
- Prices obtained by exporters have remained virtually static over a number of years. This is due to lack of market information, excessive number of exporters in some countries, the abundant supply available from a few key sources, especially in Southeast Asia, and heavy losses in transit. In addition, air freight rates have also risen in recent years. Clearly, the revenue obtainable from this trade will increasingly depend on economics in breeding and collection of fish for export as well as a determined effort to reduce transit losses.
- Airlines play a vital role in the global ornamental fish trade. For the exporting countries, the selection of export markets is largely dictated by the availability of suitable sites to appropriate des-

Number of people dependent on marine ornamental fish trade for their livelihood

Country	Number
Aruba	350
Cape Verde	60
Djibouti	90
Dominica	110
Egypt	200
Indonesia	7,000
Kenya	600
Malaysia	3,500
Maldives	500
Mauritius	300
Neth. Antilles	170
Philippines	7,500
Singapore	100,236
Sudan	90

Source: NL Chao in Tomey 1997

Total value of marine ornamental fish and invertebrates imported into the EU, 1995

			-
Asia	US\$	6,304,048	
South and central			
America		400,117	
USA		1,058,860	
Africa		555,461	
Kenya		493,361	
European Union		1,863,806	
Others		641,369	
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Total world import US\$ 12,117,022

Source: Nambiar KPP and Singh T (1997)

tinations. Airlines earn about US\$80 million annually from the transport of ornamental fish.

On the average, freight cost represents about 40-50% of landed cost.

 Importing countries have begun to voice concern over the large-scale capture and movement of so many fish, in particular, on its impact. The possible distribution of exotic epizootics is also cause for concern.

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SEAHORSES, an identification guide to the world's species and their conservation by Sara Lourie, Amanda Vincent, and Heather Hall contains all you need to know about seahorses, 214-pages. Published by Project Seahorse (www.seahorse.mcgill.ca) and is distributed by NHBS, 2-3 Wills Road, Totnes, Devon, TQ9 5XN (London, UK). Phone: +44 (1803) 865 913. fax: +44 (1803) 865 280, e-mail: nhbs@nhbs.co.uk, internet: www.nhbs.com
The book costs US\$ 43.42

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