



HOW DOES THE GLOBAL FISH TRADE AFFECT SUSTAINABILITY?

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The international trade in fish and fish products is worth over US\$55 billion per year (FAO 2002a). Fish-related trade has expanded rapidly in the last three decades, with the value of fish imports increasing nearly seven-fold between 1976 and 2001 (Fishstat 2003). Trade has become a driving force in the global fishing enterprise, influencing the species of fish targeted by industrial fleets and aquaculture businesses, the intensity of fishing pressure, and, in many cases, the incentives for fishing either sustainably or destructively.

Indeed, the international fish trade has become one of the frontiers of economic globalization. This raises important issues about whether trade exacerbates the current problems with unsustainable fishing practices or provides an avenue for gradual improvement as fishers are pushed to meet environmental requirements in importing countries.

DOES INCREASED TRADE ACCELERATE THE DEPLETION OF FISH STOCKS?

The rapid rise in the quantity and value of the global fish trade puts it near the center of the debate regarding sustainable fisheries management. Some see increased trade as a driver of fish stock depletion. The reasoning behind this argument is that higher demand for certain fish products translates into greater economic incentive to continue fishing. In many cases, these are the very species already in decline—the high-value demersal, deep-water, or migratory species that consumers prefer, such as cod, Patagonian toothfish, or bluefin tuna. There are a number of instances where this argument appears to hold true. One example is the increasing demand for Patagonian toothfish (Chilean sea bass) in Japan and the United States, which continues to fuel a booming illegal fishing business in the southern oceans that is causing severe declines in this species population.

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Increased market access through trade can also drive severe environmental damage to habitats and ecosystems. For instance, demand for shrimp in developed countries—particularly the United States—contributed to the accelerated expansion of shrimp farms in many developing countries such as India, Thailand, and Ecuador, along with its significant environmental consequences.

Trade also has the effect of further insulating consumers from the environmental impacts of their fish choices and consumption (WRI et al. 2000). Consumers often know little about where the fish they are buying comes from, how it was caught, or what the effects on the fish stock and ecosystem might be, unless the fish is labeled as “sustainably managed.” (See *Box 11-1 Seafood Certification: Incentive for Sustainability*). On the other hand, if destructive practices are involved, or the stock is poorly managed and in a depleted state, consumers won’t know unless adequate labeling is required. In addition, consumers in developed countries will not suffer in the same way that a local community of small-scale fishers might when local fish supplies are depleted. In fact, the nature of trade markets is such that consumers of traded fish will usually have the option of turning to other imported fish species as substitutes for depleted stocks, so there is little incentive to insist on sustainable fishing practices.

On the other hand, trade advocates argue that trade revenue is an essential element of economic growth, particularly in developing nations, and may thus be one foundation of better government management of natural resources such as fish stocks. The hope is that significant foreign earnings derived from the fish trade will translate into greater investment in fisheries management by governments wishing to preserve this income stream. That, in turn, will gradually support more sustainable fishing practices. So far there are only a few examples where this holds true. For instance, when major fish buyers such as Unilever start requesting stricter management standards and measurable sustainable harvest practices from their fish suppliers, countries may strengthen national rules or enforcement practices to keep or attract such a large client (Unilever 2003). Small-scale fisheries can also benefit from increased



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Menhaden being off-loaded to fishmeal factory, Southport, North Carolina, USA.

international trade and access to new markets. A small well-managed fishery that has traditionally been marketed for local consumption can see its market share increase through up-scale niche markets in foreign countries where consumers may demand sustainably harvested fish (MSC 2004).

In some cases, trade can act as a conduit for the spread of better fishing practices. For example, when consumers in the United States became concerned about the high dolphin mortality associated with the tuna catch, fishing practices began to change to satisfy the consumer demand for “dolphin safe” canned tuna. This change affected not only United States tuna fishers, but those from other nations as well, since canned tuna is one of the most heavily traded fish products (Sabatini 2001; Fishstat 2003). Likewise, when the United States adopted a policy requiring the use of turtle excluder devices for all shrimp fishing destined for that country’s substantial shrimp import market, it triggered the adoption of this technology by some shrimp fishers in Southeast Asia (Chokesanguan 2001a; Choudhury 2003).

In the end, the question of whether trade encourages overfishing or is part of its solution cannot be answered with certainty (Dommen 2000). The fish

trade is complex, involving numerous fish stocks and fishing practices, governed by an array of trading policies. Empirical evidence tells us that trade is one factor exacerbating some instances of overfishing, as in the case of Patagonian toothfish. But there are no systematic studies supporting the conclusion that trade is inherently harmful to fisheries.

It is likely that trade simply magnifies the environmental effects of existing fishing practices. Where those practices are harmful, as with some types of trawling or deep water fishing, trade will intensify these effects by expanding the market for fish caught in this way or by providing easy market access to illegally harvested products. But when trade opens new markets for sustainably managed fisheries, it can magnify the benefits of such enlightened management as well. National and international trade policies can be crucial in distinguishing between beneficial trade and trade that harms fish stocks (OECD 2003).

DO INTERNATIONAL TRADING RULES UNDERMINE SUSTAINABLE FISHERY MANAGEMENT?

Trade measures can, in theory, be designed to promote the sustainable use of fish resources. For example, a country can enact trade regulations barring the import of fish that have been illegally harvested or caught in an unsustainable manner. In practice, however, it is not easy to put such restrictions in place without provoking controversy. International trade rules often interpret trade restrictions as barriers to free trade, even when they are imposed for reasons of environmental protection.

The World Trade Organization (WTO) is the main international body regulating the flow of goods such as fish across national borders. A primary goal of the WTO is to facilitate world trade on a fair and equal basis by removing barriers such as import quotas and regulations that favor a country's domestic products. These "protectionist" measures are often set by importer countries to shield their domestic industries from competition with imported goods. Some government subsidies to the domestic fishing industry are also considered protectionist measures (see *Box 8-1* on fishing subsidies).

In order to discourage protectionism, WTO trade rules are built around the principle of "nondiscrimination," which means that countries are not allowed to "discriminate" against imported products on the basis of where they were produced, as long as the end

product looks and performs acceptably. In the case of fish and fishery products, this performance is measured in terms of taste, nutrition, and product safety according to agreed-upon international food standards.⁸ In other words, the nondiscrimination principle says, for instance, that a salmon or shrimp from any country is considered equivalent no matter how it is caught or raised, as long as it looks and tastes right and is safe to eat. This principle however, runs counter to the premise of many national trade policies meant to promote sustainable fishing practices, because the very point of such policies is to discriminate between products that harm fish stocks and marine ecosystems and those that minimize such harm. For example, a country that wants to encourage environmentally sound fishing practices would probably like to impose trade barriers impeding the imports of fish not caught or processed in this manner; under WTO rules this would be considered trade discrimination, and therefore sanctioned under the nondiscrimination principle.

The idea of promoting environmentally sound practices is also the basis of "ecolabeling" programs, which certify as "sustainable fish" products that meet certain environmental standards, allowing marketers to cater to consumers who want to support sustainable fisheries (Downes and Van Dyke 1998). (See *Box 11-1* on seafood certification).

Fortunately, WTO rules contain a safeguard clause (GATT Article 20) that nations may invoke to "protect human, animal or plant life or health, and to conserve exhaustible natural resources" (WTO 2003a). In effect, this clause allows nations to discriminate against trade products in certain circumstances—through process requirements or product bans—in order to protect the environment. Unfortunately, the conditions under which this clause may be applied are very restrictive, making trade regulations with an overtly environmental purpose contentious and sometimes the subject of trade disputes among nations. Since 1995, some eight cases involving

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⁸ There are two key agreements related to the food trade that acknowledge the importance of harmonized international standards so as to minimize the risk of sanitary and other technical standards becoming barriers to trade. These are the Agreement on the Application of Sanitary and Phytosanitary measures (SPS), which ensures proper sanitary measures to protect human health, and the Agreement on Technical Barriers to Trade (TBT), which ensures that technical regulations and standards, including packaging, marking, and labeling requirements do not create unnecessary obstacles to trade. Both agreements were annexed to the 1994 Marrakech Agreement that established the World Trade Organization (FAO/WHO 1999).

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fish products have come before the WTO's Dispute Settlement Body—the official panel responsible for resolving international trade disputes (Helland 2000).

Two of the most notable examples of these disputes involve restrictions on harmful fishing methods enacted by the United States. The first dispute was filed by Mexico, challenging a requirement that canned tuna imported into the United States be caught using “dolphin safe” methods that reduce

the dolphin mortality associated with tuna harvesting. The second dispute was filed jointly by India, Malaysia, Pakistan, and Thailand against a United States import ban on shrimp caught without the use of turtle excluder devices (TEDs) (Downes and Van Dyke 1998). Initially, the ruling in both cases went against the United States, with a determination that these trade restrictions constituted unfair practices. The U.S.-Mexico tuna dispute is being resolved bilaterally under the International Dolphin

Box 8-1: Examining Fishing Subsidies

Government subsidies of the fishing industry have received much attention by both free trade advocates and environmentalists. Many trade proponents hold that fishing subsidies provide an unfair advantage to the fishing industry in those countries where subsidies are high, reducing the costs of fishing and allowing fishers to charge lower prices for traded goods. This, in turn, helps them out-compete unsubsidized fishers from other countries.

Environmentalists consider many government fishing subsidies to be a leading factor in the excessive size or capacity of the world's fleets, and thus a key driver of overfishing. A 1996 analysis by FAO estimated that 30–40 percent more fishing capacity exists in the world's fishing fleets than the oceans' fish stocks can withstand (Garcia and Grainger 1996), and subsidies have played a large role in financing fleet expansion.

While the arguments for curbing “excessive” fishing subsidies have been around for some time, progress in tackling the problem has been slow. In part this reflects the political difficulties that governments frequently face when they attempt to curtail benefits to politically powerful groups. In addition, several basic questions about the nature and effect of subsidies remain unresolved, the answers to which are critical to effective action on subsidies. These questions include the following:

- What defines a fishing subsidy?
- Which subsidies are detrimental to sustainable fishing?
- Which subsidies are harmful from a trade perspective and what is the WTO's role in the subsidies debate?

What Defines a Fishing Subsidy?

Despite years of discussion, there is no universal agreement on what defines a fishing subsidy (FAO 2002a). In general, subsidies can include a variety of forms of government assistance, ranging from direct payments to the fishing industry to indirect aid such as building harbor facilities for fish handling, or supporting research on new fishing gears. One useful classification scheme adopted by the Asia Pacific Economic Cooperation (APEC), a regional development and trade organization, divides fishing subsidies into six categories:

- *Direct assistance to fishers and fishery workers*, such as supplemental income support payments, unemployment insurance, and support for training in alternative employments.

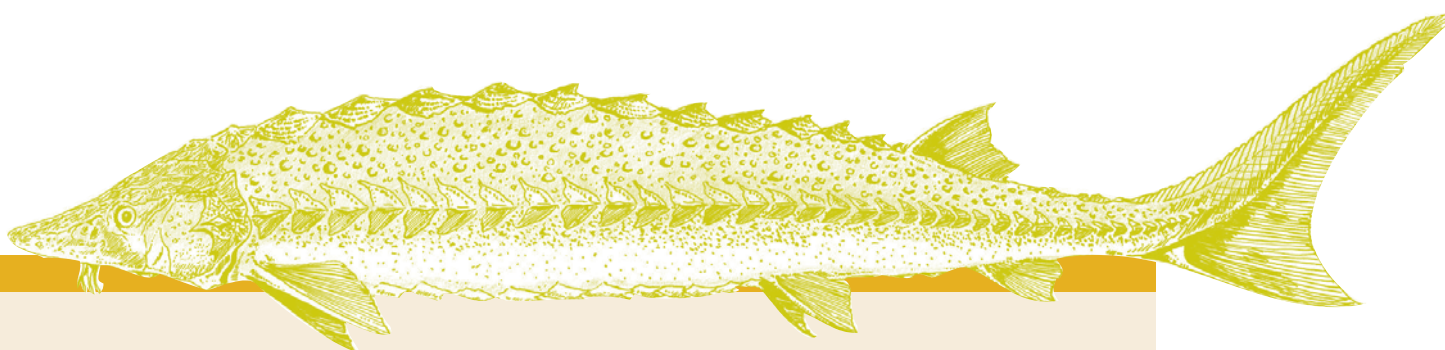
- *Lending support programs*, such as government-funded loans, loan guarantees, or lower interest rates on loans to purchase boats or equipment.
- *Tax preference and insurance support programs*, such as fuel tax exemptions, income tax deferrals, and government-funded vessel insurance.
- *Capital and infrastructure support programs*, such as grants to purchase or modernize vessels, access fees to the fishing waters of other nations, bait services, and the construction of harbor facilities and other port infrastructure.
- *Marketing and price support programs*, such as export marketing support, advertising and promotion of seafood products, and minimum price supports for certain species or products.
- *Fisheries management and conservation programs*, such as vessel buy-back programs, stock enhancement efforts, general fisheries management and enforcement actions, and research and development.

While useful, APEC's classification scheme is not universally adopted, and other definitions and accounting systems for quantifying subsidies are currently in use. Consequently, it is difficult to say exactly how much governments spend on subsidies to the fishing industry. One rough estimate is that global fishing subsidies total at least US\$15 billion per year (WWF 2001). Japan reports by far the largest figure, spending over US\$2 billion annually, according to an OECD study (OECD 2000).

Which Subsidies Are Detrimental to Sustainable Fishing?

Not all fishing subsidies damage ecosystems or contribute to overfishing. It is often unclear which specific subsidies are harmful, or how harmful they may be, particularly in the case of indirect subsidies like port improvements or government-sponsored trade promotions. And some subsidies can be highly beneficial to small-scale fishers. In Japan, for instance, government subsidies since the 1950s have helped raise the level of income of small-scale fishers in coastal communities.

But there are a few types of subsidies that clearly contribute to overfishing. One is the group of subsidies that encourages continued growth of fishing fleets, even when fish stocks are already overexploited by existing capacity. These subsidies



often consist of grants or low-interest loans to purchase or upgrade fishing vessels. They were originally conceived by governments as incentives to develop their industrial fishing sectors, but have not been withdrawn even though most national fleets in the developed world suffer from overcapacity. Some fishing subsidies doled out in developed countries actually have a negative effect on small-scale fishers in developing countries (see *Chapter 10* for further discussion on conflict between large and small-scale fleets).

Another questionable subsidy is fishing access payments. These are fees that one government pays to another for access to its Exclusive Economic Zone (EEZ). The best known example is the access fees that European governments pay to allow European boats to fish in West African EEZs (see *Box 10.1* on the fishing conflict between EU fleets and West African fleets). The European fleets have been criticized for depleting West African fish stocks, but proponents of the fees claim that they provide much-needed revenue to the governments of many West African countries (WWF 2001; Kaczynski and Fluharty 2002).

In contrast to these harmful subsidies, some government-subsidized programs clearly contribute to better fisheries management. For example, well-designed “vessel buy-back” programs, where the government pays fishermen to retire fishing vessels, can help shrink the size of the fishing fleet and reduce pressure on fish stocks. And government-sponsored research on fishing gear and methods can improve the selectivity of the gear and refine how best to deploy it to cut down on bycatch and waste (see *Chapter 11* for further discussion on management practices). Government support is also essential for many other aspects of advanced fishery management and conservation, such as research into better stock assessment methods.

How Do Trade and the WTO Figure Into the Subsidies Debate?

When WTO member nations opened the current round of trade negotiations in Doha, Qatar in 2001, they agreed to try to clarify the WTO rules with regard to fishing subsidies (WTO 2001). By taking on this subject, the trade negotiations could play a significant role in changing how national fisheries are

managed. Action at that level could simultaneously meet both a WTO goal—removal of trade barriers—and a fishery management goal—a decrease in fishing overcapacity.

But the WTO’s role in addressing the problem of fishing subsidies should not be exaggerated. Not all fishing subsidies are relevant to international trade, and so only a subset of them fall within the WTO’s mandate. Only those that create conditions of trade distortion can be challenged through the organization’s Dispute Settlement Body, and are likely to be subject to elimination through trade negotiations (WTO 2003c; OECD 2003). For instance, grants to upgrade vessels fall within WTO’s definition of a trade-distorting fishing subsidy, while government-to-government payment of fishing access fees may not (WWF 2001).

From the perspective of sustainable fishing, some types of trade-related subsidies should be removed right away, such as loans to expand boat capacity. But other subsidies that benefit the environment may actually need to be shielded from WTO action, such as loans to reconfigure boats to use environmentally friendly fishing gear. Finding the balance between removing trade-distorting subsidies and preserving subsidies that help manage the resource sustainably will be a major challenge.

Certainly WTO cannot be the only venue where the discussion about modifying fishing subsidies takes place, given the organization’s limited mandate. Other intergovernmental groups can also provide appropriate forums for action. The WTO has already held meetings with such organizations as FAO, the United Nations Environment Programme (UNEP), OECD, APEC, and the United Nations Conference on Trade and Development (UNCTAD) to coordinate their work on subsidies (FAO 2002c). The FAO’s International Plan of Action (IPOA) on fishing capacity already calls on FAO member governments to eliminate subsidies that create excess fishing capacity (FAO 1999e), but the voluntary nature of the IPOA limits its implementation. In the final analysis, decisions regarding how to apply subsidies to fisheries rest with national governments, but these decisions are influenced by international organizations, environmental groups, and other interest groups.

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Conservation Program. (See *Chapter 7* for further discussion on dolphin bycatch).

The dispute concerning shrimp imports was ultimately settled in favor of the United States after this country clarified its regulation to make sure that it was applied broadly to all nations, and not targeted to just a few nations selectively (USTR 2001). In the meantime, a number of countries have implemented programs to introduce the use of TEDs in shrimp trawlers to accommodate the U.S. requirement (Chokesanguan 2001a), a testament to the potential impact that environmental trade policies can have when they are allowed to stand.

While the shrimp/turtle case shows that trade and environmental rules can sometimes be compatible, it should not be interpreted too broadly. In general, the WTO's mandate only deals with environmental matters tangentially, and many nations still see environmental trade restrictions as thinly veiled protectionism, and actively discourage them. In addition,

the international trading system provides an awkward platform for making and enforcing fisheries policies. While there are international standards to ensure that the world's food supply is sound, free from adulteration, and safe to eat,⁹ the existing standards do not address fishery resource exploitation, nor does any panel of experts exist to advise the WTO on fisheries-related policies. This makes it difficult to interpret WTO rules and resolve disputes as they relate to sustainable fishing practices.

Another possible source of conflict between trade and environmental policies revolves around the status of international environmental treaties such as the Convention on Trade in Endangered Species of Wild Fauna and Flora (CITES), or the United Nations Fish Stocks Agreement. These treaties, negotiated and signed by the international community, explicitly include trade restrictions designated to achieve environmental ends, with sustainable fisheries being one of those ends. Nonetheless, their implementation is not harmonized with WTO's international trading rules. In fact, they could be challenged as unfair trade practices within the WTO system by WTO member countries who have not signed these environmental agreements.

To date, this has not occurred, and there is little indication as to how the Dispute Resolution Body might rule if they were challenged. The surest way around this potential difficulty would be for the WTO to explicitly recognize the authority of these international agreements and clarify how they fit into or conflict with WTO rules. Steps to begin this process are supposed to take place as part of the current round of international trade negotiations (called the "Doha round") (WTO 2003b).

The current round of trade talks also includes a discussion of national fisheries subsidies, which many see as unfair government support for the fishing industry, and thus an unfair trade practice (Dommen 2000). Action to eliminate some subsidies could be a significant step toward both fairer trade and more sustainable fisheries—an example of trade and environment in alignment. However, (as of 2004) the Doha round of trade talks is stalled, and the fishery subsidies discussion has been curtailed for the time being (see *Box 8-1*).



Fish from all over the world are sold at the Tsukiji fish market in Tokyo, Japan.

⁹ The Codex Alimentarius Commission (Codex) or food code was established in 1963 as a joint FAO/ World Health Organization commission to protect the health of consumers and ensure fair practices in the food trade. The Codex Committee on Fish and Fishery Products in particular seeks to ensure that the world's fish supply for food is sound, wholesome, free from adulteration, and correctly labeled. The SPS and TBT agreements, have adopted the Codex standards as scientifically justified norms for international trade (FAO/WHO 1999).