

3.0 WORLD SUPPLY AND MARKET CONDITIONS

BC seafood production is primarily an export industry that competes with other seafood producers from around the world. It is affected and shaped by broad industry trends, consumer and market preferences, and regulatory and trade issues.

The discussion that follows draws on a variety of sources, including: a seafood market survey conducted for this study (GSGislason & Associates 2003); a seafood market report prepared for the Office of the Commissioner for Aquaculture Development (HM Johnson & Associates 2002); a recent book on international seafood trade (Anderson 2003); and an analysis of international seafood trade and non-trade barriers (OECD. *Liberalising Fisheries Markets: Scope and Effects*, 2003).

3.1 Worldwide Supply and Production Patterns

Aquaculture has accounted for almost all of increased fisheries production since the late 1980s.

World fisheries production, both capture and aquaculture, reached 142 million tonnes in 2001, up from 100 million tonnes in 1987 (see Exhibit 9). Virtually all of the increase in fisheries production since the late 1980s can be attributed to the growth in aquaculture production.

Of the 2001 production, 94 million tonnes came from the capture fishery and 48 million tonnes came from aquaculture. More than half of total world aquaculture production is finfish. The Food and Agriculture Organization (FAO) of the United Nations estimates global fish supply at 13.1 kg per capita in 2000 (FAO 2002).

3.1.1 Capture Fisheries

BC has a very small share of global capture production.

China's fisheries account for about 20% of world capture production. Other top producing countries include Peru, Japan, the United States, Chile, Indonesia, Russia, and India. Canada's production, at about 1 million tonnes, is 1% of the world total. BC's production of 0.2 million tonnes is 0.2%.

The major species harvested in capture fisheries are anchovies, pollock, herring, tuna, and mackerel. Salmon, with harvests totalling about 0.84 million tonnes in 2001, does not rank in the top ten species (see Exhibit 10). BC produces about 3% of world salmon supply.

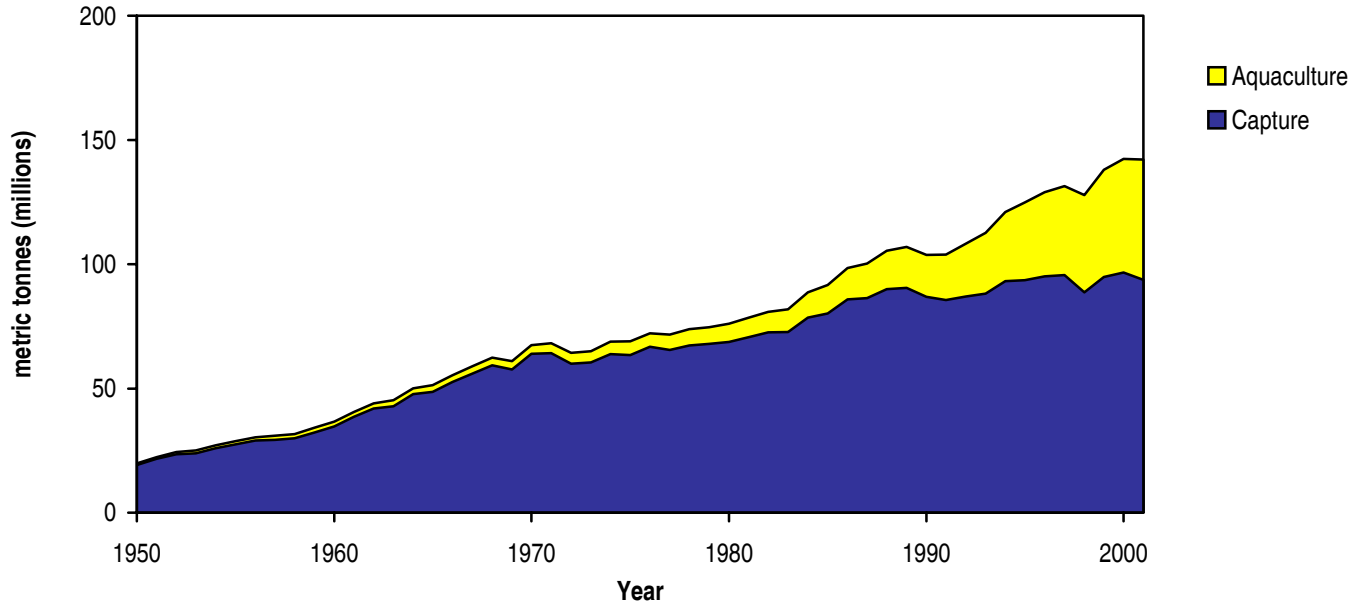
Most of the increase in capture fisheries in recent years has come from fisheries in the Southeast Pacific, with other Pacific areas showing decreasing catch trends. However, there are growing concerns about the reliability of seafood production statistics, particularly those from China.

3.1.2 Aquaculture Production

Increased world seafood supply will come from aquaculture.

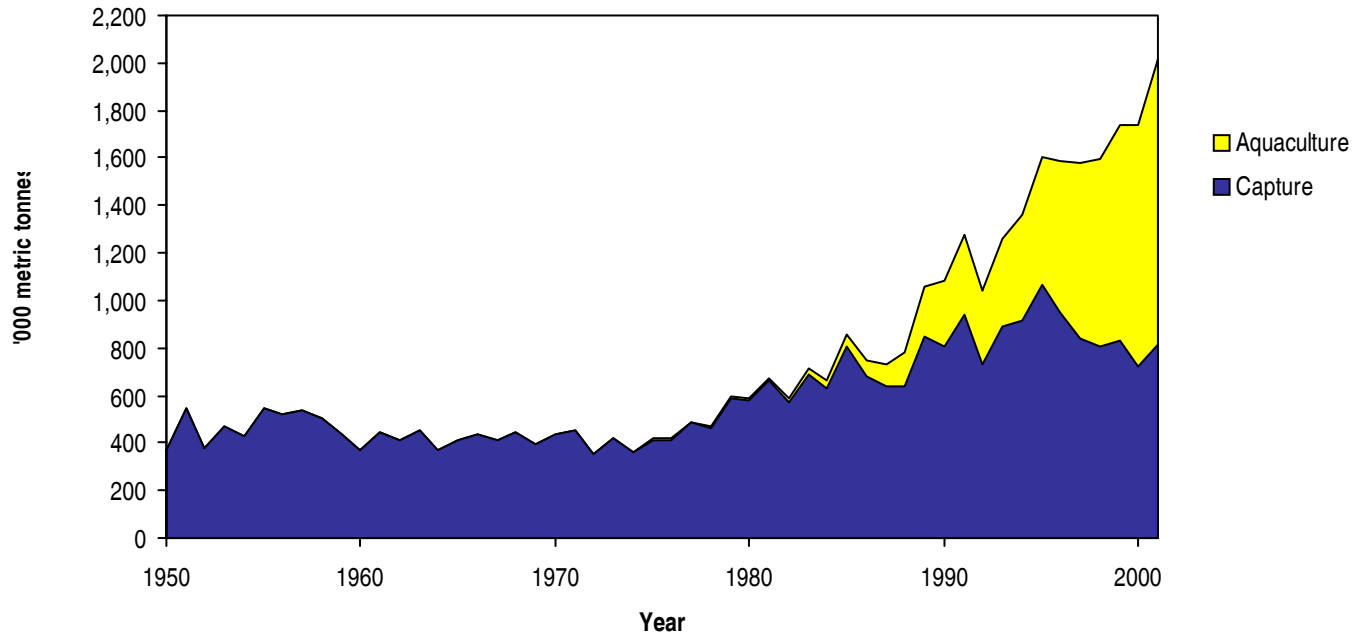
FAO predicts that total seafood demand will reach 160 million tonnes or more by 2030 (FAO 2002). According to the FAO, capture fisheries have peaked and cannot be expected to contribute additional quantities to the world seafood supply. Therefore, new seafood supplies must come from aquaculture. Currently accounting for one-third of all seafood landed globally, aquaculture may comprise more than one-half of global fish consumption by 2030.

Exhibit 9: World Fisheries Production - 1950 to 2001



Source: FAO

Exhibit 10: World Salmon Production - 1950 to 2001



Source: FAO

Globally, BC is also a small aquaculture producer.

China is the world's leading aquaculture producer, with current production exceeding 25 million tonnes annually (and dominated by carp for the domestic market). Other leading producers – India, Indonesia, Thailand, Bangladesh, and Vietnam – each produce no more than three million tonnes per year. Canadian production (0.2 million tonnes) and BC production (0.1 million tonnes) are minuscule relative to the global total.

World aquaculture is dominated by carps, oysters, salmonids, scallops, and tilapia. Total production of farmed Atlantic, chinook, coho and other salmonids has grown dramatically from almost zero in 1980 to about 1.2 million tonnes today. BC produces about 5% of the global farmed salmon supply. Chile and Norway both produce in excess of 300,000 tonnes of farmed salmon annually.

3.1.3 Production Trends

Refrigeration and Transportation Technology

Prior to the mid-20th century, food production and consumption were primarily functions of location. Since then, refinements in refrigeration technology and reductions in transportation costs, combined with trade liberalization and harmonization, have encouraged global production and distribution of food products. Consumers are able to purchase food products originating from different continents or hemispheres depending on season, product availability and market demand.

Refrigeration and transportation improvements have aided globalization of food production.

Advances in technology and transportation have helped increase world trade in perishable food products. Shippers can deliver perishable products to consumers thousands of miles away, with little loss of freshness and quality, and at lower and lower prices. Innovations in handling and advances in packaging methods can maintain product freshness and quality. For example, individual quick freezing (IQF) of small products, such as shrimp and scallops that have a tendency to clump, locks in moisture and allows for easier portioning and thawing.

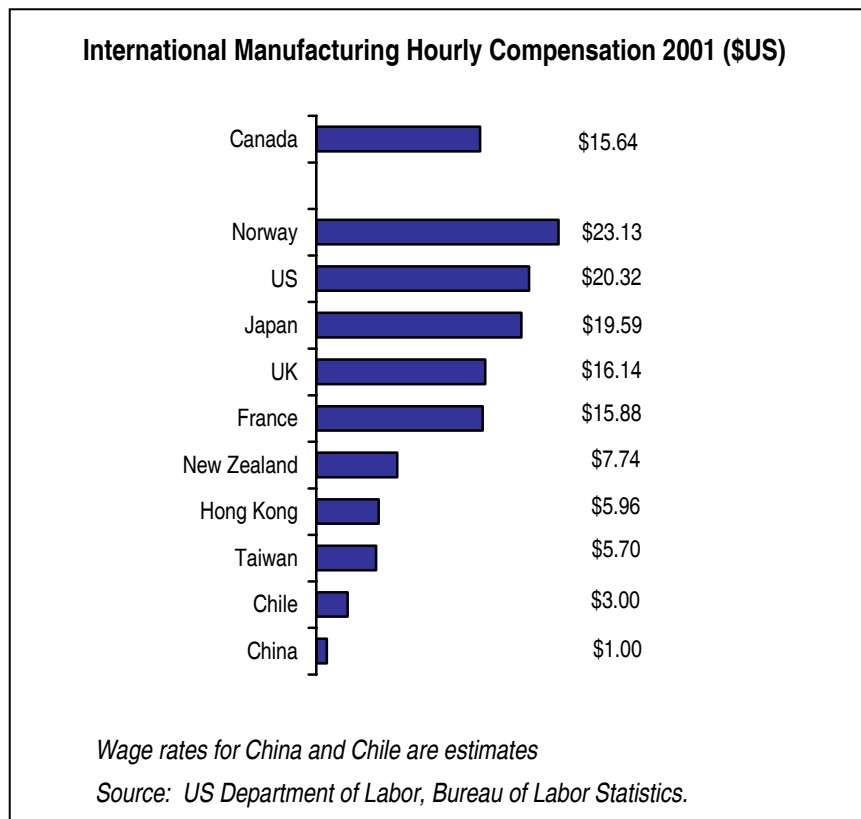
Another innovation is modified atmosphere packaging (MAP), packaging that replaces air with carbon dioxide or other gases to inhibit the growth of bacteria. MAP, together with careful temperature control, can increase the shelf life of seafood by two to three times, and can help send fresh product to the market or consumer in better condition.

Seafood Processing

Processing, too, is being globalized.

Processing is also becoming a global phenomenon. Better refrigeration and transportation technology means that processing no longer needs to occur close to harvesting locations. For example, China has emerged as a major fish processing nation. Raw material from anywhere in the world can be frozen and shipped to China, where the product is thawed, processed in labour-intensive plants and refrozen for shipment back to North America at competitive prices. Some North American processors, such as Fisheries Products International (FPI), are also using imported frozen raw material. The quality and acceptability in the marketplace of such twice-frozen seafood is growing.

Low wages and an enormous labour supply give Southeast Asia and China in particular a significant cost advantage over North America in labour-intensive manufacturing processes. This applies not only to seafood but also textiles, electronic equipment, toys and other manufactured goods.



Value-Added Production

Value-added seafood products are growing in the marketplace.

Value can be added to seafood through further processing to create products that offer consumers greater convenience and/or a greater range of product choices. Value-added products can range from simply portioned seafood (e.g., salmon fillets) to more processed products, such as seasoned portions, smoked salmon, surimi and crab cakes.

The poultry industry has embraced the concept of value-adding. Twenty-five years ago, almost all chicken was sold as whole eviscerated birds. Today, whole birds are a minor share of sales with portions, nuggets and other traypack items dominating the market.

Many attempts at value-added production fail.

At the same time, there are numerous marketing challenges to value-added products, including the tremendous competition and cost to gain shelf space in supermarket outlets. Most attempts to add value to seafood products actually result in additional cost to the producer and ultimately do not succeed in the marketplace (HM Johnson & Associates 2002). Producers often fail to understand the size of the market, the appropriate market segment(s), and/or consumer preferences.

Packaging can add value to food products.

Value-adding can also entail packaging, with minimal to no traditional processing of the product. For example, BC Hothouse, the main marketing arm for the BC vegetable greenhouse industry, emphasizes packaging for their whole product lines (e.g., blister packs of tomatoes on the vine and “stop light packs” of red, yellow, and green peppers). Packaging provides an opportunity for branding.

In the case of seafood, live shipments of fish and shellfish to market (e.g., live geoducks to Hong Kong, live rockfish to the Pacific Northwest) constitute value-added, even though the fish products do not change form.

Competition

Seafood producers face highly competitive markets.

Markets have become much more competitive especially for producers still selling commodity products. Global food distribution has changed significantly, with substantial consolidation at the food distribution and retail levels. Retail discounters and wholesale clubs such as Costco have emerged, own label brands by retailers have become more important, and the balance of power has shifted from food manufacturers to food retailers. The result has been increasing price pressures and squeezing of margins for food manufacturers and producers.

There is greater competition for “centre-of-the-plate” protein. Many large broadliners, such as SYSCO and Tyson, sell a whole array of protein products and not just seafood. Although each protein line has different attributes, purchase decisions are increasingly made on the basis of consistency of availability, quality and price.

Cooperation

To supply final consumers with food products of consistent volume and quality, and at competitive prices, requires cooperation between agents in the value chain (i.e., harvesters/growers, processors, wholesalers and retailers). One form of cooperation is vertical integration and ownership of business at different stages of the chain. Others are forward supply contracts and the formation of producer groups and marketing organizations. Poultry producers generally have much greater value chain cooperation than do seafood producers, especially those in capture production.

Branding of Seafood

A lack of packaging makes seafood branding difficult

Most food branding occurs for packaged goods. Branding involves delivering a product that matches the image or promise one is trying to convey. The development of a brand without consistent supply and quality as well as product grading, is extremely difficult. For these reasons, with a few exceptions (e.g., Gold Seal and Highliner), branded seafood products are rare.

Self-Service at Retail

Self-service and “case ready” seafood are growing in popularity.

Traditional supermarkets and retailers are under tremendous pressure to compete with the low prices and margins of discount chains such as Costco and Wal-Mart. The clear trend is towards more self-service and “case ready” seafood. Self-service cuts labour costs and in-store space requirements, and creates the need for packaged seafood. Packaging, in turn, creates labelling and branding opportunities and facilitates product traceability and adherence to regulatory requirements (see Sections 3.3.3 and 3.3.4).

3.1.4 Trade Patterns

Currently, a third or more of the global seafood supply is traded internationally.

International Exports

BC's share of global seafood exports has fallen.

Total international seafood exports grew by \$US 39.4 billion between 1980 and 2000. Canadian exports grew by \$US 1.7 billion, and BC exports by \$ 0.3 billion, over the same period. As a result, both Canada's and BC's rankings among world seafood exporters have fallen during the past two decades.

	Seafood Exports (\$ US billions)		
	1980	1990	2000
BC	0.4	0.8	0.7
Non-BC	<u>0.7</u>	<u>1.4</u>	<u>2.1</u>
Canada	1.1	2.2	2.8
Chile	0.3	0.9	1.8
China	0.3	1.3	3.7
Denmark	1.0	2.2	2.8
Indonesia	0.2	1.0	1.6
Norway	1.0	2.1	3.6
Thailand	0.4	2.3	4.4
US	1.0	3.0	3.1
Other	<u>10.1</u>	<u>20.4</u>	<u>31.0</u>
Total	<u>15.4</u>	<u>35.4</u>	<u>54.8</u>

The countries showing the largest growth in exports are those with significant aquaculture sectors – for example, Norway (salmon), Chile (salmon), China (tilapia and carp) and Thailand (shrimp) – or those conducting significant seafood processing of imported raw material (e.g., China, Indonesia, Denmark).

International Imports

Canada is a net seafood exporter.

The largest seafood importer is Japan (\$US 15.7 billion in 2000), followed by the US (\$10.6 billion). Currently, the value of Canadian seafood exports (\$US 2.8 billion) is double that of Canadian seafood imports (\$US 1.4 billion). Thus, Canada is a net exporter, with a positive merchandise trade balance in seafood. In contrast, the US is a net importer and its seafood trade deficit is growing over time.

3.2 Consumer Trends

3.2.1 Demographics and Food Trends

Population Growth

Future demand for seafood is expected to grow with population and rising incomes in developing countries. FAO estimates that given current fish consumption patterns an

additional three million tonnes of fish will be required annually to meet the demands of increasing world population.

Population Aging

Health benefits from seafood are appreciated by older people, and increasingly by younger consumers.

An aging population in North America and in Europe is spurring seafood consumption, as older people tend to consume healthier foods, including fruits, vegetables, and seafood. Awareness of the health benefits of seafood consumption is growing even among younger consumers. Increased consumption of seafood high in omega-3 fatty acid has been shown to help reduce high blood pressure, ensure a healthy heart, and develop and maintain brain functioning.

Consumer Awareness of Healthy Foods

Consumers are placing more value on fresh, quality food products.

Consumer awareness and interest in fresh, quality food products is also on the rise due in part to the popularity of television cooking shows, celebrity chefs, and health and nutrition books. Improvements in transportation and the demands of growing and diverse immigrant populations in North America have helped to ensure that a wider range of international food products, including fresh and frozen seafood, is readily available in the market. For example, the growing Asian population in North America has led to increased sales of live seafood in restaurants and supermarkets.

Convenience

Smaller families, two working parents, greater urbanization and a faster pace of life mean that consumers are pressed for time. Busy consumers are looking for fresh chilled fish products and for a variety of higher-valued, more processed products that are easy to prepare and serve (e.g., “heat and serve” protein, bagged pre-cut vegetables). This applies not only to the home consumer but also to institutions and restaurants that are having difficulty in finding workers and need food that is ready to cook or serve.

Higher Personal Incomes

Income levels are rising rapidly in many developing countries and, consequently, consumption of seafood (and other proteins) is growing. With higher incomes, consumers are also placing greater emphasis on convenience and making more food purchases away from the home.

Modernization is changing Chinese seafood consumption.

For example, the recent boom in China’s economy is changing the way consumers buy seafood. Traditionally, Chinese consumers shopped at open-air markets or “wet-markets” for fresh fruits and vegetables and live seafood for cooking later in the same day. Now, urban dwellers are acquiring refrigerators and microwaves in the move to modernization. Updated food distribution systems are also changing the Chinese diet, with supermarkets offering more processed and convenient fare but fewer live fish and animals.

Changing Consumer Tastes

Consumer tastes have changed in Japan.

The Japanese seafood market has shifted resulting in long-term repercussions for the industry. Consumer tastes have changed, with a growing preference for red meat and the acceptance of farmed fish as a substitute for wild fish. Younger people have different tastes and consumption patterns than their parents. The country’s continuing weak economy has also adversely affected prices.

In North America, per capita consumption of red meats has fallen while consumption of pork and poultry is much higher than 25 years ago. Per capita fish and seafood consumption has been generally flat, although consumption has increased for some products (e.g., salmon) and decreased for others (e.g., cod) over the past decade. Battered fish sales are down while sales of fresh fish, boneless portions and fillets are up.

3.2.2 Quality and Safety

Food Quality

Quality and safety considerations are high on the list of consumer preferences. Consumers are increasingly choosing fresh fish over frozen product and seeking out local foods as much as possible. In almost every survey of seafood consumers, fresh is preferred to frozen (see for example Belknap ASMI 2000).

This interest is also driven in part by the popularity of television cooking shows and the growing appreciation of healthier foods. In addition, there is greater demand for quality assurance and date stamping of products to ensure freshness.

At the same time, there is also significant consumer demand for high quality frozen products and products made from previously frozen raw material, e.g., packaged, ready-to-cook convenience items.

Food Safety

Concern for food quality and safety has heightened following the outbreaks of bovine spongiform encephalopathy (BSE), or “mad cow” disease, first in the UK and Europe and then more recently cases in Canada and the US. These highly publicized incidents may lead to lasting changes in consumer perceptions and food purchasing patterns.

Markets are demanding tougher food safety standards and product traceability

Food safety risks include drug and pesticide residues, food additives, pathogens (e.g., bacteria, viruses, parasites, fungi), environmental toxins (e.g., lead, mercury) and persistent organic pollutants (e.g., dioxins). Although scientists generally consider food safety risks to be low, consumers in developed countries are demanding more stringent food safety standards while at the same time requiring a wide variety of internationally traded products. Food safety issues are also leading to greater requirements for product traceability and country-of-origin labelling (see Section 3.3).

3.2.3 Sustainability and Other Environmental Issues

Consumers, especially in developed countries, are also increasingly concerned about environmental sustainability, biotechnology and other issues related to the sources and handling of their food.

Seafood Lists

Listing of unsustainable seafood products can be arbitrary and misleading.

In supermarkets and restaurants, a growing number of consumers are carrying lists of seafood species (e.g., Chilean seabass) to avoid for lack of sustainability reasons. Environmental advocacy groups such as the Sierra Club, the National Audubon Society, the Monterey Bay Aquarium, and Environmental Defense prepare these lists, but the criteria for listing are not always clear. The difficulty with seafood is that there are many different fish species available in different locales. As in the case of orange roughy, there have been problems de-listing species after their populations have recovered. The result is that the lists can confuse or misinform consumers.

Eco-labelled Foods

Consumer willingness to pay for eco-labelled foods is unclear.

Sustainability concerns motivate some consumers to look for foods certified as environmentally friendly or sustainable, so-called “eco-labelled” foods. However, it is not clear whether or how much most people are willing to pay for foods certified as eco-labelled. Consumers typically seek highest affordable quality based on household budget and perceptions of product quality. In France, certified growers of fish and poultry can apply the “Label Rouge” to their products, a government trademark label signalling superior quality.

Animal Welfare and Human Health

Many North American and European consumers are interested in food obtained from animals raised and killed in a humane environment or caught in a way that avoids harming non-target fish species. In supermarkets, for example, it is now very difficult to find canned tuna that is not stamped “dolphin-friendly”.

Consumers are also concerned about issues such as genetically modified or engineered foods, chemical residues, irradiation, food additives, and hormones. European consumers are less likely than their US counterparts to accept the safety of goods that have been altered using biotechnology.

Marine Stewardship Council and Sustainability

There is an evolving global conservation ethic that is promoting production of food in a sustainable manner.

MSC has developed international sustainability standards and product labelling for seafood.

The most far-reaching sustainability initiative for seafood is the Marine Stewardship Council (MSC), which was launched by the multinational corporation Unilever and the World Wildlife Fund for Nature. To reverse the decline in world fisheries, MSC aims at harnessing consumer purchasing power to generate change and promote environmentally responsible stewardship. The Council has developed a standard for sustainable and well-managed fisheries, with a product label to reward responsible management and practices. Its current mandate is limited to capture fisheries.

Under the MSC process, fisheries undergo a rigorous, independent, third party evaluation against the international standard for sustainable fisheries. Successful fisheries then have the right to use the MSC logo on their products, provided that the custody is verifiably intact. To date, seven fisheries, including Alaska salmon, have achieved certification. Another ten, including Alaska sablefish, pollock, and halibut and BC halibut and salmon, are in the certification phase with many others in pre-assessment. More than 100 shelf-ready products now carry the MSC label.

Certification of Alaska salmon has created expectations for BC salmon.

MSC has become a powerful market incentive. For example, with the certification of Alaska salmon, some customers now expect BC salmon to have MSC certification as well. MSC certification is increasingly demanded at the retail level in both Europe and the US. International acceptance of the process has also spawned competing eco-labels, especially in Europe.

MSC certification, however, conveys nothing about product quality. For example, New Zealand hoki is MSC-certified but Unilever has expressed concern over product quality, specifically bruising in the meat.

There is also a trend for retailers and foodservice to institute sustainable sourcing policies for seafoods and meats e.g., Sainsbury, McDonalds, Ahold, Unilever.

3.3 Trade Issues

World fisheries trade is characterized by a wide variety of products and markets. The most important factors influencing trade flows are distance, consumer preferences, and resource endowments.

International trade in fish products has increased to a record \$US 55 billion (FAO 2002). Fisheries trade in the past decade has grown at an average annual rate of 4%.

3.3.1 Trade Agreements

WTO

The WTO seeks a fair trading system for all member countries.

The World Trade Organization (WTO) currently has more than 140 members, including Canada, that together account for 90% of world trade. WTO members are required to grant equal treatment to goods and services from all other members. If a member offers better terms and conditions of trade to a trading partner designated as a Most Favoured Nation (MFN), the same must be done for all other MFNs. Actual applied tariffs tend to be much lower as a result of preferential trade agreements.

WTO membership does not preclude the use of non-tariff barriers.

WTO can rule whether member trade practices are fair. Member countries may raise barriers against other members' products that they consider to be unfairly traded and may impose countervailing measures to counter subsidies and/or anti-dumping measures to counter the selling of products below cost.

Other Trade Agreements

NAFTA and other regional trade agreements have eliminated or reduced tariffs between countries.

Despite the MFN concept, numerous regional trade agreements provide for more preferential terms of trade. Canada has entered into several free trade agreements, most notably with the US and Mexico through the North American Free Trade Agreement (NAFTA). Under NAFTA, the US eliminated all tariffs on Canadian products in 1998 and most tariffs against Mexico were removed by the end of 2003. Canada has preferential tariffs for Commonwealth countries in the Caribbean and for Chile under the Canada-Chile Free Trade Agreement.

The European Union is a trading block of 15 nations with one set of tariffs to cover all countries. Each EU country is able to set non-tariff barriers such as product labelling. The current membership consists of Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, and the United Kingdom. Another ten nations, mainly in Eastern Europe, are candidates.

A free trade agreement linking Canada, Norway, and Iceland could have major impacts on the seafood industry.

Neither Norway nor Iceland belongs to or is planning to join the EU. Major seafood exporters, both are signatories of the European Free Trade Agreement (EFTA) which also includes Switzerland and Liechtenstein. EFTA has signed a free trade agreement with the EU. Canada and the EFTA are currently negotiating a similar agreement that could have implications for the domestic seafood market.

3.3.2 Tariffs and Non-Tariff Trade Barriers

Tariffs for Seafood

Tariff structures are typically complex and exhibit a wide array of duty levels. Tariff rates are based on the International Harmonised System (HS) that is administered by the World Customs Organisation (WCO). A total of 177 countries use HS as the basis for their tariff system.

HS Code	Average Applied Tariff (%)				
	Canada	US	Japan	China	EU
0301 Fish – live	0.0	0.0	2.2	11.7	6.8
0302 Fish – fresh	0.1	0.8	4.8	17.9	12.9
0303 Fish – frozen	0.1	0.7	4.4	18.5	13.6
0304 Fish – fillets/meat	0.0	0.7	4.4	30.0	10.2
1604 Fish – prepared/preserved	5.4	5.2	9.2	25.0	18.4
0306 Crustaceans	2.7	1.3	3.8	24.0	11.0
0307 Molluscs	0.5	0.4	7.4	21.9	7.2

Canada has essentially opened its domestic seafood market to the world, including low cost competitors, while these same countries continue to maintain high tariffs for imported seafood products.

High tariffs in key markets make Canadian value-added seafood products uncompetitive.

Average tariffs for raw or unprocessed fish tend to be much lower than those for processed products. High tariffs in the EU, Japan, and China encourage Canadian exports of seafood raw material rather than value-added, processed products. That is, the tariffs make Canadian processed seafood products uncompetitive in international markets, especially if the price of raw material ingredients is high. As a result, few value-added seafood products are likely to be made in Canada unless produced primarily for the North American market.

Non-Tariff Barriers

As tariffs fall with trade liberalization, the use of non-tariff barriers is growing.

As free trade agreements are negotiated and world trade increases, tariffs are generally falling. At the same time, countries are resorting to various non-tariff barriers to protect their domestic industries. Some of these barriers are designed to meet legitimate policy goal, while others are used deliberately to distort trade. Non-tariff barriers can be challenged but the process is complex and time-consuming. In any case, they result in higher costs to seafood exporters.

Although the WTO encourages countries to use international standards members still have the right to adopt their own standards as they see fit, especially for health and safety concerns. For example, the United States has a zero tolerance policy for the organism *listeria monocytogenes* (“*listeria*”) in foods that are not intended for further heat treatment, such as smoked salmon, a policy that it does not necessarily apply to domestic producers. Most countries have health and sanitary requirements for fish that increase with the number of processing stages.

Hazard Analysis and Critical Control Point (HACCP) systems are common. HACCP is a widely used and internationally recognized science-based control system for ensuring safe food production. HACCP systems identify and evaluate potential hazards in each step of the food production process and establish stringent actions to reduce them. These systems, when properly applied, focus on preventive measures rather than end product testing.

Non-tariff barriers for seafood products can include technical import regulations such as the requirement for fish to be a certain size, or to be gutted and bled when landed directly. The EU, Japan, and a few other countries require fish to be labelled with origin of catch, generic marketing names, and as wild or aquaculture production. The US is mandating country-of-origin labelling in 2004 (see Section 3.3.4). WTO requires notification of technical import requirements and regulations.

3.3.3 Traceability

In recent years, the outbreaks of BSE and *e. coli*, as well as other food safety issues, have highlighted instances of poor production practices and the need to know more about the source of products, how they are treated and/or modified, and what food safety controls have been applied.

Traceability means being able to track a food product's history from conception to consumption.

In light of this heightened scrutiny, all information regarding a food product's history, "from conception to consumption", should be well documented. Traceability refers to mechanisms for tracking product history. It is intended not only to assure consumers of food safety, but also to provide them with differentiated products according to their needs (e.g. wild or farmed, organic/sustainably produced, complying with religious or other requirements). Traceability is an emerging requirement and key component of international trade.

Traceability in fish and seafood products is more difficult than for livestock or crop production. Generally, its application to seafood products lags behind that for terrestrial products. However, traceability for aquaculture products generally is much better than for capture fishery products. Traceability is easier for those capture fisheries with onboard observers and/or port validation of catch.

The EU is developing and implementing traceability requirements.

The EU has required HACCP-based food processing control systems for fish products since 1996. In addition, it has passed or will pass legislation that will increase requirements for fish traceability and documentation. This includes a *Product Safety Directive* (effective 2003), a *Hygiene of Foodstuffs Directive* (effective 2004), and a *General Principles and Requirements of Food Law* (effective 2005). The EU-wide concerted action project TRACEFISH has the objective of developing a set of traceability standards for both capture and farmed fish that can be applied by any operator in the world.

3.3.4 US Country of Origin and Bioterrorism Legislation

COOL

New US country-of-origin labelling guidelines apply to imported seafood products.

The 2002 US Farm Bill requires detailed country- of-origin labelling for fish and shellfish products. On October 30, 2003, the US Department of Agriculture (USDA) issued proposed country-of-origin labelling (COOL) guidelines for domestic and imported meat, fish, shellfish, peanuts, and produce.

The guidelines allow for labelling of the package or individual item, or for the displaying of signs at the retail point of sale (foodservice is excluded). Both the Farm Bill and the

USDA guidelines require that the origin label identify whether the seafood product is wild or farm-raised.

All fish and shellfish whether chilled, frozen, raw, cooked, breaded, or canned will be subject to regulations unless they are an ingredient in a “processed food item”. USDA has proposed to define the term “processed food item” as one having undergone a physical or chemical change causing the character to be different than the original commodity, e.g., a fish stick, or as one derived from a food commodity that is combined with other food commodities or other substantial food components resulting in a retail item marketed differently, e.g., seafood medley or surimi.

Proposed labelling requirements are:

- Products produced exclusively in the US – commodities derived exclusively from fish and shellfish hatched, raised, harvested and processed in the US must bear the “Product of the US” designation;
- Products produced exclusively outside the US – commodities derived exclusively from fish and shellfish hatched, raised, harvested, and processed outside the US must bear the designation “Product of Country X”;
- Products entering the US for part of the production process – commodities are classified as to point of processing where “processed” means any process that effects substantial transformation as defined by US Bureau of Customs and Border Protection (USCBP) Rules of Origin, e.g., (1) fish caught in US waters and processed into frozen fillets in Canada would be labelled as “Product of Canada” (alternatively the product could be labelled with other production steps, if the product’s identity was maintained along with records to substantiate the claim, as “Product of Canada, Harvested in US”), and (2) fish caught in Canadian waters and processed into surimi in the US would be labelled “Product of US”; and
- Blended products entering the US – blended or mixed retail food items that are prepared from raw material sources having different origins must list alphabetically all the countries of origin of all of the raw material contained therein

US producers and processors themselves find the COOL requirements onerous.

The COOL guidelines are meeting with considerable resistance from US agrifood producers and processor, even those who support the concept of such labelling as a trade barrier. Opponents cite the onerous record-keeping requirements and the prohibitive costs of tracking mixed or co-mingled products. For example, retailers will have to segregate similar products of different origins, such as lobsters from Maine and Nova Scotia.

Canada considers COOL a trade barrier to discourage imports.

The US is promoting its guidelines as a tool to advance consumer knowledge. However, Canada views COOL as a trade barrier designed to increase costs for importers and to foster a perception of foreign products as being less safe or of lesser quality than US products.

US Bioterrorism Act

In response to heightened security policies following the September 11, 2001 terrorist attacks, President Bush signed *The Public Health Security and Bioterrorism Preparedness and Response Act* of 2002 (the Bioterrorism Act) in June 2002. The goal of the Bioterrorism Act is to protect the US food supply against the threat of intentional contamination.

The new Bioterrorism Act requires advance notice of all food shipments into the US.

Two provisions impact the BC seafood industry. The first, Registration of Food Facilities, requires facilities that manufacture, process, pack, or hold food for human or animal consumption in the US to have registered with the US Food and Drug Administration (USFDA) by December 12, 2003. Imported food from an unregistered facility will be held at the border. The second, Prior Notice of Imported Food Shipments, requires importers to give the USFDA advance notice of each shipment of food into the US electronically no more than five days before its arrival and no fewer than:

- two hours before arrival by land via road,
- four hours before arrival by air or land via rail, or
- eight hours before arrival by water.

The notification periods are a substantial improvement over the proposed rule issued in 2003 that would have required importers to give notice by noon the day before the arrival of a shipment of food to the US for all modes of transportation including by land via road. Nevertheless, the new regulations and associated record-keeping will add costs to Canadian exporters.

3.4 Markets and Economic Outlook

3.4.1 Economic Outlook

The World Economy

Globally, economic and trade growth have been weak, but are slowly recovering.

The world economy has been generally weak but economic activity is picking up in some countries. However, business and consumer confidence in many regions, including Europe and North America, remain uneasy. The end of the official war in Iraq reduced some uncertainty, but there continue to be concerns about regional security and global terrorism. In this climate, investors are seeking lower-risk havens such as government bonds and gold rather than equities.

Growth in world trade slowed in late 2002, due to the general economic weakness, with some improved growth anticipated for 2003 and 2004. The economies of most countries are operating well below their potential. As the world economy picks up, trade and GDP growth in the majority of OECD countries including Canada and the US, will increase after 2004.

The Canadian Economy

The Canadian economy has been hit by the rising dollar, SARS, and other recent events.

Canada's economy was very strong in late 2002 and early 2003, helped in part by low interest rates. However, the spring and summer of 2003 saw a number of events – including a rise in the Canadian dollar, the emergence of Severe Acute Respiratory Syndrome (SARS), a BSE incident in Alberta, and a major power blackout in Eastern Canada – that worked to temporarily reduce this growth. The Canadian economy is expected to recover and pick up in 2004.

The BC economy has lagged behind most other provinces in recent years. It continues to struggle after a drop in tourism in 2003 and a slowdown in the forestry sector aggravated by the softwood lumber dispute with the US. Housing construction and oil and gas development are areas of expansion for the province.

3.4.2 Interest Rates and Exchange Rates

Interest Rates

Interest rates are expected to remain low, encouraging investment.

Interest rates in North America are at their lowest levels in decades. With the weak US economy, the Federal Reserve Bank has cut its rate to 1.0%, the lowest level in 45 years, to stimulate investment and spending. The current Bank of Canada key lending rate is 2.50%. Lower interest rates make it cheaper for businesses, including the seafood industry to invest in plant and equipment. Prime lending rates are typically one to two percentage points higher than the Bank of Canada rate.

Exchange Rates

Through the 1990s into the early part of this decade, the Canadian dollar declined by almost 30% against the US dollar, primarily as a result of the very strong US economy. In 2002 the dollar was worth on average only \$US 0.63. This low value made exports relatively inexpensive and many Canadian companies prospered.

Seafood exporters are vulnerable to the fluctuating Canadian dollar.

In late 2002 and early 2003, as the US economy continued to falter while the Canadian economy held strong, the dollar began rising quickly to its current level fluctuating in the \$US 0.75 to \$US 0.77 range. Few exporters have had time to reduce their exposure of currency fluctuations or to realign costs. The Canadian dollar is expected to remain relatively strong not only against the US dollar but also against other world currencies. This represents a severe challenge for all Canadian exporters, including the BC seafood industry.

3.4.3 Domestic and Key Export Markets

Canada

While the vast majority of BC seafood is exported, there is potential to expand sales within the province and elsewhere in Canada through import replacement. BC and Canada import substantial amounts of seafood from the US, such as oysters from Washington State and wild troll-caught chinook from Alaska and California.

There are multiple benefits to expanding domestic seafood sales.

The stronger Canadian dollar makes domestic sales more attractive. Selling at home avoids trade barrier issues and reduces currency fluctuation risks. Market proximity means that lower transportation costs. Seafood producers would be able to react more quickly to any changes in market demands or conditions. An increase in domestic sales would have the added benefit of possibly raising the profile of and support for the BC seafood industry.

United States

US economic recovery is expected in 2004.

A sluggish economy and high budget deficit in 2003 weakened the US dollar, which has fallen against the Euro, the Canadian dollar and the Japanese yen. Still, the US dollar is relatively strong and has mainly lost ground on currency gains over the last decade. The US economy has already shown several signs of recovery and is forecast to strengthen substantially in 2004.

The US imports three-quarters of its seafood supply and that import share is increasing. It is currently the largest single market for BC seafood products. The US offers the advantages of proximity, easy access due to NAFTA, and social and cultural similarities. The Canadian Food Inspection Agency (CFIA) works closely with US regulatory authorities and the countries' regulations are compatible. (Nonetheless, the US has not stopped blocking shipments of smoked salmon on the basis of *listeria* concerns.)

Seafood producers face the threat of anti-dumping and countervail action in the US.

Despite the general compatibility, it is clear that the US will take measures to protect domestic industries including seafood by petitioning the US International Trade Commission (USITC). During the past decade, US seafood producers have been successful in pursuing dumping cases against foreign seafood producers (see Case Study I) The US currently applies anti-dumping measures against fresh and chilled farmed salmon from Norway and Chile and countervailing duty on salmon from Norway.

Asia and Australia

Japan's economic outlook is improving.

Japan is still experiencing economic deflation, with general price levels falling. Consumer confidence has declined, long-term unemployment has become entrenched, and interest rates have been near zero since 1999. The yen has appreciated since early 2002, a fact that continues to depress domestic prices. Government spending, particularly on construction projects, is keeping the economy active, but the country's debt is enormous and growing. The economy remains somewhat weak but business investment is increasing and the economy is expected to improve in 2004 as world trade increases.

Japan is the second largest export market for BC seafood. In Japan, Canadian seafood falls under MFN rates of duty. Consumption taxes and fish import quotas are also in place for Alaska pollock, mackerel, herring, cod, and squid. Imports are subject to tolerances for mercury and PCBs. Domestic catches are declining, however, and Japan is resorting to more imports of seafood.

The economy of **China** is growing at a rate of 7% to 8% annually. The emergence of SARS in late 2002 disrupted the Chinese and Hong Kong economies (e.g., negatively impacting the Hong Kong market for BC geoducks). However, recent economic growth rates are expected to continue for several years.

With its abundant cheap labour, China has become a manufacturing powerhouse producing an enormous variety of industrial and consumer goods for the rest of the world. Currency fluctuations will also benefit Chinese exports. The Chinese yuan (or renminbi) is linked to the US dollar so the dollar's recent decline makes China's exports to Europe and Japan more competitive. (The yuan is not traded in global currency markets.) At the same time, these exports have not lost any competitiveness in US markets.

A fast-growing economy and large population make China a highly favourable seafood market.

China joined the WTO in 2001 and is reducing tariff levels. While tariffs will remain high on some goods, its WTO membership provides greater opportunity for exports to China. A huge population and rising income level have created a middle class of more than 200 million people who are large seafood eaters and have the disposable income to purchase imported seafood.

Hong Kong is now a special administrative region of China but remains a separate member of the WTO. Although currently in a recession, its economy is expected to improve as world trade and economic growth recover.

Case Study 1: US-Vietnam Trade Dispute over Catfish

Issue

Now the country's most successful aquaculture business, the US catfish industry spent years and millions of dollars transforming the image of catfish from "river rats" to a Southern delicacy. However, average producer prices which had peaked at \$US 0.75/lb in 2000 declined to \$0.57/lb in 2002, while frozen fillet prices fell from \$2.83/lb to \$2.39/lb over the same period. Many in the industry attributed the price decline to rising imports of frozen fillets of Vietnamese catfish known as "basa" and "tra". After the lifting of trade sanctions against Vietnam in 1994, bilateral trade negotiations had seen the removal of tariffs on Vietnamese catfish in 2000 and the signing of a landmark trade agreement between the US and Vietnam in December 2001.

Response

To counter the wave of Vietnamese imports, the Catfish Farmers of America (CFA) convinced Congress to pass a law in November 2001 that only the species *Ictalurus punctatus* could be accurately labelled as catfish, despite the existence of more than 2,000 species of catfish including the Vietnamese *pangasius*. At the same time, the industry embarked on an aggressive promotional campaign to emphasize the qualities of US catfish over "inferior" Vietnamese products that it maintained were grown in rivers polluted by Agent Orange and other toxic chemicals.

When the labelling law and promotional campaign failed to slow the imports, CFA and other industry groups claimed that the Vietnamese were dumping frozen catfish fillets in US markets at artificially low prices. They filed an antidumping complaint with the US International Trade Commission (USITC) on June 28, 2002. The petitioners alleged that producers in Vietnam, where incomes average about one-fiftieth of American levels, were subsidizing sales to US catfish consumers.

Results

In a preliminary ruling in January 2003, the US Department of Commerce (USDOC) found that Vietnamese catfish had been sold at less than fair value and issued anti-dumping tariffs ranging from 38% to 64%. These tariffs were upheld in the Department's final ruling in June 2003 and in a subsequent decision by the USITC on July 24, 2003.

Vietnamese seafood exporters deny selling fish at below market costs and attribute their advantage to cheaper input costs and superior breeding grounds in the Mekong River. However, the USDOC argued that since Vietnam was a non-market economy, its claims to have low input costs could not be accurately measured against those of a free market economy; instead, investigators used cost information from Bangladesh and India. While cheap and abundant labour alone is sufficient to ensure the competitiveness of Vietnamese fish, the US price declines were likely caused in part by increases in domestic catfish production, in terms of both productivity and dedicated pond acreage.

Catfish prices bottomed out in January 2003 and are expected to rise over the rest of the year. Although US sales of Vietnamese catfish have fallen sharply since the preliminary USDOC ruling, basa seems to have established an identity among some buyers who favour its higher oil content and attractive white colour. Consequently, the value (price) of imported basa is growing in the US. Vietnamese producers are also looking to markets in Australia, China, and Europe.

Lessons Learned

After encouraging Vietnam to adopt free market principles, US industry and lawmakers were unwilling to uphold those principles in the face of losing business and market share to lower cost Vietnamese catfish producers. Republican Senator John McCain, a Vietnam veteran and key figure in the normalization of diplomatic and trade relations with Vietnam, has called the catfish war "a troubling example of the very protectionism we have urged the Vietnamese to abandon". This protectionism is spreading as evidenced by the fact that US shrimp producers have filed similar complaint against Vietnam and several other major shrimp producers.

(On February 17, 2004, the USITC determined that there was indication of dumping of frozen and canned warmwater shrimp and prawns from Brazil, China, Ecuador, India, Thailand, and Vietnam in the US. The USDOC is expected to make a preliminary anti-dumping determination on June 8, 2004.)

The Hong Kong dollar is officially pegged to the US dollar. As a free port, the region generally does not have tariffs on imported goods. The recently signed China-Hong Kong trade pact will eliminate all tariffs on goods, thus opening a “back door” to the Chinese market.

Hong Kong's new cadmium level for BC oysters is a non-tariff barrier.

Hong Kong itself is an important market for BC oysters. However, a recently imposed 2 parts per million (ppm) cadmium level for BC oysters is believed by many to be a deliberate non-tariff barrier.

Taiwan was accepted into the WTO in 2002, and has lowered many tariffs and removed non-tariff barriers. To comply with WTO regulations, it is expanding imports. Nonetheless, changes in import rules and regulations can be made with little warning.

New Zealand and Australia have seen a period of economic growth, but their economies slowed down in 2003 as trade decreased and their currencies, particularly for New Zealand, rose in value. Again, economic recovery is expected in 2004.

Europe

Modest economic growth is also projected for Europe. Consumer demand will likely remain weak in the near term as unemployment persists. The Euro is strong having risen about 35% against the US dollar in recent months. Further currency appreciation could slow prospects for recovery in 2004. The United Kingdom is weathering the current economic downturn better than other European countries, although the pound has weakened since last autumn.

In the European Union, tariffs for specific HS-code products are uniform for member countries, but non-tariff barriers differ across member countries. Value-added taxes (VAT) vary by country and often by product within a country. As a result of EFTA, non-members Iceland and Norway receive preferential tariffs over countries such as Canada. Canadian seafood exports are covered under MFN tariffs and range from 2% to 25%.

The EU applies lower duties to imported raw materials and semi-processed products.

Driven by depleting domestic fish stocks, the EU has gradually opened up to seafood imports particularly those intended for further processing. Dependency on imports for fresh product means lower duty rates on raw material and semi-manufactured goods. On occasion, duties are suspended either temporarily or permanently if EU producers require imported material to manufacture exports. Concerns over dumping resulted in the EU-Norway Salmon Agreement, which includes among other provisions a minimum price for Norwegian salmon.

The UK places a high priority on food safety following the episode of mad cow disease several years ago and major supermarket chains have strict technical requirements. Seafood exports from Canada can enter France according to EU requirements, but live molluscs must come from approved establishments. France's list of approved establishments differs from the EU list.

MSC certification and eco-labelling appear to be very important to European markets. Starting in 2005, some major European buyers will only purchase MSC-certified fish.

The EU has proposed labelling of imported product.

The EU has proposed new labelling requirements for importers that require seafood products to be labelled with the name of the seafood, its origin, and method of production. Under the EU proposal, it would be necessary to indicate the broad geographic area of harvest and specify if the seafood is cultured. Imported seafood will have to be accompanied by documents showing the specified information, even if the seafood is not intended to go on retail shelves.