The Chinese Dried Fish Market

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FORWARD

China, with one-fifth of the world’s population and one of the fastest growing economies, still has a low per capita fish consumption compared with other Asian nations. Fish consumption has increased considerably over recent years and will continue to rise as per capita income rises in response to its developing economy. This, coupled with the fact that its domestic fisheries, aquaculture, and distant water resources are finite, will lead to an increased dependency on imports to fill the gap in demand for fisheries products. There is no question that the outlook for increased fisheries trade with China is extremely favorable. However, making inroads into the Chinese market will take time and will require U.S. business to first do some homework.

Chinese consumers, for the most part, do not readily accept changes to their traditional diet. However, with more convenient fast foods and heavy promotion, the younger generation is moving farther away from the time consuming, traditional Chinese diet. Even with all the changes that the Chinese people have seen in the last few decades, younger Chinese still generally favor the taste of the traditional diet. In the dried fish market, this is one reason for the popularity of the seasoned dried fish snacks. The problem with maintaining the traditional diet of dishes prepared from dried fish is the preparation time, lack of knowledge on use of the product, and the price of the product. The higher price for dried fish makes it a prime target for substitutes - not just with fresh and frozen fish but, particularly with the young generation, fast foods such as hamburgers, fried chicken and pizzas.

Now that domestic resources are dwindling and aquaculture is limited, when the supplies of their traditional, domestic species are at low levels on the market, Chinese consumers are willing to try similar substitutes if the price is right. For seasoned, roasted, and shredded-style dried fish snacks that are popular throughout China, Alaska pollock, cod, rockfish, flounder and other flatfish, and salmon (jerky and shredded seasoned style only) would make good substitutes provided that the seasonings stick to the Chinese taste preference. For the traditional dried fish used for cooking, primarily in the coastal and southern regions of China, Alaska pollock, cod, rockfish, sole and flatfish are all good substitutes, providing the moisture content and texture match the Chinese standards. Other popular dried products that could easily be substituted using U.S. products include squid, jellyfish, shellfish, sea cucumbers, and seaweed.

Chinese fisheries enterprises are eager to establish new sources of supplies to meet the growing demand. Moreover, entering the Chinese market is not as hard as one might imagine. However, large profits are not always the case for a foreign company not accustomed to doing business with China.

First, the foreign company must have an acceptable product at a reasonable price. Dried fish is price sensitive to current market conditions and will always be higher priced than fresh or frozen fish. Providing the products meets the quality and price standards, it needs to be carefully
packaged for the targeted consumers; e.g., seasoned snacks in brightly colored, small convenient packages for younger consumers, and instructions for reconstituting and recipes for the users of traditional style dried fish. To get the product introduced to the Chinese market, the foreign company must connect with a Chinese FTC (a company with foreign trade rights).

One of the strongest deterrents for a foreign company to do business with China is the country’s high tariffs. If a foreign company connects with a Chinese FTC that has an import quota, it is possible that products may be brought into the country duty free or at reduced tariffs rates. China has reduced its tariffs. The most recent reduction was September 1997, but not to a level acceptable to the major trading nations of the world. China’s reluctance to further reduce its tariffs is due in part to its pending entry to WTO (World Trade Organization). Another concern for U.S. companies is that a permanent solution has not been met for the Most Favored Nation status granted to China on an annual basis. These concerns, including the absence of consistent transparency in trade practice and methods of trade statistics calculations are all reasons for the U.S.’s reservation to fully endorse China’s membership to the WTO.

Despite differences on both sides, China and the United States have much to benefit through expanded trade. Fortunately, China’s planned economy has a well-developed infrastructure for the efficient distribution of goods. Whether the foreign company just wants to introduce its produce to the Chinese market or would like to invest in the market, China offers a growing market and connections to other strong markets, and also the advantage of an abundant, inexpensive labor force. The Chinese government offers incentives and special economic zones to encourage foreign investment. To complement this, the U.S. has the resources, advanced technology and equipment, financial backing, and efficient management skills.

This report on the Chinese dried fish market would not have been possible without the cooperation of the Bureau of Fisheries, Ministry of Agriculture of the People’s Republic of China. In particular, we would like to thank the Bureau’s Division of International Cooperation and its Director, Xin Deli, staff members Liu Xiaobing and Zhu Baoying, and the Bureau’s Distant Water Fisheries Development Research Center’s Director, Wang Yu. We would also like to thank the regional and city departments and their staff of Bureau of Fisheries in Guangdong Province, Guangzhou, Jiangmen, Zhejiang Province, Hangzhou, Wenling and Wenzhou, Liaoning Province, and Dalian, the Shanghai Fisheries General Corporation, and the many businesses in these provinces and others that volunteered information about the Chinese dried fish market.

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I. Introduction

China is the third largest country in the world with 9.6 million square kilometers (3.71 million square miles). Its geography is dominated by mountain ranges, deserts and steppes in the west, and plains, deltas, and hills in the east. This layout of the terrain leaves less than 20 percent available for cultivation. At the present, only 11 percent is being cultivated.

China is the most populous country with 1.2 billion people. Due mostly to the terrain, 80 percent of the population lives in the eastern part of China. About 30 percent of its people live in urban areas, largely concentrated along the coastal zone. The country is divided into 22 provinces, three municipalities, and five autonomous regions (see Appendix A: Regional Demographics). The autonomous regions make up over 50 percent of China’s land mass, but account for only about 8 percent of the population—this being mainly minorities; i.e., recognized nationals that are not ethnic Han Chinese. It is a country so vast in terms of the diversity of its geography, climate, and people that many Westerners find it difficult to understand its complexity. To generalize the Chinese and the Chinese market is a grave mistake and is one often made by foreign companies trying to do business with China.
Today, China is one of the fastest growing developing countries and leading trading nations of the world. Its rapid progress over the last two decades since the Great Leap Forward can be attributed to a practical step-by-step approach to economic reform. The Chinese have followed a tried-and-true method with their reforms – after gradual introductions, what works within the Chinese system is adopted. To quote the late Deng Xiaoping, “We are crossing the river by feeling the stones”.

This report on China’s dried fish market will not attempt to go into the history of China and its people. It is, however, necessary to look at the development of the fisheries industry since China opened its doors to the Western world to understand the operations of its present day dried fish market.

II. Recent Development of China’s Fishing Industry

The reform of China’s fisheries management and use practices have been ongoing since 1978. The 3rd Plenary Session of the 11th Central Committee of the Communist Party of the People’s Republic of China, held that year, marked the opening of a China that had long since been closed to the western world. Since then, China’s economic reform has been taking a careful step-by-step approach to the establishment of a socialist market economy. The Chinese interpret this term to mean an economy guided by market forces but having a strong influence by the State through such means as state owned enterprises. To accomplish this, China has adopted and committed to an open-door policy that has accelerated the process of economic reform.

Before this period of economic reform, China operated on a planned economy that offered no motivation for development. Un-
der this former system, the State and rural collective farms controlled purchasing and marketing of fisheries products based on planned allocation and supply. Prices for fishery products, set by the State, were kept at artificially low levels with little distinction between high and low valued products. The absence of natural market forces left little incentives for fishing enterprises that had only to fulfill their requirements set by the State to maximize profits.

Another factor that hindered the development of China’s fisheries industry was that, before the reforms, no enterprise was given the right to import and export fish products. Only enterprises designated by the State could export products. With the initiation of reforms in the early 1980s, the State gradually allowed central and local fisheries enterprises the right of importation and exportation of fish products.

By 1985, impressive results from the reforms led China to withdraw the state monopoly of fisheries products from the state-owned fisheries trade enterprises. Previously, all production had to be sold to state-owned trade enterprises. With the dissolution of the state monopoly, enterprises could freely control the sales of their fisheries products. This rapid development of the industry found private enterprises flourishing where some state-owned enterprises could not compete and were forced into bankruptcy in the emerging market environment. To survive, remaining state-owned companies developed their distant water fleet, cold storage facilities, and processing sectors.

Today, state-owned enterprises makeup slightly more than 10 percent of the total fishing industry enterprises. Most have become highly centralized with complete control of their product, from harvesting to marketing.
The rapid development of China’s fishing industry has been so dramatic it is hard to comprehend that it has happened so smoothly. Production has risen from 4.3 million metric tons (MT) in 1979 to 28.13 million MT in 1996. By the end of the year 2000, production is planned to reach 35 million MT, with aquaculture accounting for 60 percent of the total. This jump in production has encouraged exports of fisheries products which, in turn, has spurred fisheries imports. By 1996, trade in fisheries products reached 802,000 MT of exports and 138,700 MT of imports.
In 1996, freshwater and sea water aquaculture accounted for 54.5 percent of the total 28.13 million MT production. As mentioned, by 2000, China’s aquaculture is planned to account for 60 percent of the total production. Aquaculture helps to fill a large part of the gap, but, from an economic standpoint, China has its concerns. China’s farmed products are becoming more expensive and less competitive on domestic markets that now offer a wide variety of products to meet all income levels. The cost of the fish fry used for local aquaculture, purchased from outside sources, is continuing to increase while the market price of a mature fish is very low due to fierce competition by other products. Additionally, the price and sources of supply of fishmeal, also purchased from overseas sources, so far have been stable but there are concerns about the future. These concerns have led China to look at ways to cooperate with foreign sources to lessen the dependence on sources of farmed products.

In further efforts to open its doors and increase trade, on October 10, 1992, the United States and China signed the Memorandum of Understanding (MOU) on Market Access that commits China to liberalize its trade practices and gradually open its markets to U.S. goods. Until the terms of the MOU, which will allow reciprocal preferential trading rights, are fully satisfied, the U.S. must annually grant China Most Favored Nation (MFN) status. This annual review by the U.S. Congress produces a feeling of instability to many U.S. companies seeking a long-term commitment. However, it is hoped that a permanent solution will be reached soon.

Another issue looming over the heads of U.S. businesses is China’s pending entry into the World Trade Organization (WTO), a multinational trading system established on widely accepted international rules. Issues that still need to be resolved before the U.S. will endorse China’s membership include tariff reductions, elimination of non-tariff barriers such as the absence of consistent transparency in trading practices, and an agreement reached on differences in calculation of statistics.¹

¹ The U.S. calculates trade statistics based on F.A.S. value (free alongside ship; i.e., does not include charges for loading, freight and insurance). China records trades statistics based on C.I.F. value (includes cost plus all charges incurred; i.e., insurance, freight, and other miscellaneous charges).
III. General Overview of China’s Dried Fish Industry

A. History
Dried fish products have a long, important history in China. Until the 1960’s, all fish and perishable products had to be preserved because there was no refrigeration. Dried fish played a major role in the older traditional food customs of China. However, since the 1960’s, technology improved and frozen fish grew in popularity, replacing much of the traditional dried fish products. Today, dried fish is favored by the older generations of Chinese and those at lower income levels that still keep to their traditional diet. However, the somewhat new snack-type variety of dried fish products has gained a strong following with younger generations of Chinese and is gaining acceptance with other age levels and all income levels.

B. Products
Dried fish comes in a variety of products and product forms, listed below and shown in Appendix F: Product Variety and Section X: Profiles of Coastal Regions and Markets. Most dried fish products are made from sea water aquatic products. These products are more suitable for drying and produce a unique taste.

<table>
<thead>
<tr>
<th>Species</th>
<th>Dried Product Form</th>
<th>Supply Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow croaker</td>
<td>whole, butterflied; canned-salted/dried in oil</td>
<td>domestic and Africa</td>
</tr>
<tr>
<td>Brown croaker</td>
<td>whole, butterflied</td>
<td>Africa</td>
</tr>
<tr>
<td>Croaker, other</td>
<td>whole, butterflied</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Cod</td>
<td>skinless h&amp;g, fillets; snacks-fillets, shredded</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Red snapper</td>
<td>whole, butterflied</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Pollock</td>
<td>skinless h&amp;g, fillets; snacks-fillets, shredded</td>
<td>various imports</td>
</tr>
<tr>
<td>Hake</td>
<td>butterflied, skinless h&amp;g, fillets; snack: fillets, shredded</td>
<td>various imports</td>
</tr>
<tr>
<td>Flounder</td>
<td>whole</td>
<td>various imports</td>
</tr>
<tr>
<td>Chinese herring</td>
<td>whole</td>
<td>domestic</td>
</tr>
<tr>
<td>Anchovy</td>
<td>whole</td>
<td>domestic, Japan and others</td>
</tr>
<tr>
<td>Needlefish</td>
<td>whole, butterflied</td>
<td>Vietnam, Japan and others</td>
</tr>
<tr>
<td>Sardines</td>
<td>whole</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Black Carp</td>
<td>whole, butterflied</td>
<td>domestic, farmed</td>
</tr>
<tr>
<td>Fish bladders</td>
<td>whole, split</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Fish bones</td>
<td>salted, roasted</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Fish skins</td>
<td>pieces, roasted and reconstituted</td>
<td>domestic</td>
</tr>
<tr>
<td>Cuttlefish</td>
<td>whole, shredded</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Eel</td>
<td>whole, butterflied; snacks-fillets</td>
<td>domestic</td>
</tr>
<tr>
<td>Shrimp</td>
<td>whole, butterflied</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Mussels</td>
<td>whole, shelled</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Clams</td>
<td>whole, shelled</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Abalone</td>
<td>whole, sliced, shelled</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Scallops</td>
<td>whole, pieces, shelled</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Octopus</td>
<td>whole, sliced</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Jellyfish</td>
<td>whole, shredded</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Sea cucumber</td>
<td>whole, split</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Snails</td>
<td>whole</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Mackerel</td>
<td>whole, butterflied; canned- salted/dried in oil</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Pomfret</td>
<td>whole</td>
<td>domestic</td>
</tr>
<tr>
<td>File fish</td>
<td>snacks-fillets</td>
<td>domestic</td>
</tr>
</tbody>
</table>
1. Product Forms

Product forms of dried fish include whole, skinless headed and gutted (h&g), butterflied, fillets, canned in oil, snack varieties (seasoned and unseasoned including small whole fish, fillets, shredded, flaked, and fish bones). The snack varieties will be dry and hard; dry and soft; dry and roasted or dry, shredded. The seasoned snacks come in a variety of flavors including curry, sweet (sugar, honey, vanilla, etc.), salty, spicy (varying degrees of hot), ginger, soy sauce, flavored with liquor, and mixed with sesame seeds.

Both the snack variety and the dried fish used for cooking have a six-month shelf life. Depending on the type of storage; e.g., cool, dark or refrigerated, product shelf life can be extended considerably and still maintain optimum flavor and texture. Reconstituted dried fish products do not require refrigeration, but must be kept in fresh water and consumed within a few days.

2. Product Characteristics

Species: The type of species used for the dried product is the most important attribute to the Chinese. The Chinese strongly favor species caught in their domestic fishing grounds of the Yellow, Bohai, East China, and Japan seas. However, overfishing and other factors have depleted these favored domestic species. With demand growing in some areas, such as the snack-type sector and areas of increasing income levels, the Chinese have been forced to accept substitutes. If the product cannot be made with their traditional species, it must be a close substitute.

Yellow croaker has always been the most popular dried fish product, excluding the snack varieties. The domestic yellow croaker resources are now becoming scarce and is being substituted using yellow croaker from Africa. To look at the two yellow croakers, it is not possible to determine significant differences, but, to the Chinese, there is a big taste difference. The domestic yellow croaker is preferred and commands a much higher price than the African variety.

File fish, because of its texture, has been the preferred species used for snack products, but again, scarce domestic resources have forced substitutions of cod and pollock. By looking at the dried product one cannot distinguish between the two species, but the Chinese can taste the difference. Still, these substitutes have been readily accepted in the snack sector of the dried fish market.

Another example provided by the Jiangmen Wholesale Market is that the market is now buying red fish (snapper), another popular dried fish, from India and Thailand to supplement the

<table>
<thead>
<tr>
<th>Species</th>
<th>Dried Product Form</th>
<th>Supply Source</th>
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<tbody>
<tr>
<td>Sea bass whole</td>
<td>whole</td>
<td>domestic</td>
</tr>
<tr>
<td>Sea bream</td>
<td>whole</td>
<td>domestic and various imports</td>
</tr>
<tr>
<td>Hair tail (belt fish)whole</td>
<td></td>
<td>various imports</td>
</tr>
<tr>
<td>Crabs (2-3 inches) whole</td>
<td></td>
<td>domestic</td>
</tr>
<tr>
<td>Shark fin</td>
<td>whole, skinned</td>
<td>various imports</td>
</tr>
<tr>
<td>Shark skin</td>
<td>pieces, reconstituted</td>
<td>various</td>
</tr>
<tr>
<td>Small shark</td>
<td>butterflied</td>
<td>domestic</td>
</tr>
</tbody>
</table>
dwindling supply of domestic red fish. The market has tried a similar fish from Canada, but found that quality could not match that of imports from India and Thailand.

Region of origin: When importing frozen fish for dried fish processing, the origin of the species is given strong consideration by importing organizations such as the Jiangmen Aquatic Products Wholesale Market. The amount of moisture in a fish’s flesh is an important quality consideration. The less moisture, the better the product. Excessive moisture may result in a mushy product. Fish from the warmer water of the tropics grow faster and retain more moisture. The additional amount of moisture needed to be removed from warm water fish increases the production cost. The market has found that fish imported from South Africa does not result in a good dried product. However, in recent years, fish from West Africa have produced a better product.

Color: In most dried fish products the color of the product will tell the experienced eye its quality. Usually, the lighter the color the higher the quality.

Price: The price for dried fish is higher than that of frozen products and is sensitive to market conditions. Many of China’s larger markets have daily auctions for dried fish products that use a reference price based on current market conditions. Dried fish snacks are high valued products, in higher demand than the traditional dried fish, and therefore, able to command higher prices. However, consumption of traditional dried fish is declining except in poor areas where income levels are slowly rising and among older (65+) Chinese. The price for these products must be kept low to compete with other products. Products from certain areas, such as Wenlin, known for its superior sun-dried products, sell at higher than market prices.

Smell, taste, texture and weight: The experienced senses of the buyer will use these characteristics to judge the quality of the product. Some products such as shark fin and sea cucumbers have no smell or taste, but most products have a strong distinct smell and taste that allows the buyer to judge its freshness and estimate remaining shelf life. Products that do not have a distinct taste such as shark fin acquire the taste of other ingredients added to the product. Texture and weight usually indicate the amount of moisture in the product. If the product is heavier than it should be, probably has too much moisture, predisposing it to rapid spoilage. The texture will more than likely be on the mushy side. Again, it takes an experienced person to judge these characteristic accurately.
Size:
The size of the product and uniformity of size will dictate the price. The larger the size the higher the price. With fish bladders, the size of the opening will also influence the price - again, bigger is better.

Packaging: Most dried fish products are sold in bulk and require no packaging. A typical market will display dried products in burlap bags, baskets, trays, or hanging for whole larger fish such as Chinese herring, yellow croaker, and red snapper. Many snack variety products are prepackaged.

However, it is quite popular throughout China for department stores to proudly display these snacks in clear canisters, alongside dried fruit and candy, giving the consumer other options.
C. Production Processes

In the south and southeast of China, the main method used for drying fish by thousands of individuals and even the larger markets like Jiangmen and Wenlin is still sun-drying. At least for the southern coastal areas, most people will insist that the sun-dried method for processing fish is far superior to machine dried processes and produces a much better taste.

Depending on the quality of the fish, processors will first wash, then salt the fish, and then place it on wooden frames that allow air to circulate and start the drying process. Experienced eyes will judge how much, if any, salt is needed for the fish. The best quality fish does not need to be salted before drying. As the quality of the fish decreases, an increasing amount of salt is added. Depending on the fish, the drying process should be complete within 2-3 days.

Wenlin processors, famous for their dried fish, use a slightly more intricate process for drying fish. Today, as it has been in the past, hundreds of individual processors still follow ancient, traditional methods of preserving fish and supply most of the dried fish on the local markets.

The prepared fish are placed on woven sheets of bamboo slats that allow the air to circulate around the fish. When not in use, these sheets are rolled up and stored. The length of drying time will depend on the weather. Good conditions require wind and lots of sunshine. If the conditions are right, the process is complete within two days and the product is delivered to the market. If the winds shift, the processors must move the sheets in the direction of the wind. If the conditions are not right, the fresh product is frozen until condition change.
In the north, the sun-dried method is still used for dried fish products used for cooking. However, large companies such as Dalian Ocean Fisheries Import & Export, the largest company in Northern China, uses state-of-the-art technology for processing their dried fish products. To ensure efficient and profitable use of this high tech processing equipment, the company must secure large supplies of the raw material to satisfy the considerable production capacity. Equally important, the market for these dried fish products must be extremely large such as only the Asian market can supply. Since the domestic resource cannot meet the increasing demand for product, most companies in China, like Dalian Ocean, must rely on imports and their distant water fleet. Dalian Ocean has five vessels working near the Bering Sea using a quota purchased from Russia, one vessel in West Africa and forty vessels working various grounds in the North Pacific.

Imported technology, mainly from Japan, is used to produce the popular dried fish snacks. Fillets of sole, haddock, and other fish are washed, sorted, salted and/or seasoned, dried and then baked. After the baking or roasting process, the fillets are run through rollers several times to flatten and achieve a uniform thickness. After each pass through the system, the rollers are adjusted to a lower level of thickness. When they have reached the desired thickness, the product is ready for packaging or shredding. Another popular product, squid, is also machine dried, baked, flattened by rollers, and then put through a shredding process.
The availability of reconstituted fish products cuts down preparation time dramatically, making these products easier to use and very popular. The following preparation methods use reconstitute dried fish products: (see Appendix K: Reconstituting methods for other examples.)

Rice water method: Individuals use this method for family use. Unlike Westerners, Chinese will wash their rice thoroughly before cooking. To use this method for reconstituting dried fish they will save the water used to wash rice. The milky water makes a good solution in which to soak dried fish products until they become soft and reconstituted. Products such as sea cucumbers will need to soak for a couple of days before they are ready for use, while fish bladders need only a short time.

Steaming: This method is also a popular, easy method used by individuals for family use. The dried product is simply placed in a steamer and steamed for hours (depending on the product, size, etc.) before it is ready for use.

Baking Soda Solution: This method is used primarily by professionals for commercial use. The amount of soda added to cold water differs with the type of product. The method is quicker and the end result is more appealing. After the product has soaked in the soda solution, its appearance more resembles the fresh product than the other reconstituting methods; i.e, plump, shiny and, in cases such as squid, almost translucent.

Dried fish products have a shelf life of six months, but the reconstituted products must be consumed within just a few days. If the reconstituted product is not consumed on the day it is reconstituted or purchased, the product must be kept in fresh water until used.
IV. Consumption Trends

A. Regional Differences

We must view China as a collection of regional markets with vast cultural differences and varying income levels. Seafood consumption, while high, is still primarily concentrated in the coastal areas. Large producing areas that do not have sufficient facilities to process and store the fish will have higher levels of dried fish production as well as higher consumption levels of dried fish.

Generally speaking, coastal communities used to be the only consumers to regularly eat fish. Now seafood consumption is slowly rising farther inland as the income levels throughout China increase with the growing economic prosperity. Chinese consumers now demand choices for their money, leading China to import more seafood to satisfy the market. Now, fish products are more affordable and available, in a greater variety, than ever before.

While regional consumption figures were not available for this report, information gathered from industry interviews throughout the coastal region show that dried fish consumption is considerably higher in the southern coastal areas where all types of dried fish products are popular with all age and income levels. Usually, most dried fish consumed in the east and northeastern areas are of the snack variety.

Overall, children and young adults consume most of the snack-type dried fish products,
while the older generation consumes the traditional whole or fillet-style dried fish products. Also, many of the younger generation simply do not know how to prepare dried fish, either lacking the knowledge or the interest to learn. The main reason for this generation gap is the preparation time for the products. As with most other cultures, the younger generation of China is favoring fast, convenient foods while the older generations, with more leisure time, stick to traditional food customs that often require lengthy preparation.

As noted, the overall market is divided into restaurants (the high-end) and household (the low-end) of the market. The high-end caters to restaurants as well as higher income level business and government representatives. This market includes fresh products such as lobster, salmon, scallops, and dried products used in soups such as shark fin, bladders, and molluscs. The low-end market is the average household who purchases small quantities of small-sized, inexpensive fish. Speaking for the households, as one Chinese said, “If it doesn’t fit in a pan the Chinese won’t buy it.”

Consumer preference overall leans to fresh or live seafood as they perceive it as healthier than frozen or dried products. However, frozen products are quite popular and accepted in many households. Today, the distribution and storage of seafood products are more efficient, income levels have increased, and refrigeration is common. Along the coastal areas, consumers prefer saltwater products. Further inland, the consumers’ first choice is the freshwater product. Ms. Ye Dan, with the Foreign Economic Liaison Office from Zhejiang Province Fisheries Bureau, explains that Zhejiang Province has many fish farms that provide for the needs of the local people who prefer freshwater fish. The cities of Hangzhou and Huzhou, Zhejiang Province are called Home of Fish and Rice - both have abundant freshwater fish.

Director Ye Huan Qiang, Guangdong Ocean and Aquatic Products Bureau, reported that prior to the 1960’s, Guangdong region alone produced several hundred thousand metric tons of dried/salted fish used for cooking. Now only 100,000 MT is processed there. High value products such as the snack products for young children and middle adults (25-45 years of age), and shark fin for older people remains popular with the southern Chinese. Low valued products are still available, but are consumed mainly by low income people.

On a tour of Zhejiang’s local stores and markets, Song Li Li, Marketing Specialist with the Fisheries Market and Processing Division of the Zhejiang Provincial Fisheries Bureau, told how all local people, both young and old, like dried fish. However, most young people will not buy dried fish because the time it takes to prepare. Older people, especially retired, will still purchase the dried fish because they have more leisure time needed to prepare the fish.

People all over China are changing their eating habits as their living standards improve. The Wenlin Wholesale Market used to produce a large amount of dried hairtail, one of their most popular dried products. Now the people of Wenlin prefer the taste of frozen hairtail over the dried product.

In Shanghai, the market for seasoned dried fish snacks is not as strong as it has been in the past, but is still very popular. Seasoned dried fish fillets used to be made with file fish - preferred for its texture. Now, however, the file fish resources are scarce so they are substituting
pollock and cod. People cannot tell the difference by looking at the dried snack product, but the Chinese people can tell by the difference in taste. Again, younger people are the major consumers of seasoned dried fish snacks with little differentiation between income level groups. Dried fish, used for cooking, is still commonly used in traditional Shanghainese dishes. These consumers are of all ages and income level does not affect consumption. Chinese herring is the most popular dried fish for the Shanghainese-style traditional recipes.

In Beijing proper, the demand for dried fish, though low, remains stable. However, in poorer areas of the region the demand is increasing. Although the people are still poor, income levels in these areas and other lower income areas of China have raised enough to allow the people to buy dried fish more frequently. The demand for sea cucumber, once considered a high value product in the northern area of China is declining while the demand for shark fin, a higher valued product, is increasing.

Getting a true picture on the status of dried fish consumption is difficult. Basic consumption figures for dried fish are not available and total seafood consumption is based on production. However, referring ahead to Section VI., D. Domestic Dried Fish Market Supply, it is evident the market supply is growing substantially. For this report, we will rely on available data and the opinions of major producers, buyers, and government officials interviewed throughout China. Depending on the region you visit in China, you will get varying opinions on dried fish consumption. What the Chinese can agree on is that consumption of fish is increasing rapidly.

![PRC Seafood Per Capita Consumption 1978 - 1996, in kilograms](image)
B. Influences on Consumption

Many factors having an affect on dried fish consumption have been mentioned in previous sections of this report: lower prices for frozen fish; consumers’ perceptions of healthier and fresher fresh or frozen products; ease of preparation; rising income and living standards.

Other factors that affect consumption are the company’s reputation or an entire region’s reputation, consumer’s traditions, price, and processing methods. Chinese companies are now paying more attention to their product, to its quality, appearance, and competitive pricing. The companies are also paying more attention to their customers as traditional norms change and give way to a modern society. Companies are changing products and adding more choices to meet this challenge (e.g., convenient snack varieties). In recent years, to eliminate commission and offer lower prices, many companies no longer use middlemen. Some processors have their own retail outlets so they can sell direct to consumers. Many of these companies have their own marketing and purchasing divisions.

C. Consumer Acceptance

To be readily accepted, foreign and domestic companies importing new products must select products close to the traditional diet or habits of the Chinese people. Many of the larger companies, such as China National Fisheries Corp. (CNFC), experiment and introduce new products to the market every year. However, Chinese consumers do not easily accept new products. Past experience shows that when fisheries products are abundant on the market, the Chinese people are not ready or willing to accept new products. If there are shortages on the market, the people will be more willing to try substitutes. This is the single most determining factor. In some cases lower prices will influence the purchasing decision if the product is similar and the quality good.

V. Traditional Uses

Eating is a very important part of the Chinese lifestyle. A typical home-style Chinese meal will include 4-5 courses. Holidays, especially, are marked by an endless array of elaborately prepared dishes. Dried fish products has long been a main staple in the Chinese diet, both for its cooking and medicinal uses. Lower valued products are commonly used in everyday cooking while high valued dried fish products such as eel, shark fin, sea cucumbers, and abalone are common fare during the holidays and for medicinal use.

A. Diet

Every Chinese family has their own unique, favorite ways to prepare dried fish. Some common, popular ways dried fish products are included in daily diet include:

Appetizers:
Shredded jellyfish (reconstituted), seasoned, served cold plain or combined with shredded raddish or white fungus. This popular appetizer is often served at banquets given at
restaurants and with holiday meals in the home. Steamed dried eel, seasoned and served with a vinegar dipping sauce. This high valued appetizer is served in Zhejiang-style restaurants and in Zhejiang family homes.

Main Dishes:
Salted and dried fish such as hair tail and yellow croaker, seasoned and steamed together with pork.
Salted and dried Chinese herring or mackerel steamed together with ground pork or egg.
Dried shrimp, scrambled with egg or mixed with an egg custard.
Reconstituted dried seafood products such as sea cucumber, squid, shark fin, and fish bladders, stir-fried with vegetables.
Dried fish roe is eaten with rice or rice porridge.
These main dishes are primarily served in the home and not in restaurants.

Soups:
Dried fish are often used to make soup stock or combined with fresh meat or fish and vegetables as a main ingredient in soups. Dried shark fin, anchovies, shrimp, scallops, other molluscs and other shellfish, and seaweed are all commonly used in soups. Reconstituted sea cucumber, abalone, and squid are also popular in soups.

Snacks and Desserts:
Most seasoned dried fish products are snacks and can be casually eaten at any time. While most snack varieties are consumed by children, salty dried fish snacks are often taken by adults, after work with beer or alcohol. Sweet dried fish snacks are sometimes offered as dessert. Fish used for the snack variety include cuttlefish, squid, file fish, golden thread, and needlefish. Dried shrimp is often mixed with other ingredients to make fillings for moon cakes and dumplings.

Small quantities of dried fish products are commonly used as a seasoning for their intense flavor in many types of dishes. (See Appendix L for traditional recipes using dried fish.)

Qing Chi Hao! Enjoy!
B. Medicinal

According to Confucian philosophy, many Chinese believe that all things must be kept in harmony with the natural order of life (Tao). This harmony, or balance, is what is known as yin and yang, the two fundamental forces of the universe. Yin is cool and watery and represents the moon, air, and water. Yang is hot and heavy and represents the earth and sun. Yin and yang exists in all things, living and non-living, in various proportions that are subject to constant change. Certain types of food are categorized into groups of varying degrees of “cold” and “hot”. In relation to the body, Tao is kept in balance through proper diet, exercise, and life style. To ensure a balanced diet the body needs equal amounts of each group.

A simple example of being out of balance would be if your body feels generally rundown. Chinese might interpret this to be that your body is too cool (having a higher degree of yin than yang). The advice in this case would be to eat more warm-to-hot foods to bring your body back into balance.

Cold foods:
- Crab, turtles, sea cucumbers, abalone, oyster, jellyfish, snake, green bean, watermelon, American ginseng root, edible chrysanthemum flowers, and green tea;

Warm foods:
- Eel blood, dog meat, lamb, red beans, dates, pepper, garlic, Chinese chives, red ginseng root, and black tea.

Warm foods are often eaten in larger quantities during winter months.

Dried Sea Cucumbers: Sea cucumbers have long been prized for their comforting and healing powers. For medicinal purposes, it is generally used in the form of a tonic. It is especially known for treating kidney problems and strengthening one’s vital energy (Qi). Other common uses include treatment to increase energy, lower blood pressure, impotence, night time emissions and related problems, and to regulate the bladder and bowels. Many Chinese believe the medicinal use of dried sea cucumber can also stop the growth and spreading of cancer cells in the body.

Dried Fish Bladders: Fish bladders are used for medicinal purposes throughout China. However, bladders, as part of the normal diet, are not consumed in the northern region. Bladders are known for their sweet taste and smooth qualities. They are always eaten reconstituted, prepared usually in a soup or stir fry dish. Like sea cucumbers, bladders are known to nourish the kidneys and strengthen one’s Qi. Bladders also serve to strengthen muscles and veins, control excessive bleeding, reduce swelling, and speed the healing of bruised skin. Bladders are also given to mothers recovering from recent child birth to revitalize their energy.
Dried Mussels: Dried mussels are also believed to be very healthy for mothers recovering from recent child birth. Mussels are reconstituted and prepared in various forms. Mussels and other shellfish, made into a soup, are also thought to help dissolve fatty tumors in the body.

Shark Fin/Fish Fin: For medicinal use, fins are used as a tonic and are known for their sweet taste and smooth qualities. The tonic is used to strengthen one’s Qi, lower cholesterol, prevent heart diseases, increase appetite and energy, and strengthen blood.

Seaweed: A soup is made of various types of dried or fresh seaweed is believed to dissolve fatty tumors in the body.

VI. Dried Fish Supply

A. Production of Dried Fish Products

Dried fish production has increased an average 22.7 percent since 1993. Growth in China’s dried fish production, while still high, is slowing down considerably with an increase of 11.6 percent in 1996 as compared to 1995’s growth of 35.6 percent. Although total aquatic production continued to increase, 28.3 million MT in 1996 and to a projected 35 million by the end of 2000, it is unlikely the dried fish production will increase much more than its present level.

Many Chinese industry officials believe domestic production of dried fish will decrease because of changes in consumers preferences and living standards, and insufficient supplies of raw materials reserved for drying.
Speaking for the consumers, industry representatives state that the main reasons for the decreased dried fish production are as follow:

1.) Nutrition; i.e. consumers’ growing health concerns that dried fish contains more bacteria and chemicals, and that salted fish will cause cancer;
2.) Frozen fish is closer in price to fresh fish than dried fish; and
3.) Consumers do not consume large quantities of dried fish, while they will consume large quantities of fresh or frozen, if available.

The total supply for the dried fish market comes from the domestic and distant water fleet and imports. Most imported fish, intended for the dried fish market, are brought in frozen then dried in China. Some shark fin, shellfish, molluscs, and a few other species are imported as dried products. High valued products caught by the domestic fleet are processed and frozen immediately on the vessels, while other not so popular, lower valued species such as squid are sun-dried on the vessels. The frozen products will be marketed immediately or put in cold storage for further processing that may include drying. About 10-15 percent of the total aquatic production goes to dried fish processing.

Large firms with their own fleet, like China National Fisheries Corp., meet the demands of the market with their own catch, imports, and purchase products from other Chinese companies that may or may not have their own fleet.

B. Imports of Dried Fish Products

Some significant amounts of China’s seafood imports, particularly lower valued products, are further processed and re-exported to Asian and European markets. Imports that stay on the domestic market are dictated by the restaurants and households that divide the market in China. For restaurants, high level products are imported: lobster from Australia, Dungeness crab from Seattle, fresh Atlantic farmed salmon mostly from Norway but some from the US, and other species from West Africa and South America. China does import a small amount of smoked salmon, mostly from Norway, but it primarily goes to high class restaurants in Beijing and Shanghai. For households, the final consumers, less expensive products are imported such as pollock and yellowfin sole, hairtail, yellow croaker, sea cucumbers, some dried fish, and shark fin.

Most imports to the northern part of China of pollock and yellowfin sole, items that are not popular in the Beijing market, are sent to Dalian and Tianjin for processing and redistribution. Of the imported products, Beijing consumers prefer the yellow croaker, hairtail, and other species from the southeast Asian countries. Yellowfin sole is the most popular of the fish imported from the United States. Most imported sea cucumbers are consumed in the northeast provinces, while a small amount of imported dried fish and shark fin products are sent to Hunan Province.
Russian products, mainly pollock, are starting to show up in Guangdong and other large markets. This is a result of fishing agreements negotiated by Russia and China in Beijing, not on a provincial level. According to these agreements, Russian vessels are repaired in Chinese ports, including ports in Guangdong Province, in exchange for payment in fish caught in Russian waters. Russian transport vessels deliver the fish to Dalian and Yantai where it is distributed throughout China. Guangdong processors are also starting to buy flounder and sole caught in Russian waters from Dalian and Yantai.

During the period 1993 through 1996 the volume of imported dried fish products decreased 61 percent, but the overall average import price rose by 141 percent. The most notable decreases in imports were dried and salted cod, small dried fish, and smoked salmon. Cod and the small fish are still popular dried fish products and are fairly recent substitutes for the scarce traditional species used for dried snacks. Increasing amounts of these types of fish are being imported raw and processed in China. Imports of some products such as shark fin, fillets, and salted herring all increased more than 40 percent during this period. These increases are partially attributed to higher income levels that allow increased consumption of higher priced products such as shark fin, fillet-style snacks, and the domestic resources of traditional herring that are becoming scarce.
The major 1996 dried fish products imports were shark fins accounting for 43 percent of the volume and 73 percent of the value; small, other dried fish with 24 percent of the volume and 6 percent of the value, and fish meal making up 19 percent of the volume and 5 percent of the value. Just three years previous, 1993, fish meal accounted for 60 percent of the total volume and 41.5 percent of the value, while shark fin made up only 12 percent of the volume, but 47.4 percent of the value. During this three-year period the average import price of meal practically doubled while the average value of shark fin remained stable. Also, contributing to the increase in shark fin, besides its notable increase in consumption, has been the relocation of foreign processing centers to China to benefit from lower production costs.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>030-</td>
<td></td>
</tr>
<tr>
<td>51000</td>
<td>Flours, meals and pellets of fish, fit for human consumption</td>
</tr>
<tr>
<td>52000</td>
<td>Livers and roes dried salted or in brine</td>
</tr>
<tr>
<td>53000</td>
<td>Fish fillets, dried, salted or in brine but not smoked</td>
</tr>
<tr>
<td>54100</td>
<td>Smoked fish including fillets: Pacific salmon, Atlantic salmon and Danube salmon</td>
</tr>
<tr>
<td>54200</td>
<td>Smoked fish including fillets: Herrings</td>
</tr>
<tr>
<td>54900</td>
<td>Smoked fish including fillets: Other</td>
</tr>
<tr>
<td>55100</td>
<td>Dried fish, whether or not salted but not smoked: Cod</td>
</tr>
<tr>
<td>55900</td>
<td>Dried fish, whether or not salted but not smoked: Other</td>
</tr>
<tr>
<td>55910</td>
<td>Dried fish, whether or not salted but not smoked: Other: Pipefish and seahorses</td>
</tr>
<tr>
<td>55920</td>
<td>Dried fish, whether or not salted but not smoked: Other: Shark fins</td>
</tr>
</tbody>
</table>
More than half of China’s dried fish imports come from Japan and Myanmar (Burma). Japan supplies 71 percent of all shark fin imported to China and of Japan’s total dried fish products sold to China, shark fin accounts for more than 86 percent. Myanmar supplies 68-78 percent of all imports of dried fish, other (not cod, herring, salmon, small or otherwise specified); this accounts for 70-80 percent of the total dried fish imports from Myanmar to China. During this period, of the two good years that the United States served as China’s third largest import trading partner in dried fish products, 95-99 percent of the trade was fish meal. The US showed an increasing trade in shark fin, from 22,105 MT to 62,712 MT, until 1996 when it declined 17,237 MT. The most dramatic change in the makeup of import trading partners has been with the Hong Kong Special Administrative Region (SAR) - a decrease of more than 80 percent. This strongly shows China’s increasing trend in dealing direct with other foreign countries rather than relying primarily on agents in Hong Kong SAR or Taiwan.
C. Exports of Dried Fish Products

According to its Five-Year Plans, China continues to encourage expansion of its exports as a means of generating much needed foreign currency. Increased production and more enterprises engaged in foreign trade has led to a rapid increase in China’s exports. Yang Jian, Vice Director of the Ministry of Agriculture’s Bureau of Fisheries, attributes this growth in exports to new species development and improved quality control. From 1992 to 1996, exports of dried fish products grew 6.8 times, from 2,518,325 kg to 17,070,390 kg. During this time, the value of China’s exports rose from $17,878,000 to $133,302,000 in 1995, then declined 43 percent in 1996 to $75,607,000. The overall average import price declined from a high of $12.695/kg. in 1994 to $4.43/kg. in 1996. The largest increases in exports were shipments of dried livers and roes, dried cod and small dried fish, increasing 5-7 times from 1992 to 1996. Significant decreases from 1995 to 1996 were seen in smoked fish, other: 86.3 percent in volume, 96.4 percent in value and 74 percent in its average export value. From 1995 figures, small dried fish decreased in its total export value and average export price, 38 percent and 62 percent, respectively, in 1996.

China’s most important dried fish products exports have been small and other dried fish, livers and roe, shark fin and fillets, accounting for 46.8 percent, 26.3 percent, 12.8 percent and 6.8 percent of the total 1996 volume. Livers and roes accounted for 35.4 percent of the total 1996 export value, followed by shark fin 30 percent, small fish 21.3 percent and fillets 6.3 percent. These products, that account for 93 percent of the total export volume and value, all experienced significant decreases in their average export price from 1993 to 1994: livers and roe 43.7 percent, fillets 51.3 percent, shark fin 11.5 percent and small fish 70 percent.
**Code** | **Description**
--- | ---
030- | 51000 Flours, meals and pellets of fish, fit for human consumption
 | 52000 Livers and roes dried salted or in brine
 | 53000 Fish fillets, dried, salted or in brine but not smoked
 | 54100 Smoked fish including fillets: Pacific salmon, Atlantic salmon and Danube salmon
 | 54200 Smoked fish including fillets: Herrings
 | 54900 Smoked fish including fillets: Other
 | 55100 Dried fish, whether or not salted but not smoked: Cod
 | 55900 Dried fish, whether or not salted but not smoked: Other
 | 55910 Dried fish, whether or not salted but not smoked: Other: Pipefish and seahorses
 | 55920 Dried fish, whether or not salted but not smoked: Other: Shark fins
 | 55990 Dried fish, whether or not salted but not smoked: Other: Saury, sardines, puffer fish, catfish; Small dried fish: Silver anchovy, herring or other sardines; Fish maws, heads, tails, lips & skins, other
 | 56100 Fish, salted but not dried nor smoked and fish in brine: Herrings or other Sardines
 | 56200 Fish, salted but not dried nor smoked and fish in brine: Cod
 | 56300 Fish, salted but not dried nor smoked and fish in brine: Anchovies
 | 56900 Fish, salted but not dried nor smoked and fish in brine: Other
Japan and Hong Kong SAR have long been China’s most important trading partners for its exports, accounting for 64.7 percent and 26.4 percent respectively in 1996. Market share positions were reversed in 1992 when Hong Kong SAR accounted for 75.3 percent and Japan 17.2 percent. Exports to both countries have increased significantly as China’s total exports have increased over the period 1992-1996: Japan 433,004 kg. to 11,041,833 kg. - 25.5 times and Hong Kong SAR 1,896,506 kg. to 4,503,426 kg. - 2.3 times. Taking into consideration the dramatic increase in total exports, this is another indication that proportionately less and less trade is going through agents in Hong Kong SAR. The major dried fish products going to Japan are small and other dried fish 45.7 percent, livers and roes 40 percent, and fillets 7.3 percent. Exports to Japan have been spurred by Japan’s heavy investment in China’s fish processing industry. China’s exports to Hong Kong SAR are basically shark fin 51 percent and small and other dried fish 45.6 percent. Exports to the Republic of Korea, China’s third largest trading partner for its exports, consist mainly of small and other dried fish 38 percent, dried cod 32.5 percent, and dried fillets 12 percent. Recent noteworthy increases in trading partners’ share include exports of dried fillets 245,010 MT to Portugal and Taiwan’s increased purchases of small and other dried fish to 254,205 MT. However, that is Taiwan’s only import from China.
Japan and Hong Kong SAR have long been China’s most important trading partners for its exports, accounting for 64.7 percent and 26.4 percent respectively in 1996. Market share positions were reversed in 1992 when Hong Kong SAR accounted for 75.3 percent and Japan 17.2 percent. Exports to both countries have increased significantly as China’s total exports have increased over the period 1992-1996: Japan 433,004 kg. to 11,041,833 kg. - 25.5 times and Hong Kong SAR 1,896,506 kg. to 4,503,426 kg. - 2.3 times. Taking into consideration the dramatic increase in total exports, this is another indication that proportionately less and less trade is going through agents in Hong Kong SAR. The major dried fish products going to Japan are small and other dried fish 45.7 percent, livers and roes 40 percent, and fillets 7.3 percent. Exports to Japan have been spurred by Japan’s heavy investment in China’s fish processing industry. China’s exports to Hong Kong SAR are basically shark fin 51 percent and small and other dried fish 45.6 percent. Exports to the Republic of Korea, China’s third largest trading partner for its exports, consist mainly of small and other dried fish 38 percent, dried cod 32.5 percent, and dried fillets 12 percent. Recent noteworthy increases in trading partners’ share include exports of dried fillets 245,010 MT to Portugal and Taiwan’s increased purchases of small and other dried fish to 254,205 MT. However, that is Taiwan’s only import from China.

**PRC Domestic Dried Fish Market Supply**  
in '000s kilograms

<table>
<thead>
<tr>
<th>Year</th>
<th>Production + Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>578,800 + 10,175</td>
<td>17,072</td>
</tr>
<tr>
<td>1995</td>
<td>518,596 + 15,045</td>
<td>12,840</td>
</tr>
<tr>
<td>1994</td>
<td>382,506 + 17,206</td>
<td>10,488</td>
</tr>
<tr>
<td>1993</td>
<td>316,444 + 25,915</td>
<td>6,261</td>
</tr>
</tbody>
</table>
VII. Marketing and Distribution Channels

A. Market Structure

As noted in Section II. Recent Developments, since 1985 when China withdrew its state monopoly on products, all enterprises, whether state-owned or private, have complete control over the sale of their fisheries products. Now, fisheries enterprises have choices where to sell or purchase their products. However, to conduct any foreign trade the Chinese company must be granted foreign trade rights issued by the Ministry of Foreign Trade and Economic Cooperation (MOFTEC).

China’s Domestic Market

China’s fishing industry is categorized by four basic groups wherein each element has control over its product and where each enterprise has the right to apply for foreign trading rights should they choose to. As discussed in Section VI., Supply, the domestic markets are supplied by individual fishermen, enterprises with their own distant water and domestic fleets, and imported fishery products.

Production for the snack food sector of the dried fish market is dominated by large processing companies. However, literally thousands of small individual producers/fishermen account for most of dried fish products used for cooking. Now, many of the large state-owned and some private enterprises are highly centralized - controlling their own production and direct marketing. However, urban wholesale markets, either state-owned or private, remain the main distribution points for all seafood products. These markets are supplied by state-owned, collectively-owned, or privately-owned enterprises, individual fishermen, and direct imports. Most of the major production areas have large wholesale fish markets that buy, process, and sell fresh, frozen, salted and dried products (see Section X. Profiles of Coastal Regions and Markets). These markets have sufficient storage and handling facilities and adhere to strict regulations to ensure product safety that, among others, include guidelines that dictate the amount of chemicals that can be added. The markets also require equipment certification on their processing equipment and inspection certificates on products.
All products must be registered upon entering storage at these larger markets. Registration includes description name, quality, size, volume, weight, low limit price, and price set by suppliers. All items are issued a holding number, storage location and date entered. This information is then recorded on the register. Storage locations are identified by type of product, marketing season, and product life.

The main customers of these larger markets are intermediate wholesalers, restaurants, and retail shops. For its clients, the markets provide services that include transportation, shipping and handling, security, processing and packaging, on-site nonprofit hotels, restaurants, and free parking.

To stabilize market prices and the supply of fishery products, eighteen of the large wholesale markets in ten provinces and municipalities have recently been connected by a computerized network.

1995 Top Ten Producing Provinces
(In 000s metric tons)

<table>
<thead>
<tr>
<th>Province</th>
<th>Total</th>
<th>Marine</th>
<th>Freshwater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shandong</td>
<td>3,809</td>
<td>3,273</td>
<td>536</td>
</tr>
<tr>
<td>Guangdong</td>
<td>3,543</td>
<td>1,972</td>
<td>1,571</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>3,181</td>
<td>2,787</td>
<td>394</td>
</tr>
<tr>
<td>Fujian</td>
<td>2,573</td>
<td>2,242</td>
<td>331</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>2,195</td>
<td>651</td>
<td>1,544</td>
</tr>
<tr>
<td>Liaoning</td>
<td>1,979</td>
<td>1,784</td>
<td>195</td>
</tr>
<tr>
<td>Hubei</td>
<td>1,509</td>
<td>-0-</td>
<td>1,509</td>
</tr>
<tr>
<td>Guangxi</td>
<td>1,034</td>
<td>646</td>
<td>388</td>
</tr>
<tr>
<td>Hunan</td>
<td>863</td>
<td>-0-</td>
<td>863</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>840</td>
<td>-0-</td>
<td>840</td>
</tr>
</tbody>
</table>

source: Bureau of Fisheries, Ministry of Agriculture, PRC
Smaller public and private markets are dominated by small family-run operations. Individuals rent stalls or small areas to hawk their products that they have produced themselves or purchased from small processors. These markets traditionally sold dried fish products used primarily for cooking. Now, many of the small vendors include dried fish snacks to meet the demand of their customers. With little to differentiate between products, in cramped, close quarters, sellers negotiate the price with customers based on the quality of the product and the quantity purchased.

Dried Seafood Market in Wenzhou

Family Run Dried Seafood Store in Hangzhou

Dried fish products used for cooking and dried fish snacks are found in foodstuff stores and the new supermarkets. Prepackaged snacks are openly displayed on counters and shelves for personal selection and displayed behind glass or plexiglass counters. In department stores, only the dried fish snack varieties are found, displayed in a similar but more attractive manner - prepackaged on counters or in rows of clear, covered bins. In all stores, there is no self-service with products sold in bulk. Employees stand ready to assist with selections.
B. DRIED FISH DISTRIBUTION CHANNEL FOR STATE-OWNED ENTERPRISE

- CNFC Fleet Domestic and Distant Water
- Imports
- Other Chinese Companies

> China National Fisheries Corporation CNFC

- CNFC Processing
  - Export Markets
  - Wholesalers
  - Restaurants
    - Public Markets
    - Private Retailers
    - Supermarkets
    - Department Stores
    - Foodstuff Stores
The distribution channel for large wholesale markets flow much the same as the channel for the large state-owned enterprise on the previous page. In addition to the catch by their fleet, China National Fisheries Corporation (CFNC) receives primary processed products and finished products from direct imports and other Chinese companies that have surplus products to sell. The only difference with the large wholesale markets is that they do not own a fleet and will receive products from individual fishermen as well as direct imports and Chinese enterprises.

Highly centralized enterprises, like CNFC, control the processing and marketing of their products to the wholesale level of the distribution channel. Wholesalers and restaurants purchasing from the centralized enterprises or the large wholesale markets purchase mainly whole, primary-processed aquatic products and do their own custom processing. On the retail level, the larger companies will market their packaged processed dried fish products direct to supermarkets, bypassing the wholesalers.

**Foreign Trade Companies**

For over 125 years Hong Kong has served as the gateway of doing business with the Chinese. Using Hong Kong as a gateway reduced the difficulties to foreign businesses interested in trade with China. Hong Kong, where English is the most popular language in conducting business, provides excellent transportation connections, a sophisticated telecommunication network, advanced technology, strong financial systems, and a highly educated and skilled workforce well versed in doing business with mainland China. Perhaps, more importantly, many trading companies preferred to use Hong Kong and Taiwan agents because of their favorable customs procedures and good connections.

Foreign businesses must deal only with foreign trade companies if they want to conduct business with China. However, with China’s open-door policy, more companies are finding it easier and more profitable to deal direct with the Chinese companies. Export statistics show that even though total exports to Hong Kong are increasing, Hong Kong’s share of the total exports have decreased considerably.

Most foreign trade companies are state-owned, but, with relaxed requirements, more private enterprises are being issued foreign trade rights. The Ministry of Foreign Trade and Economic Relations and Trade (MOFTEC) will be
testing a system, on a limited basis, that will grant automatic trading rights upon registration. Until the system is fully adopted, Chinese companies must get authorization before conducting foreign trade. MOFTEC reviews all applicants, issues trading rights and regulates the activities of these companies. Foreign trade companies are currently placed in the following categories:

- **Original ministerial-level trading companies** - These were the original foreign trade companies, limited in number, but extremely powerful. Before liberalization of foreign trade practices there was only one foreign trade company per industry. These companies still exist. While they have the most experience in foreign trade practices and have excellent connections, they are also the most expensive, inflexible, and time-consuming to deal with.

- **Regional and provincial-level trading companies** - The regional and provincial-level companies were set up after the initial liberalization of trade practices. They have since expanded in numbers and popularity. These companies are less expensive and less rigid to deal with than the ministerial-level companies, yet have excellent local connections.

- **Industry foreign trading companies** - This the largest and fastest expanding section of the foreign trading companies. These are export-oriented enterprises that have been granted the right to directly export their products. This group also includes foreign investment enterprises (FIE’s) that have limited trading rights. An FIE can directly negotiate commercial ventures with foreign companies, export their own products, and imports materials to produce those products.

**VIII. Product Pricing**

Prices, for the most part, are based on accepted world prices. For larger companies with their own fleet, their first price offer is based on their quota. They analyze and take into consideration the market and other influencing factors that may have an affect on their quota to reach an acceptable price. If the market does not accept the price, they will begin private negotiations with the buyer. The large markets will operate in much the same manner, setting reference prices aided by a computerized network that links the supply and wholesale list prices of the major markets. Daily auctions at many of the markets help to keep prices stable.

Product characteristics that will influence individual sales are quality, color, size, and uniformity.
IX. Foreign Trade Business Practices

A. Business Transactions and Customs Procedures

The normal payment terms for most transactions are processed by Letter of Credit. Many Chinese FTC (foreign trade companies) prefer to purchase on a f.o.b. basis (free on board) and, therefore, are responsible for all freight and insurance. For shipments direct to China, required documentation include a bill of lading, commercial invoice, insurance certificate, packing list, and a U.S. Shipper’s Export Declaration if the value exceeds $2,500 ($500 for postal shipments). Other documents, if stipulated in the sales contract, may be required.

Chinese Customs assesses tariffs (see Appendix I: Tariffs) based on c.i.f. values. If the import value is stated in foreign currency it will be converted to renminbi (RMB) on rates set by the People’s Bank of China. Additionally, the Customs General Administration (CGA) will collect a value-added (VAT) tax. VAT on most fish and agricultural products is 13 percent. However, the VAT on dried fish products is 17 percent.

B. Packaging and Promotion

As noted, foreign companies can not directly import and market their products in China without the use of a recognized FTC. There is only one exception to this - foreign companies may direct market goods to the domestic market they have produced in China. In recent years, China has frequently been hosting international trade shows where the participation of foreign companies attempting to introduce their products is welcomed and encouraged. These trade shows are an ideal way to make major industry contacts. The products for the trade shows are exempt from customs duty, provided they are re-exported. For more information about trade shows in China contact the U.S. Department of Commerce (see Appendix M: General Contacts).

Packaging is becoming extremely important as the Chinese consumer becomes ever increasingly brand conscious. All packaged goods (except bulk), imported and produced in China, are required to carry Chinese language labels. Labels must contain: product type, brand name, trademark, producer’s name and address, country of origin, ingredients, quantity, production date and expiration date, warnings for potential risk of spoilage; i.e., must be kept refrigerated, store in a dry, cool place, etc. Large processors in China will include an inspection certificate with each package to insure quality.
X. Profile of Coastal Regions and Markets

HAINAN PROVINCE

Located China’s southern coast, Hainan is a tropical island. It has become a province only in the last decade. To attract foreign investment in developing the economy in this area, China made it the largest special economic zone in the country. Hainan currently has a population of 7.3 million. Its annual GDP and urban income are US $4.69 billions and US $599, respectively. Hainan has 24 natural harbors fitted with berthing facilities - 13 have operative deepwater berths, with a cargo-handling capacity of 15 MT. Hainan has 15 shipping lines, linking the island with every major port in China and over 30 overseas destinations. Main cities of the province are Haikou, Sanya, and Dongfang, with the provincial capital located in Haikou.

GUANGDONG PROVINCE

Guangdong Province, located in southern coastal area of China, has a 69.6 million population (1996). Its per capita annual income of urban residents was US $984 in 1996, ranking it the 2nd highest in China. The province’s GDP was US $78.5 billion in 1996, which was the highest in the country.

There are three special economic zones (SEZ) established to attract foreign direct investment that offer special incentives and tax credits. The province is also vigorously engaging in foreign trade and the value of its exports in 1996 accounted for 40 percent of the nation’s total. A good transportation network has been established in Shenzhen, Zhuhai and Shantou for the distribution of goods.

Shunde and Nan Hai City, facing the South Sea, are known for their freshwater pond farming. The pond farming project was originally sponsored by the Food and Agriculture Organization of the United Nations (FAO). Shunde now has the largest amount of freshwater aquaculture. Guangdong is also known for being the largest eel producer in the country. The annual per capita consumption of aquatic products was US $46 - accounting for 11.8 percent of the total consumption of food.
Guangzhou

Guangzhou, located on the Pearl River Delta, is the capital city of Guangdong Province with a population of 6 million, not counting an estimated additional 2 million transients. The city was the first city in China to open its doors to the world market and the first to reform its fishery distribution system. The market price system was adopted and large quantities of fish are traded in the city. The per capita consumption of seafood 1991 was 28.3 kg., the highest among the large cities of China. Its average economic growth of 14.8 percent since 1979 is 5 points above the national average. Guangzhou, like many other cities in China, carries out continuous fishing industry support construction and renovation in accordance with China’s planned economy.

Huang Sha Fish Market is Guangzhou’s main wholesale market and acts as a central marketplace for the major producing areas in southern China. The market area used to be a port and is still used by trading vessels to offload their products for redistribution throughout China. The city turned the area into a wholesale and public market about 7-8 years ago. Today it houses over 300 companies. A small area adjacent to the market is set aside for dried/salted and wet/salted processing and (wet) cold storage. In the near future the city administration will build a large dried fish market in an area located behind the present market.
Dried Fish at Retail Store in Guangzhou

Dried Octopus ¥32/Jin

Dried Yellow Croaker ¥88/Jin

Dried Chinese Herring ¥55/Jin
Dried Products at a Retail Store in Guangzhou

Dried Silver Fish (Grade 1) ¥110/jin

Dried Needle Fish (Grade 1) ¥18/jin

Dried Hake (Grade 1) ¥16/jin

Dried Fish Fillet (Grade 1) ¥28/jin

Dried Hake ¥52/jin

Dried Silver Fish ¥110/jin

Dried Octopus ¥32/jin

Dried Octopus ¥32/jin

Dried Hake ¥56/kg.

Dried Squid 10 kg./box

Dried Mussel 10 kg./box

Dried Scallops ¥20/jin

Dried Octopus ¥32/jin

Dried Products at a Wholesale Market in Guangzhou
Dried Squid at a Wholesale Market in Guangzhou

Dried Squid 15 kg./box
Dried Squid 10 kg./box
Dried Squid 12 kg./box ¥80/kg.

Dried Fish Wholesale Store in Guangzhou

Dried Needle Fish
Dried Japan Sand Borer
Dried Sole
Dried Fish Wholesale Store in Guangzhou
Jiangmen

Jiangmen is located west of Zhongshan County and the Pearl River Delta in Guangdong Province. It has over 270 kilometers of coastline and a network of rivers that run throughout the city providing an ideal environment for fishery resource cultivation.

Jiangmen Wholesale Market:

Jiangmen’s market history dates back to the 17th century when it was formed as a trade center for the area. Today the market area spans 20,000 square meters that is covered with new construction and buildings, and an additional 18,000 square meters reserved for sun-drying and parking. In addition to its fresh/frozen market, it is the largest dried processing base and market in the world. Its operations include local wholesale markets, importing and exports seafood products, and a specialized style of processing. Products from the Jiangmen Wholesale Market are well known in the United States, Hong Kong, Macau, and Canada. Eighty percent of the dried fish products produced in Guangdong come from this market.

Jianghui Road has become the center for the dried fish section of the market and encompasses the entire street. Today, the market is home to four large fisheries companies: Jiangfan Fisheries Company, Jiangmen Fisheries Supply & Marketing, Jiangmen Fisheries Import and Export Company, and Yuezhong Fisheries Company. The Administration has committed 46 million yuan to the construction of an 8,000 square meter market and half of this has been invested to date. Within the next three years, the Administration plans to build a large, separate dried/salted fish market located not far from the main market entrance.

The dried/salted fish complex, located adjacent to the wholesale market site, accounts for 109,000 MT in its annual sales. In addition to the production area, it has separate large cold storage and wet storage areas. The complex also has the responsibilities for supply and marketing its own products. The 450 MT capacity cold storage is used for dried fish and has two holding stages. The wet storage area is used for the salted fish. Popular products produced at the complex include yellowfin tuna, mackerel, hairtail, pomfret, yellow croaker, sole, flounder, red fish (snapper), and anchovies.

The market has personnel that set reference prices based on current market conditions. Actual prices are negotiated between the buyers and the sellers based on the reference price. A daily auction for the dried/salted products is held from 5:00 am-7:00 am. The auction acts as the middleman collecting 5 percent of the sales (3 percent from the seller and 2 percent from the buyer). The seller will set the lowest price that the auction can sell the product. The auctioneer will try to sell higher but can not sell lower. The highest level of sales (the high season) is normally from the fall through the winter, primarily because people prefer to eat fresh fish in the summer.

Some of the products brought to the dried fish market complex are finished products. The rest is usually brought in frozen and processed on site. The main countries the Jiangmen processors are importing from are Vietnam, Myanmar (Burma), Sir Lanka, India, Spain, Singapore and Pakistan. The main regions from within China that the market receives product from are Zhanjiang of Guangdong, Fujian, Zhejiang, Guangxi, and Hainan Island.
Most of the frozen fish imported for local processing are from Asian countries and from Chinese fleets fishing in foreign waters. The main imported species imported are yellow croaker and purple squid that come from southeast Asian countries. So far, the market has not imported fish from the United States for local dried fish processing, but a high level of interest was expressed for flatfish and other groundfish species.

Dried Fish Processing in Jiangmen, Guangdong

Dried Fish Products Displayed in Jiangmen, Guangdong

Product: Dried Blade
Origin: Taishan

Product: Threadfin
Origin: Jiangmen

Product: Dried Golden Shred
Origin: Vietnam

Product: Dried Bream
Origin: Jiangmen

Product: Red Fish
Origin: Jiangmen

Dried Fish Fillets in Jiangmen’s Cold Storage

Dried & Salted Mackerel in Wet Storage at Jiangmen, Guangdong
FUJIAN PROVINCE

Fujian, located in the southeastern coastal area of China, has a population of 32.6 million. The annual GDP of the province in 1996 was US $31.6 billion, which was the seventh largest in China. Per capita annual income of urban residents was US $624 in 1996. The province’s well-established trading ports allows it to establish substantial worldwide links. Fujian is across from Taiwan Island and, with most of its investment from Taiwan, Fujian is now the third largest province in terms of utilizing foreign investment in China.

Major cities in Fujian are Fuzhou (capital of the province), Xiamen, and Quanzhou. With a 3,050 kilometer long coastline, moderate climate, and abundant marine resources, marine-related industries, such as ocean shipping, ocean fishing, aquatic breeding, and processing have expanded rapidly in recent years. In Xiamen, one of the special economic zones in China, fishery industry plays an important role in city’s economics. Chinese prawn, eel, shrimp, and grouper are specialized farmed species. In Fujian, per capita consumption of aquatic products was US $41 or 12.9 percent of the total food consumption.

ZHEJIANG PROVINCE

Zhejiang is an east coastal province with the population of 43.4 millions. Its average annual per capita urban income was US $839 and its GDP, US $49.95 in 1996. The province has a coastline of 1,900 kilometers and is rich in sea resources such as shrimps, prawns, and crabs. In 1996, its salt water fish and sea crustacean catches accounted for 21 percent and 35 percent respectively of the nation’s total. The province’s Zhoushan city, positioned on a group of 1,339 islands, is China’s largest seafood base and contributes 10 percent of the nations’s entire output. Major cities of the province are Hangzhou (capital city), Ningbo, Shaoxing, and Wenzhou. Annually, the consumption of aquatic products was about US $51 per person, accounting for 15.6 percent of total consumption of food products.

Hangzhou

Hangzhou, the capital of Zhejiang with a population of 5.9 million, is a true success story of one of China’s wealthiest provinces. It has been very successful in attracting foreign investment away from Shanghai. To its credit, Hangzhou has a good infrastructure and lower land and labor costs than Shanghai. It also offers four economic zones where some can handle their own customs procedures.

Its excellent railway system offers service to Shanghai, Jiangxi Province, and Ningbo and Changxing, Zhejiang Province. Its river port can only handle small ships up to 1,000 dwt. The nearest ocean port is Zhapu, 70 kilometers away, but most freight comes through the ports of Shanghai and Ningbo. Its airport is located 15 kilometers from the city and offers domestic service to most major Chinese cities and international service to Singapore.
Long Xiang Bridge Market

Long Xiang Bridge Market is a large cooperative market in Hangzhou that offers fresh, live, and dried fish products and a variety of fresh produce. The second level of the market houses a large selection of dried fish products and reconstituted dried seafood products such as fish bladders, sea cucumbers, sea snails, clams, fish skins, and squid.
Dried Products at Foodstuff Store, Hangzhou

Anchovy ¥6/Jin
Seaweed & Shrimp Soup (convenience food) ¥1/pk
Squid ¥1.4/pk (250g)
Dried Fish Fillet ¥15/pk (250g)
Fish Bladder ¥180/kg
Fish Bladder ¥640/kg
Fish Bladder ¥760/kg
Chinese Herring ¥56/kg
Wenlin

Wenlin is located in the middle of the Zhejiang Province’s coastline, between Ningbo and Wenzhou, facing the East China Sea. The city is accessible by the Hungyan Airport, located 25 kilometers from the city, with service to major cities in China such as Guangzhou, Wuhan, Shanghai, and Hangzhou; from the Jiaoshan Port that has open freight lines to the Chinese cities of Shanghai, Dalian, Xiamen, Jilong, and some harbors in Japan; from the Haimen Port with regular shipping lines to Hong Kong and Japan; from the National Road 104; the Ningbo-Taizhou-Wenzhou Freeway and the coastal railway that runs through the city.

Songmen Fisheries Trade Market - Wenlin Wholesale Market

The Songmen Fisheries Trade Market in Wenlin was established ten years ago and supplies fresh, frozen, and dried fish mainly to intermediate wholesalers and retail shops. It is one of the largest seafood trade markets in China, supplying more than 100 different kinds of seafood products. Local sources, mainly hundreds of individual fishermen and families, but also some processors, are the market’s main source of supply. Some products are imported from Thailand, India, Indonesia, a small amount from Africa, and some pollock from Russia. The market is always short on supply and can not meet the demand.

For dried fish products, Songmen is the second largest market in China, supplying approximately 35,000 MT annually. Production, for the most part, is literally done by hundreds of individuals. The Wenlin area is famous throughout China for their traditional sun-dried processing and especially, for their dried yellow croaker, squid, and eel.

The main products processed and sold at the market are squid, eel, shrimp, yellow croaker, and hairtail. Yellow croaker used to be the main species processed at the market. Now that this resource is becoming scarce, substitutes such as African brown croaker are being used.

Some of the market’s dried squid and herring are being exported to Japan, but very little of the market’s products are exported. Supplies fall short in meeting the increasing demand, but the main reason for fewer exports is that the prices in Wenlin are higher than other areas.
Wenzhou

Wenzhou, with a population of 7 million, is located 350 kilometers south of Shanghai on the southeast coast of Zhejiang Province. Wenzhou has not developed as fast as some of the coastal cities in China due to its relatively poor infrastructure. Its airport is located 25 kilometers from the city offers domestic service only. There is no railway now but future plans include laying track that will connect the city with Linhui and Jinhua. Wenzhou does have an economic zone that is located close to the airport and the Longwan Port. The city is working on developing a deepwater port.
Ningbo

Ningbo is an open coastal city located in Zhejiang Province with a population of 5.3 million. It is the fourth largest transhipment port in China. Ningbo offers excellent connections with Hangzhou using the Hangzhou-Ningbo Expressway. Future plans include a rail facility at the port, a coastal expressway that will link the city with Wenzhou and the Fujian Province.
SHANGHAI

With a population of 14.2 million, Shanghai is one of the four metropolitan cities directly under the central government in China. It is the nation’s largest industrial and commercial city and largest port, served by 19 container shipping lines. The city has an annual GDP of US $34.97 billion and an average urban per capita income of US $987 in 1996, which is the highest in China.

In terms of foreign trade, Shanghai ranks second highest in the country (behind Guangdong). Annual per capita consumption of aquatic products was about US $60, accounting for 14.4 percent of the total consumption of food and 3.7 times of nation’s average. Still, consumers prefer the live and fresh products over the salted and dried products, but are quite fond of snack-style dried fish products. In Shanghai, an abundant supply of farmed fish products supplements other market supply sources sufficiently meeting the demand. However, the demand for a few species such as yellow croaker, hairtail, and pompano is not being satisfied with the current level of supply. With depletion of fish resources in the East and Yellow Seas, Chinese companies have started to expand operations in distant water fisheries and establish joint ventures with foreign companies.

JIANGSU PROVINCE

Jiangsu is located in eastern coast of China and has a coastline of 1,000 kilometers on the Yellow Sea. Its 71.1 million people makes it the most densely populated province in China. The annual GDP of the province was US $72.34 billion in 1996, the second highest in China behind Guangdong Province. However, the average urban population income was US $625, 37 percent less than that of Shanghai. The province’s per capita annual consumption of aquatic products was US $24, above the nation’s average of US $15.9 and accounting for 9.6 percent of the total food consumption. Major cities of the province are Nanjing (capital city), Suzhou, and Wuxi.
SHANDONG PROVINCE

Shandong is a peninsula in eastern China. With 87.4 million people (1996), it is the third most populated province of the nation. The province’s annual GDP is US $71.81 billion, and its annual urban income is US $590.

It has some 25 ports along the province’s coastline, with nation’s second largest port located in Qingdao. The province is actively involved in joint ventures with foreign companies. A new port and fish trading center with foreign investment of US $20 millions is planned to be developed in Qingdao. Shandong is also a major aquaculture producer. Its fish hatchery in Rongcheng City has become the leading seafood breeding center for Southeast Asia. However, the consumption of aquatic products in this province is below nation’s average. In average, people in this region only spend US $11.4 on aquatic product, accounting for 5.7 percent of their total food consumption.

BEIJING

Beijing, located inside Hebei province, is the political capital of China. Almost all China’s central government agents are housed in this city. The city is also the major rail hub of the country, connecting directly with all large cities within the country. Its airport is the country’s busiest international terminus, operating direct flights to nearly 60 world destinations. The population of the city was 12.6 millions in 1996. Its annual GDP and urban income are recorded US $19.47 billion and US $884, respectively.

TIANJIN

Tianjin is the third largest city of China. With its four pillar industries of electronics, chemicals, metallurgy, and machinery, it plays a significant role in the nation’s industrial sector. The city is located on Bohai Bay and is 80 kilometers to the southeast of Beijing. This makes it a main hub for the north China network: north to Shenyang, Harbin, and Mongolia; and south to Shanghai and Guangzhou; and southwest to central China. Populated by 9.5 million people, Tianjin records an annual GDP of US $13.3 billion and an annual urban income of US $720.
HEBEI PROVINCE

Hebei is at the center of the Bohai region, neighboring Liaoning in the north and Shandong in the south. The province also encompasses two of China’s municipalities, Beijing and Tianjin. Major industries in the province are coal, petroleum, and iron. In 1996, the province reported its GDP of US $41.68 billion and urban income of US $536. Total population of the province by 1996 was 64.8 million, ranking it the sixth largest in the country. Hebei’s major cities include Shijiazhuang (capital), Baoding, Tangshan, and Qinhuangdao. On the border with Liaoning Province, Qinhuangdao is one of China’s largest port in terms of cargo-handling tonnage. The port’s main shipping links are with Japan, the Philippines, Singapore, Hong Kong, and South Korea.

LIAONING PROVINCE

Liaoning Province is located in the southern part of Northeast China and was once called “the first province beyond the mountain pass”. Joined by the northeast plain, it divides Bohai Bay from the Yellow Sea. Abundant natural resources, land, coastal and marine area, convenient transport systems, and an established supportive infrastructure make Liaoning a very important province of China. The province’s population is 41.2 million and its provincial capital is Shenyang. The province has four major ports: Dalian, Dandong, Yingkou, and Jinzhou, with shipping links to Tianjin, Shandong Province, and Korea. Its good rail network also provides an important means of transport. Annual GDP of the province is US $38.04 billion, and its urban population income is US $507 (1996).

Dalian

Dalian, home of China’s fifth largest seaport, is located on the southern tip of the Liaodong Peninsula with a population of 2.54 million. It faces the Bohai Sea on the west and the Yellow Sea on the east. Its airport is located 10 kilometers from the city and offers domestic flights to most major Chinese cities an international service to Japan and the Republic of Korea. Dalian also offers daily ferry service to Yantai. In 1996, foreign investment in the city was exceeded only by that of Shanghai and Guangzhou.
Dried Products at Dalian Seafood Store

Packaged Dried Products at Dalian Seafood Store

Dried Products at Dalian Seafood Store

Dried/Salted Salmon in Dalian Seafood Store
APPENDIX A: Regional Demographics

People's Republic of China:
Population 1.212 billion, GDP $3.5 trillion US, GDP per capita $2,900 US, GDP real growth rate 10.3%

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<td>58.2</td>
<td>Wuhan 4.16 (capital), Yichang</td>
<td>35.79</td>
<td>13.2</td>
<td>9</td>
<td>526</td>
<td>18</td>
<td>6.5</td>
</tr>
<tr>
<td>Hunan</td>
<td>64.3</td>
<td>Changsha 1.67 (capital)</td>
<td>31.89</td>
<td>12.7</td>
<td>11</td>
<td>610</td>
<td>9</td>
<td>5.2</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>71.1</td>
<td>Nanjing 2.65 (capital), Nantong, Suzhou 0.9, Wuxi 4.3, Xuzhou, Zhenjiang</td>
<td>72.34</td>
<td>12.2</td>
<td>2</td>
<td>625</td>
<td>7</td>
<td>6.8</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>41.0</td>
<td>Nanchang 1.57 (capital), Jiujiang Jingdezhen, Ganzhou</td>
<td>18.28</td>
<td>13.4</td>
<td>17</td>
<td>456</td>
<td>24</td>
<td>5.6</td>
</tr>
<tr>
<td>Jilin</td>
<td>26.1</td>
<td>Changchun 2.7 (capital), Jilin 1.3</td>
<td>16.11</td>
<td>13.7</td>
<td>19</td>
<td>459</td>
<td>23</td>
<td>5.1</td>
</tr>
<tr>
<td>Liaoning</td>
<td>41.2</td>
<td>Shenyang 4.2 (capital), Dalian 2.54, Dandong</td>
<td>38.04</td>
<td>8.6</td>
<td>8</td>
<td>507</td>
<td>20</td>
<td>5.4</td>
</tr>
<tr>
<td>Qinghai</td>
<td>4.9</td>
<td>Xining 0.67 (capital)</td>
<td>2.21</td>
<td>8.6</td>
<td>29</td>
<td>462</td>
<td>21</td>
<td>7.8</td>
</tr>
<tr>
<td>Shaanxi</td>
<td>35.4</td>
<td>Xi'an 2.61 (capital)</td>
<td>14.16</td>
<td>10.2</td>
<td>21</td>
<td>459</td>
<td>22</td>
<td>8.1</td>
</tr>
<tr>
<td>Shandong</td>
<td>87.4</td>
<td>Jinan 2.3 (capital), Qingdao 2.55, Yantai 6.4, Weihai 2.5</td>
<td>71.81</td>
<td>12.2</td>
<td>3</td>
<td>590</td>
<td>13</td>
<td>7.0</td>
</tr>
<tr>
<td>Shanxi</td>
<td>31.1</td>
<td>Taiyuan 1.9 (capital), Datong</td>
<td>15.73</td>
<td>11.0</td>
<td>20</td>
<td>447</td>
<td>27</td>
<td>6.2</td>
</tr>
<tr>
<td>Sichuan</td>
<td>114.3</td>
<td>Chengdu 3.1 (capital), Panzhihua</td>
<td>50.78</td>
<td>9.8</td>
<td>4</td>
<td>540</td>
<td>16</td>
<td>7.7</td>
</tr>
<tr>
<td>Yunnan</td>
<td>40.4</td>
<td>Kunming 1.6 (capital)</td>
<td>17.97</td>
<td>10.4</td>
<td>18</td>
<td>602</td>
<td>11</td>
<td>6.6</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>43.4</td>
<td>Hangzhou 2.0 (capital), Ningbo 1.2, Shaoxing, Wenzhou 7</td>
<td>49.95</td>
<td>12.7</td>
<td>5</td>
<td>839</td>
<td>4</td>
<td>5.8</td>
</tr>
</tbody>
</table>

| **Autonomous Regions:** | | | | | | | | |
| Guangxi | 45.9 | Nanning 0.49 (capital) | 22.53 | 10.3 | 15 | 608 | 10 | 4.5 |
| Inner Mongolia | 23.1 | Hohhot 0.8 (capital), Baotou | 11.86 | 1.0 | 22 | 415 | 29 | 5.8 |
| Ningxia | 5.2 | Yinchuan 0.5 (capital) | 2.30 | 10.5 | 28 | 438 | 28 | 6.7 |
| Xinjiang | 16.9 | Urumqi 1.22 (capital) | 10.99 | 6.4 | 24 | 565 | 14 | 8.8 |
| Tibet | 24.1 | Lhasa 0.12 (capital), Shigatse | 0.78 | 3.2 | 30 | 791 | 5 | -0- |

* Chongqing, formerly of Sichuan Province, became a separate municipality in 1997
** GDP growth rates are adjusted for inflation
## APPENDIX B: Imported Dried Fish Products

### PRC Imported Dried Fish, by Products

<table>
<thead>
<tr>
<th>HS Code</th>
<th>Description</th>
<th>1992 Quantity (kg)</th>
<th>1992 Value (US$'000)</th>
<th>1993 Quantity (kg)</th>
<th>1993 Value (US$'000)</th>
<th>1994 Quantity (kg)</th>
<th>1994 Value (US$'000)</th>
<th>1995 Quantity (kg)</th>
<th>1995 Value (US$'000)</th>
<th>1996 Quantity (kg)</th>
<th>1996 Value (US$'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>030-00</td>
<td>51000 Flours, meals and pellets of fish, fit for human consumption</td>
<td>15,547,670</td>
<td>7,600</td>
<td>3,664,183</td>
<td>2,321</td>
<td>2,636,762</td>
<td>1,355</td>
<td>1,958,917</td>
<td>1,742</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>52000 Livers and roes dried salted or in brine</td>
<td>399,392</td>
<td>4,215</td>
<td>134,837</td>
<td>61</td>
<td>4,057</td>
<td>32</td>
<td>21,437</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53000 Fish fillets, dried, salted or in brine but not smoked</td>
<td>13,683</td>
<td>44</td>
<td>22,947</td>
<td>61</td>
<td>61</td>
<td>32</td>
<td>15,643</td>
<td>160</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54100 Smoked fish including fillets: Pacific salmon (oncorhynchus spp.)</td>
<td>20,521</td>
<td>335</td>
<td>17,066</td>
<td>284</td>
<td>20,633</td>
<td>351</td>
<td>13,088</td>
<td>223</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Danube salmon (hucho hucho)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54200 Smoked fish including fillets: Herrings (Clupea harengus, Clupea pallasii)</td>
<td>0</td>
<td>0</td>
<td>341</td>
<td>2</td>
<td>1,532,099</td>
<td>3,050</td>
<td>4</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54900 Smoked fish including fillets: Other</td>
<td>17,992</td>
<td>111</td>
<td>35,183</td>
<td>61</td>
<td>26,323</td>
<td>144</td>
<td>15,643</td>
<td>160</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55100 Dried fish, whether or not salted but not smoked: Cod (Gadus morhua, Gadus ogac, Gadus macrocephalus)</td>
<td>441,469</td>
<td>537</td>
<td>1,745,681</td>
<td>2,880</td>
<td>560,941</td>
<td>925</td>
<td>94,011</td>
<td>147</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55900 Dried fish, whether or not salted but not smoked: Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55910 Dried fish, whether or not salted but not smoked: Other: Pipelikefish and hippocampi</td>
<td>7,708</td>
<td>937</td>
<td>14,545</td>
<td>1,263</td>
<td>3,815</td>
<td>524</td>
<td>4,904</td>
<td>570</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55920 Dried fish, whether or not salted but not smoked: Other: Shark's fins</td>
<td>3,079,652</td>
<td>16,776</td>
<td>3,375,138</td>
<td>18,358</td>
<td>4,001,175</td>
<td>16,559</td>
<td>4,362,543</td>
<td>24,487</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55990 Dried fish, whether or not salted but not smoked: Other: Other: Other</td>
<td>5,362,573</td>
<td>3,982</td>
<td>6,744,730</td>
<td>3,660</td>
<td>4,927,198</td>
<td>2,337</td>
<td>2,425,342</td>
<td>2,051</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>56100 Fish, salted but not dried nor smoked and fish in brine: Herrings (Clupea harengus, Clupea pallasii)</td>
<td>773</td>
<td>6</td>
<td>118</td>
<td>1</td>
<td>163,861</td>
<td>581</td>
<td>1,202</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>56200 Fish, salted but not dried nor smoked and fish in brine: Cod (Gadus morhua, Gadus ogac, Gadus macrocephalus)</td>
<td>10,616</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>53</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>56300 Fish, salted but not dried nor smoked and fish in brine: Anchoyves (Engraulis spp.)</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>1</td>
<td>30</td>
<td>0</td>
<td>235</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>56900 Fish, salted but not dried nor smoked and fish in brine: Other</td>
<td>1,012,932</td>
<td>866</td>
<td>1,451,333</td>
<td>1,207</td>
<td>1,114,167</td>
<td>967</td>
<td>852,468</td>
<td>452</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTALS</strong></td>
<td>9,284,139</td>
<td>23,065</td>
<td>25,914,981</td>
<td>35,414</td>
<td>17,206,132</td>
<td>32,585</td>
<td>15,044,964</td>
<td>32,585</td>
<td></td>
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</tr>
</tbody>
</table>

*Note: All values are in US$'000.*
### APPENDIX C: Exported Dried Fish Products

#### PRC Exported Dried Fish, by Products

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>03051000</td>
<td>Flours, meals and pellets of fish, fit for human consumption</td>
<td>0</td>
<td>95,943</td>
<td>0</td>
<td>89,153</td>
<td>0</td>
<td>15,460</td>
<td>0</td>
<td>35</td>
<td>0</td>
<td>135,228</td>
</tr>
<tr>
<td>03052000</td>
<td>Livers and roes dried salted or in brine</td>
<td>0</td>
<td>887,756</td>
<td>0</td>
<td>976,780</td>
<td>0</td>
<td>1,781,108</td>
<td>0</td>
<td>14,893</td>
<td>0</td>
<td>4,484,084</td>
</tr>
<tr>
<td>03053000</td>
<td>Fish fillets, dried, salted or in brine but not smoked</td>
<td>0</td>
<td>939,608</td>
<td>0</td>
<td>791,520</td>
<td>0</td>
<td>790,073</td>
<td>0</td>
<td>3,589</td>
<td>0</td>
<td>1,159,525</td>
</tr>
<tr>
<td>03054100</td>
<td>Smoked fish including fillets: Pacific salmon (Oncorhynchus spp.)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>03054200</td>
<td>Smoked fish including fillets: Herrings (Clupea harengus, Clupea pallasi)</td>
<td>0</td>
<td>1,061,088</td>
<td>0</td>
<td>3,833,468</td>
<td>0</td>
<td>2,743,862</td>
<td>0</td>
<td>67,722</td>
<td>0</td>
<td>375,139</td>
</tr>
<tr>
<td>03055100</td>
<td>Dried fish, whether or not salted but not smoked: Cod (Gadus morhua, Gadus ogac, Gadus macrocephalus)</td>
<td>0</td>
<td>35,524</td>
<td>0</td>
<td>36,265</td>
<td>0</td>
<td>213,109</td>
<td>0</td>
<td>863</td>
<td>0</td>
<td>249,891</td>
</tr>
<tr>
<td>03055990</td>
<td>Dried fish, whether or not salted but not smoked: Other: Other</td>
<td>0</td>
<td>1,809,609</td>
<td>0</td>
<td>3,585,616</td>
<td>0</td>
<td>4,899,405</td>
<td>0</td>
<td>26,061</td>
<td>0</td>
<td>7,994,434</td>
</tr>
<tr>
<td>03056100</td>
<td>Fish, salted but not dried nor smoked and fish in brine: Herrings (Clupea harengus, Clupea pallasi)</td>
<td>0</td>
<td>600</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>03056200</td>
<td>Fish, salted but not dried nor smoked and fish in brine: Cod (Gadus morhua, Gadus ogac, Gadus macrocephalus)</td>
<td>0</td>
<td>61,508</td>
<td>0</td>
<td>58,000</td>
<td>0</td>
<td>136,671</td>
<td>0</td>
<td>329</td>
<td>0</td>
<td>154,485</td>
</tr>
<tr>
<td>03056300</td>
<td>Fish, salted but not dried nor smoked and fish in brine: Anchovies (Engraulis spp.)</td>
<td>0</td>
<td>500</td>
<td>0</td>
<td>127,680</td>
<td>0</td>
<td>322,295</td>
<td>0</td>
<td>58</td>
<td>0</td>
<td>56,220</td>
</tr>
<tr>
<td>03056900</td>
<td>Fish, salted but not dried nor smoked and fish in brine: Smoked fish (Pipefish, hippocampus)</td>
<td>0</td>
<td>153,755</td>
<td>0</td>
<td>141,627</td>
<td>0</td>
<td>132,436</td>
<td>0</td>
<td>639</td>
<td>0</td>
<td>271,439</td>
</tr>
</tbody>
</table>

**TOTALS** 2,518,325  17,878  6,281,050  82,714  10,487,531  133,144  12,839,708  133,302  17,072,390
## APPENDIX D: Wholesale Dried Fish Prices

### Average Wholesale Prices for Dried Fish in PRC - Values in RMB and (US$). Volume in kilograms

<table>
<thead>
<tr>
<th>Product Description</th>
<th>1997 Jan-Mar</th>
<th>1997 Apr-Jun</th>
<th>1997 Jul-Sep</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Guangdong</td>
<td>Guangxi</td>
<td>Zhejiang</td>
</tr>
<tr>
<td>Not-salted Dried “Chi” Fish [Scad/Horse Mackerel]</td>
<td>6.10 (US$0.74)</td>
<td>5.55 (US$0.67)</td>
<td>5.80 (US$0.70)</td>
</tr>
<tr>
<td>Not-salted Dried Blue Rounded Pompano</td>
<td>6.40 (US$0.77)</td>
<td>6.80 (US$0.82)</td>
<td>6.40 (US$0.77)</td>
</tr>
<tr>
<td>Not-salted Dried Sharp Lip Fish [Anchovy]</td>
<td>16.29 (US$1.97)</td>
<td>11.00 (US$1.33)</td>
<td>16.75 (US$2.02)</td>
</tr>
<tr>
<td>Cooked Dried Sharp Lip Fish [Anchovy]</td>
<td>19.02 (US$2.30)</td>
<td>18.10 (US$2.19)</td>
<td>17.32 (US$2.09)</td>
</tr>
<tr>
<td>Not-salted Dried Red Coat Fish [Japanese Threadfin Bream]</td>
<td>24.30 (US$2.96)</td>
<td>21.08 (US$2.55)</td>
<td>21.08 (US$2.55)</td>
</tr>
<tr>
<td>Not-salted Dried Red Coat Fish [Goldline Sea Bream]</td>
<td>11.81 (US$1.43)</td>
<td>13.19 (US$1.63)</td>
<td>12.75 (US$1.54)</td>
</tr>
<tr>
<td>Not-salted Dried Red Coat Fish [Goldline Sea Bream]</td>
<td>11.81 (US$1.43)</td>
<td>13.19 (US$1.63)</td>
<td>12.75 (US$1.54)</td>
</tr>
<tr>
<td>Not-salted Dried Pomfret, each &gt;= 500</td>
<td>8.30 (US$1.00)</td>
<td>10.00 (US$1.24)</td>
<td>10.00 (US$1.24)</td>
</tr>
<tr>
<td>Not-salted Dried Pomfret meat</td>
<td>8.10 (US$0.98)</td>
<td>10.00 (US$1.24)</td>
<td>10.00 (US$1.24)</td>
</tr>
<tr>
<td>Not-salted Dried “Hwan Gu” Fish [Croaker/Drum]</td>
<td>16.17 (US$1.95)</td>
<td>7.73 (US$0.93)</td>
<td>8.40 (US$1.01)</td>
</tr>
<tr>
<td>Not-salted Dried Pomfret, each &gt;= 500</td>
<td>110.00 (US$13.29)</td>
<td>110.00 (US$13.29)</td>
<td>103.46 (US$12.50)</td>
</tr>
<tr>
<td>Not-salted Dried Green Scale Fish [Herring/Sardine/Japanese Pilchard]</td>
<td>6.06 (US$0.73)</td>
<td>7.10 (US$0.86)</td>
<td>7.10 (US$0.86)</td>
</tr>
<tr>
<td>Dried Squid, length &gt;=30cm</td>
<td>149.77 (US$18.09)</td>
<td>149.77 (US$18.09)</td>
<td>148.75 (US$17.97)</td>
</tr>
<tr>
<td>Dried Squid, length 14cm &lt;= length &lt;30cm</td>
<td>140.00 (US$16.91)</td>
<td>133.46 (US$16.12)</td>
<td>140.00 (US$16.91)</td>
</tr>
<tr>
<td>Not-salted Dried Long Body Rounded Pompano</td>
<td>8.50 (US$1.03)</td>
<td>7.33 (US$0.93)</td>
<td>6.15 (US$0.74)</td>
</tr>
</tbody>
</table>

Source: Goodwill Information Limited
## APPENDIX E: Retail Prices

### Dried Fish Prices at a Seafood Market in Wenzhou City, October 14, 1997
(units in 500 grams)

<table>
<thead>
<tr>
<th>Item</th>
<th>Yuan</th>
<th>US$</th>
<th>Item</th>
<th>Yuan</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>large</td>
<td>¥ 48</td>
<td>$ 5.80</td>
<td>Seacucumber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>small</td>
<td>¥ 25</td>
<td>$ 3.20</td>
<td>Meihua sea cucumber</td>
<td>¥ 98</td>
<td>$11.84</td>
</tr>
<tr>
<td>Huangshan croaker</td>
<td>¥ 11</td>
<td>$ 1.33</td>
<td>not specified</td>
<td>¥ 25</td>
<td>$ 3.02</td>
</tr>
<tr>
<td>Tuansha croaker</td>
<td>¥ 18</td>
<td>$ 2.17</td>
<td>Scallops</td>
<td>¥ 58</td>
<td>$ 7.01</td>
</tr>
<tr>
<td>Prawn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>large</td>
<td>¥ 80</td>
<td>$ 9.66</td>
<td>winter and round</td>
<td>¥ 60</td>
<td>$ 7.25</td>
</tr>
<tr>
<td>small prawn</td>
<td>¥ 38</td>
<td>$ 4.59</td>
<td>round</td>
<td>¥ 40</td>
<td>$ 4.83</td>
</tr>
<tr>
<td>Seaweed</td>
<td>¥ 12</td>
<td>$ 1.45</td>
<td>not specified</td>
<td>¥ 38</td>
<td>$ 4.59</td>
</tr>
<tr>
<td>Shrimp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>large</td>
<td>¥ 60</td>
<td>$ 7.25</td>
<td>sharp tail</td>
<td>¥ 25</td>
<td>$ 3.02</td>
</tr>
<tr>
<td>medium</td>
<td>¥ 48</td>
<td>$ 5.80</td>
<td>Jelly fish</td>
<td>¥ 10</td>
<td>$ 1.21</td>
</tr>
<tr>
<td>small</td>
<td>¥ 20</td>
<td>$ 2.42</td>
<td>Salted baby shrimp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clam</td>
<td>¥ 38</td>
<td>$ 4.59</td>
<td></td>
<td></td>
<td></td>
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</table>

### Dried Fish Prices at Yi De Lu Market of Guangzhou City, October 11, 1997
(units in 500 grams)

<table>
<thead>
<tr>
<th>Item</th>
<th>Yuan</th>
<th>US$</th>
<th>Item</th>
<th>Yuan</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow croaker, whole round</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>domestic</td>
<td>¥ 88</td>
<td>$10.63</td>
<td>Mackerel, whole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>imported</td>
<td>¥ 68</td>
<td>$ 8.21</td>
<td>small</td>
<td>¥ 15</td>
<td>$ 1.81</td>
</tr>
<tr>
<td>Cod fillets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>domestic</td>
<td>¥ 52</td>
<td>$ 6.28</td>
<td>Octopus, butterflied</td>
<td>¥ 32</td>
<td>$ 3.87</td>
</tr>
<tr>
<td>imported</td>
<td>¥ 48</td>
<td>$ 5.80</td>
<td>Squid, butterflied medium-large</td>
<td>¥ 40</td>
<td>$ 4.83</td>
</tr>
<tr>
<td>Chinese Herring, whole</td>
<td>¥ 55</td>
<td>$ 6.64</td>
<td>Bladder, round</td>
<td>¥ 220</td>
<td>$26.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red snapper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>domestic</td>
<td>¥ 24</td>
<td>$ 2.90</td>
<td>large</td>
<td>¥ 320</td>
<td>$38.66</td>
</tr>
<tr>
<td>domestic whole, round</td>
<td>¥ 17</td>
<td>$ 2.05</td>
<td>1st class, from Dalian)</td>
<td>¥ 125</td>
<td>$15.10</td>
</tr>
<tr>
<td>domestic butterflied</td>
<td>¥ 18</td>
<td>$ 2.17</td>
<td>small</td>
<td>¥ 95</td>
<td>$11.48</td>
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<tr>
<td>Imported from HK</td>
<td>¥ 26</td>
<td>$ 3.14</td>
<td>ex. small</td>
<td>¥ 75</td>
<td>$ 9.06</td>
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<tr>
<td>Anchovy, whole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>from Japan</td>
<td>¥ 38</td>
<td>$ 4.59</td>
<td>super quality</td>
<td>¥ 485</td>
<td>$58.59</td>
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<tr>
<td>imported-unknown origin</td>
<td>¥ 18</td>
<td>$ 2.17</td>
<td>1st class</td>
<td>¥ 450</td>
<td>$54.36</td>
</tr>
<tr>
<td>domestic</td>
<td>¥ 13</td>
<td>$ 1.57</td>
<td>not specified</td>
<td>¥ 280</td>
<td>$33.82</td>
</tr>
<tr>
<td>Hakes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brown, butterflied</td>
<td>¥ 16</td>
<td>$ 1.93</td>
<td>from Indonesia (large)</td>
<td>¥ 380</td>
<td>$45.90</td>
</tr>
<tr>
<td>small, butterflied</td>
<td>¥ 15</td>
<td>$ 1.81</td>
<td>from Indonesia (small)</td>
<td>¥ 358</td>
<td>$43.25</td>
</tr>
<tr>
<td>Needlefish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from Vietnam, butterflied</td>
<td>¥ 17.5</td>
<td>$ 2.11</td>
<td>Mussels</td>
<td>¥ 13</td>
<td>$ 1.57</td>
</tr>
<tr>
<td>Flounder</td>
<td>¥24</td>
<td>$ 2.90</td>
<td>Shark fin</td>
<td>¥550</td>
<td>$66.44</td>
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<td></td>
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</table>
APPENDIX F:
Product Variety

Dried Hake

Dried and Salted Salmon

Dried and Salted Chinese Herring

Dried Hake

Dried and Salted Salmon
Dried Seasoned Seafood Products
Dried Shark

Dried/Salted Hairtail and Chinese Herring
Dried and Salted Mackerel

Dried Croaker

Dried Bladders
Dried and Salted Pomfret

Dried Sea Bream

Cuttle Fish Dried

Laver
### APPENDIX G:

**Sample Specifications & Grading of Dried Aquatic Products**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Specification &amp; Grading</th>
<th>Packing &amp; Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jelly Fish (Zhoushan Origin)</td>
<td>Thrice Alummed Quality 1st, 2nd, 3rd, 4th grade</td>
<td>25 kg/wooden case</td>
</tr>
<tr>
<td>Jelly Fish Head (Zhoushan Origin)</td>
<td>1st grade 0.5 kg &amp; up/piece 2nd grade 0.25-0.35 kg &amp; up/piece</td>
<td>25 kg/wooden case</td>
</tr>
<tr>
<td>Cuttle Fish Dried (Zhoushan Origin)</td>
<td>12-14 pieces/kg 16-24 pieces/kg</td>
<td>20 kg/carton</td>
</tr>
<tr>
<td>Chinese Herring Brined</td>
<td>1st and 2nd grade</td>
<td></td>
</tr>
<tr>
<td>Marine Eel Dried</td>
<td>600-1200 grams/piece</td>
<td>20 kg/carton</td>
</tr>
<tr>
<td>Uncooked Shrimps Dried</td>
<td></td>
<td>50 lb/paper box 200 oz/paper box</td>
</tr>
<tr>
<td>Laver</td>
<td>in-round or square sheets</td>
<td>25-50 kg/wooden case</td>
</tr>
<tr>
<td>Cooked Shrimps Dried</td>
<td></td>
<td>454 g x 50 bag/carton</td>
</tr>
<tr>
<td>Seaweed (Sea Tangle) Dried</td>
<td></td>
<td>10 kg/carton</td>
</tr>
<tr>
<td>Pud Dry Pink Shrimp (shelled)</td>
<td></td>
<td>10 kg/carton</td>
</tr>
<tr>
<td>Dried Seasoned File Fish</td>
<td>2 pieces: L 14 cm &amp; up M 12-14 cm S 10-12 cm XS 8-10 cm 3-4 pieces: 12-14 cm</td>
<td>500 g x 20 bag/carton</td>
</tr>
<tr>
<td>Mussels, Dried</td>
<td>Medium, small grade</td>
<td>30/60 kg/wooden case</td>
</tr>
<tr>
<td>Sardine, Dried</td>
<td>2-3 cm/pieces 3-4 cm/pieces</td>
<td>10 kg/carton</td>
</tr>
<tr>
<td>Dried Squid</td>
<td>12-14 pieces/kg 16-24 pieces/kg</td>
<td>20 kg/carton</td>
</tr>
<tr>
<td>Bombay Duck</td>
<td></td>
<td>20 lb/carton</td>
</tr>
<tr>
<td>Razor Clams Dried</td>
<td></td>
<td>30 kg/carton</td>
</tr>
</tbody>
</table>
APPENDIX H: Major Dried Fish Producers

Dalian Huanghai Fishery General Company
Dalian Haihai Aquatic Products Co., Ltd.
Address: Dalianwan Town, Ganjingzi District
Dalian, Liaoning 116110
Tel: 86-411-7600988, 7600191
Fax: 86-411-7600279
Contact: Xu Weichao, President & General Manager

Dalian Haiyou Company, Ltd.
Address: 51 Hailing Street
Dalian, Liaoning
Tel: 86-411-335431
Fax: 86-411-335471
Contact: Li Engrui, Deputy General Manager

Dalian Jinshan Marine Products
Address: Beishiling, Dagushan 51
Dalian Economic & Technical Development Zone
Dalian, Liaoning 116601
Tel: 86-411-751-0888 86-411-751-1167
Fax: 86-411-751-0898 86-411-761-2391
Contact: Chen Li Jia, General Manager

Dalian You Lian Seafood Company Ltd.
Address: 678 Youyi Street, Jingzhou District
Dalian, Liaoning 116100
Tel: 86-411-7803979
Fax: 86-411-7800333

Dalian Marine Fisheries Corp. of Liaoning Province
Address: Dalianwan Ganjingzi District
Dalian, Liaoning 116100
Tel: 86-411-7600318
Fax: 86-411-7600323
Contact: Zhang Yi, General Manager

Dalian Aquatic Products Company
Address: 21 Tonghai Street, Xigang District
Dalian, Liaoning
Tel: 86-411-334592
Fax: 86-411-334592
Contact: Cao Zhijiang

Guangzhou Ocean Fishing Company
Guangzhou Pelagic Fishery Integrated Co.
Address: 549 Nanhau Dong Road
Guangzhou, Guangdong 510220
Tel: 86-84400270
Fax: 86-84421524
Contact: Liang Feng, General Manager

Jiangmen Aquatic Product (Salted Fish) Wholesale Mkt. Jiangfan Aquatic Product Co.
Address: 68 Jianhui Road
Jiangmen, Guangdong 529000
Tel: 86-750-3516174/3535265/3534329
Fax: 86-750-3537165
Contact: Wang Yi, Deputy Director

Qingdao Ocean Fishery Co.
Aquatic Products Processing Factory
Address: 7 Baoshan Lu
Qingdao, Shangdong 266011
Tel: 86-532-282-6214
Fax: 86-532-282-7914

Shanghai Fish Processing Factory
Address: 486 Gongqing Road
Shanghai 200090
Tel: 86-21-6543-0810
Fax: 86-21-6543-1379
APPENDIX I: Major Importers And Wholesalers

Beijing Fisheries Corporation
Address: A1 Sidaokou Road, Haidian District
Beijing
Tel: 86-10-6225-5588
Fax: 86-10-6225-0346
Contact: Sun Xinzhuang, Deputy General Manager

China National Fisheries Corp.
Import & Export Company
Address: 31 Minfeng Lane, Xidan
Beijing, 100032
Tel: 86-10-66051653 86-10-66057331-346
Fax: 86-10-66024104 86-10-66012808
Contact: Xie Jie, Manager

Dalian Aquaculture Co.
Supply & Sales Department
Address: 90 Heishijiao Street Sahekou District
Dalian, Liaoning 116023
Tel: 86-411-4688598
Fax: 86-411-469-8678
Contact: Fu Jian Xing

Dalian Aquatic Products Company
Address: 11 You Hao Street, Zhongshan District
Dalian, Liaoning
Tel: 86-411-335431
Fax: 
Contact: Chang Chu Fu, Manager

Dalian Jinshan Marine Products
Address: Beishidong, Dagushan 51
Dalian Economic & Technical Development Zone
Dalian, Liaoning 116601
Tel: 86-411-751-0888 86-411-751-1167
Fax: 86-411-751-0898 86-411-761-2391
Contact: Chen Li Jia, General Manager

Dalian Ocean Fishery Imp. & Exp. Corp.
Address: Dalianwan, Ganjingzi District
Dalian, Liaoning 116113
Tel: 86-411-7600318-5411/7600520
Fax: 86-411-7600320
Contact: Xu Zhaobin, General Manager
Bian Hong, Deputy Manager

Dalian Pacific Seafood Co., Ltd.
Address: Bai Feng Zhi, Tie Shan, Lu Shun
Dalian, Liaoning 116041
Tel: 86-411-6210653, 86-411-6210303
Fax: 86-411-6210293
Contact: Xu Shu Fen, General Manager
Han Jian Shen, Director of Marketing
Gen Hai Tao, Director of Business Office

Fujian Aquatic Products I/E Corp.
Address: 5 Gule Lu
Fuzhou, Fujian 350005
Tel: 86-591-333-2357
Fax: 86-591-335-2339

Guangdong Aquatic Products Co.
Guangdong Xin Jie Food Co. Ltd
Address: 9/F., No. 547, Nan Hua Road E.
Guangzhou, Guangdong 510223
Tel: 86-20-84421277/84448741-30/84403999
Fax: 86-20-84421277
Contact: Ruan Kang Fa, General Manager

Guangdong Jiangmen Aquatic Products Import & Export Corp.
Address: 63 Jinhui Road
Jiangmen, Guangdong 529000
Tel: 86-750-3551453/3557851
Fax: 86-750-3531758
Contact: Ru Zhen Rang, Manager

Guangzhou Yongxing Seafood & Aquatic Products Co. Ltd.
Address: 141 Yongxing Street Hongde Road
Guangzhou, Guangdong 510235
Tel: 86-20-84416272
Fax: 86-20-84416272
Contact: Feng Wen, General Manager

Jiangmen Aquatic Product Wholesale Market
Jiangfan Aquatic Product Co.
Address: 68 Jinhui Road
Jiangmen, Guangdong 529000
Tel: 86-750-3536973
Fax: 86-750-3537165
Contact: Wu Jiazhi, General Manager
Jiangmen Aquatic Product (Salted Fish)
Wholesale Mkt. Jiangfan Aquatic Product Co.
Address: 68 Jianhui Road
Jiangmen, Guangdong 529000
Tel: 86-750-3516174/3535265/3534329
Fax: 86-750-3537165
Contact: Wang Yi, Deputy Director

Jiangmen Supply & Marketing of Aquatic Products
Address: 64 Jianhui Road
Jiangmen, Guangdong 529000
Tel: 86-750-3551307/3535995
Fax: 86-750-3533554
Contact: Lin Binjun, Manager

Liaoning Aquatic Products (Group) Import & Export Corporation
Address: No. 38 Shengli Road, Xigang District
Dalian, Liaoning 116011
Tel: 86-411-3626032, 86-411-3626255
Fax: 86-411-3641112
Contact: Zhao Feng Hua, Manager

Liaoning Donggang City Xinyang Aquatic Products Co. Ltd.
Address: Beijinzi Town, Donggang
Qingdao, Shangdong 118305
Tel: 86-415-7852888
Fax: 
Contact: Zhou Xiang Dong, General Manager

Qingdao Aquatic Products Supply & Marketing General Corporation
Address: 19B Sichuan Lu
Qingdao, Shandong 266002
Tel: 86-532-288-1564, 86-532-287-4564
Fax: 86-532-287-4821

Sanhe Group Ningbo Sanhe Imp. & Exp. Corp.
Address: 185 Cangsong Road
Ningbo, Zhejiang 315010
Tel: 86-574-7112417/7117788x211
Fax: 86-574-7117878/7112256
Contact: Wang Emile, Manager

Shanghai Fisheries General Corporation (Group)
Address: 1001 Jiang Pu Road
Shanghai, 200082
Tel: 86-21-65450426
Fax: 86-21-65370159
Contact: Chao Pinmei, Chief of Foreign Trade Department

Shanghai Ming Ocean Enterprise Co., Ltd.
Address: 88 Guotai Road, Suite 4003
Shanghai
Tel: 86-21-6510-1518
Fax: 86-21-6510-2147
Contact: Zang Heidi, Deputy Manager

Wenzhou Aquatic Products Imp. & Exp. Corporation
Address: 73 San Guan Dian Lane
Wenzhou, Zhejiang
Tel: 86-577-25274, 26391, 25887,27224
Fax: 86-577-23417

Zhejiang Aquatic Products Imp. & Exp. Corp.
Address: 22 Tianmushan Road
Hangzhou, Zhejiang 310007
Tel: 86-571-571227
Fax: 86-571-876103

Zhejiang Aquatic Products Imp. & Exp. Corp., Wenzhou Branch/Wenzhou Cold Storage
Address: Shuichan Road
Zhuangyuang Town Airport Ave.
Wenzhou, Zhejiang 325011
Tel: 86-577-6351385
Fax: 86-577-6351386
Contact: Ye Jian Hua, Director & Manager
Ying Lin Bao, Deputy Manager
Pan Jin Long, Deputy Director

Zhong Lian Aquatic Food Co. Ltd.
Address: No. 4 Malian Dao, Xuan Wu District
Beijing
Tel: 86-10-6349-0184
Fax: 86-10-6349-0185
Contact: Liu Bing-hua, General Manager

Zhoushan Xingye Co. Ltd. Joint Venture
Address: Dagan, Putuo District
Zhoushan, Zhejiang 316101
Tel: 86-580-3013812-305/686
Fax: 86-580-3018089
Contact: Wang Shuju, Chief of Business Office
<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>305.1000</td>
<td>Flours, meals and pellets of fish, fit for human consumption</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.2000</td>
<td>Livers and roes, dried, smoke, salted or in brine</td>
<td>25</td>
<td>55</td>
<td>80</td>
<td>55</td>
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<tr>
<td>305.3000</td>
<td>Fish fillets, dried, salted or in brine, but not smoked</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
</tbody>
</table>

**Smoked fish, including fillets:**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>305.4100</td>
<td>Pacific Salmon (Oncorhynchus nerka, Oncorhynchus gorbuscha, Oncorhynchus keta, Oncorhynchus tschawytscha, Oncorhynchus kisutch, Oncorhynchus maso and Oncorhynchus rhodurus), Atlantic salmon (Salmo salar) and Danube salmon (Hucho Hucho).</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.4200</td>
<td>Herrings (Clupea harengus, Clupea pallasii)</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.4900</td>
<td>Other</td>
<td>30</td>
<td>55</td>
<td>80</td>
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</table>

**Dried fish, whether or not salted, but not smoked:**

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<tbody>
<tr>
<td>305.5100</td>
<td>Cod, dried: (gadus morhua/Atlantic; gadus ogac/Polar; gadus macrocephalus/Pacific)</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.59</td>
<td>Other</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.59.10</td>
<td>Pipefish and hippocampi (seahorse)</td>
<td>2</td>
<td>3</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>305.59.20</td>
<td>Shark fins, dried</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.59.30</td>
<td>Fish maws, heads, tails, lips &amp; skins : edible, dried</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.59.40</td>
<td>Small Fish, dried NESO</td>
<td>30</td>
<td>55</td>
<td>80</td>
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</table>

Silver anchovy (spratelloides gracilis): small fish, dried Herring or other sardines: small fish, dried Other small fish, dried

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>305.59.90</td>
<td>Other dried fish, whether or not salted but not smoked</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
</tbody>
</table>

Saury, dried; Sardines, dried; Puffer fish, dried Catfish, dried; Other

**Fish, salted but not dried nor smoked and fish in brine:**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>305.6100</td>
<td>Herring (Clupea harengus, Clupea pallasii)</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.6200</td>
<td>Cod (Gadus morhua, Gadus ogao, Gadus macrocephalus)</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
</tr>
<tr>
<td>305.6300</td>
<td>Anchovies (Engraulis spp)</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
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<tr>
<td>305.6900</td>
<td>Other</td>
<td>30</td>
<td>55</td>
<td>80</td>
<td>55</td>
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</table>

**Source:** Bureau of Fisheries, Ministry of Agriculture, PRC
APPENDIX K: Reconstituting Methods by Species

Sea Cucumbers

Burn and Soak

This is a good method to use for the thick skinned sea cucumbers.

Roast the dried sea cucumber over intense heat (an electric broiler or an open flame; e.g. gas range or grill) until its outer skin become charred and crisp. Remove it from the heat source and let cool. Scrape the charred skin off with a knife; the meat under the skin should in dark brown. Next, soak the skinned sea cucumber in cold water for two days or until it becomes soft. Then, simmer the sea cucumber with enough water to cover, in a saucepan over low heat for 3 hours. Then, gut and clean any sand remaining inside of the sea cucumber. Next, due to changes in humidity and temperature, if preparing during the summer rinse and soak in cold water for 4 hours or if preparing in the winter 24 hours. Then, a saucepan filled with water, boil over medium-high heat for 30-60 minutes. After rinsing thoroughly, soak again in cold water for another 5 hours. After the final soaking it is ready for use in traditional recipes.

Soak and Boil

This is good method used for the thin skinned sea cucumbers.

Place the dried sea cucumber in a large container and cover with boiling water, soak for 24 hours. Then, drain and cover again with fresh boiling water, soak until the water becomes cool. Gut and thoroughly clean the sea cucumber inside and out. In a saucepan, cover the sea cucumber with fresh water and simmer over low heat for 45 minutes to 1½ hours (depending on size). Then, if it is not quite soft soak in warm water until it is completely soft; rinse and soak in fresh cold water for 5 hours in the summer (or 24 hours in winter). After the final soaking it is ready for use.

Shark Fin

Cut off the edge of the shark fin and place in a saucepan. Cover with fresh water and bring to a boil. Then reduce heat to low and simmer for 8-12 hours. Drain off the liquid and add fresh water to the pot, and continue cooking the shark fin over a low heat for one more hour. Remove and rinse the shark fin with clean water, removing any sand from the surface of the fin. Discard the cooking liquid and return the shark fin to the pot. Cover with fresh water and simmer over low heat for another hour. Next, remove the shark fin, trim and wash thoroughly, then return to the pot and simmer in fresh water for another 5 hours. After it cools down, remove bones and any attached tissue from the shark fin and rinse thoroughly. Soak the shark fin in fresh hot water for four more hours; then, after rinsing, soak in fresh cold water for 6 hours.
APPENDIX L: Recipes

Tofu & Salted Hairtail
1 block Tofu (half pound), cut into ¼ inch size cubes
4 ounces Salted Hairtail, cut into ¼ inch size cubes
1 tablespoon Chinese Cooking Wine
1 teaspoon Sugar
1 teaspoon Cornstarch, dissolved in ¼ cup of water for thickening
1 tablespoon Leaves from a Garlic bulb, chopped finely
1 each Green Onion, cut into 1 ½ inch long
1 teaspoon Ginger Root, sliced thin
1 ½ tablespoons Sichuan Pepper
1 cup Broth (chicken or pork)
dash Salt, Pepper and MSG

Heat cooking oil in a wok or large frying pan. Saute green onion and ginger in oil over high heat for 1 minute. Add broth and tofu cubes to oil, then add fish cubes on top of the tofu, do not stir. Reduce heat to low and simmer for 25 minutes. Next, add all remaining ingredients, except garlic and cornstarch solution. Simmer for an additional 2-3 minutes. Increase heat to high, add cornstarch solution and stir until thickened, about 30 seconds. Top with chopped garlic leaves and serve on a platter.

Dried Shrimp and Celery
5 ounces Dried Shrimp, shelled
1 pound Celery stock, cut into 2 inch julienne strips
1 teaspoon Salt
1 teaspoon Cooking Wine
½ teaspoon Sugar
1 teaspoon Sesame Oil
dash MSG

Blanch celery in boiling water for 30 seconds, drain and set aside to cool. In a small bowl, combine the dried shrimp with ½ cup boiling water. Add the cooking wine and steam over high heat for about 10 minutes. In a large bowl, mix together well the celery, shrimp and remaining ingredients. Transfer to a platter and serve.

Dried Eel
1 block Dried eel, butterflied (about ¼ pound)
4 each Green Onions
1 teaspoon Ginger Root, sliced
½ cup Chicken Broth
1 tablespoon Chinese Cooking Wine
½ teaspoon Salt

Clean the eel with fresh water, place in a bowl. Add onion, ginger, cooking wine, salt, and chicken broth. Place the bowl in a steamer and steam over high heat for 20 minutes or until it is done. Let the eel cool slightly, then tear it into thin strips (about 3 inches long) with fingers. Place fish on a platter on a platter and serve with a vinegar dipping sauce.

Mussel and Lime Eggs
4 each Lime Eggs
20 grams Dried Mussels
2 tablespoons Chinese Cooking Wine
1/4 teaspoon Salt

In a bowl, soak mussels in cooking wine until soft. Add salt and steam over high heat for 30 minutes or until tender. Set aside to cool. Remove mussels from the bowl, reserving the liquids. Mince the mussels finely and return to the bowl with the reserved liquids. Slice each lime egg evenly into 6 slices and arrange place on a plate, then spoon the minced mussels on top of the sliced lime eggs and serve.
APPENDIX M:
Useful Facts about the People’s Republic of China

Traditional Chinese Weights & Measures

1 gongshen = 1 liter
1 jin = 0.5 kilogram or 5 hectograms
   2 jin = 1 kilogram
   2,000 jin = 1 metric ton
1 dan = 50 kilograms
   20 dan = 1 metric ton
1 chi = 3.333 decimeters
   3 chi = 1 meter
1 li = 0.5 meter or 5 hectometers
   2 li = 1 kilometer
1 mu = 0.0667 hectare
   15 mu = 1 hectare

Languages:

Mandarin, the official language spoken by about 70 percent of the population
Cantonese, spoken mainly in the southern part of China and Hong Kong SAR

Chinese Currency: Renminbi (RMB) "People's Money"

1 yuan/renminbi (¥/RMB) = 10 jiao = 100 fen

For several years the Chinese currency has had a very stable exchange rate against the US dollar:

1 US dollar = 8.2782 Chinese Yuan Renminbi
1 Chinese Yuan Renminbi = 0.1208 US dollar
APPENDIX: Useful Contacts in China

General Administration of Customs
6 Jianguomennei Dajie
Beijing 100730
People’s Republic of China
tele: (86) 10-6519-4114
fax: (86) 10-6512-6020

Ministry of Foreign Affairs
225 Chaoyangmennei Dajie
Beijing 100701
People’s Republic of China
tele: (86) 10-6513-5566
fax: (86) 10-6525-6110

Ministry of Foreign Trade and Economic Cooperation
2 Dongchangan Jie
Beijing 100741
People’s Republic of China

tele: (86) 10-6519-8114
fax: (86) 10-6512-9568

State Administration for Industry and Commerce
8 Sanlihe Donglu
Beijing 100820
People’s Republic of China

tele: (86) 10-6852-2771
fax: (86) 10-6857-0848

State Administration of Import and Export Commodity Inspection (SACI)
15 Fangcaodi Xijie
Beijing 100020
People’s Republic of China

tele: (86) 10-6500-7744
fax: (86) 10-6500-2387

State Economic and Trade Commission
26 Xuanwenmen Xijie
Beijing 100053
People’s Republic of China

tele: (86) 10-6394-5531
fax: (86) 10-6304-5326

Embassy of the United States of America
U.S. Foreign Service
No. 3 Xinhui Dong Jie
Jianguomenwai 100600
People’s Republic of China

tele: (86) 10-6532-3831
fax: (86) 10-6532-2483

United States Consulate General
4 Lingshiqian Lu
Renmin Nan Lu Si Duan
Chengdu, Sichuan
People’s Republic of China

tele: (86) 28-558-3520 / 558-9642
fax: (86) 28-558-3792

United States Consulate General
No. 1 South Shamian Street
Shamian Island 510133
Guangzhou, Guangdong

tele: (86) 20-8188-8911
fax: (86) 20-8186-2341

United States Consulate General
52, 14th Wei Road
Heping District
Shenyang, Liaoning

tele: (86) 24-282-0068
fax: (86) 24-282-0074