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## China, Peoples Republic of

## **Fishery Products**

## Annual

2006

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## **Report Highlights:**

In 2007, China's total aquatic production is forecast to reach 54 million metric tons (MMT), up 3 percent from 2006's estimated 52.5 MMT. The continued development and expansion of aquaculture is attributed to higher demand in response to economic growth and increased aquatic product consumption. Aquatic exports are projected to exceed \$8 billion, with an expected surplus of more than \$5 billion. Exports to the United States alone are forecast to reach \$1.7 billion.

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#### Table of Contents

Executive Summary	3
Production	3
2007 Aquatic production is forecast to increase to 54 MMT	3
Aquatic catch production remains stable	5
Aquaculture farmed area expansion continues	6
Aquaculture production faces new challenges	7
Aquatic processing is mainly driven by exports	7
Consumption	7
Trade	9
Aquatic product trade expected to continue growing in 2007	9
Processing trade continues to boost imports	9
Fishmeal imports are forecast to reach 1.1 MMT in 2007	10
Aquatic exports are forecast to continue growing in 2007	10
Exportation of value added products continues to increase	11
Food safety remains a hurdle in aquatic product exports	11
Policy	12
The 11 <sup>th</sup> five-year plan sets production and export targets	12
Implementation of aquaculture licensing system advanced	13
Aquaculture area growth is forecast to slow down in 2007	13
The policy on aquatic processing trade remains unchanged	13
Domestic aquatic catch is restricted	13
Trade Related Issues	13
Marketing	14
Competition	15
Variety	15
The Chinese consumer	15
Market entry recommendations	15
Trade Tables	17
Trade of Certain Aquatic Products (Volume: MT; Value: \$ Million)	17
Aquatic Products Trade by Country of Origin (in \$ million)	18
Imports of Frozen Fish, by Country of Origin (in \$ million)	19
Imports of Cod, by Country of Origin	19
Imports of Salmon, by Country of Origin (in MT and in \$ million)	20
Imports of Flatfish, by Country of Origin (in \$ million)	20
Imports of Plaice, by Country of Origin	20
Imports of Crustaceans, by Country of Origin (Volume: MT; Value: \$ Million)	21
Imports of Mollusks and Other, by Country of Origin (Volume: MT; Value: \$ Million)	22
Imports of Scabber Fish, by Country of Origin (in MT)	22
Exports of Frozen Fish, by Destination (in \$ million)	22
Exports of Fish Fillets, by Country of Origin (in \$ million)	23
Exports of Shrimps and Prawns by Category (Volume in MT; Value in \$ Million)	23
Exports of Shrimps and Prawns, by Destination (in \$ million)	23
Exports of Mollusks and Other, by Destination (Volume in MT; Value in \$ Million)	24
Exports of Tilapia Products, by Destination (Volume in MT; Value in \$ Million)	24
Exports of Eel Products, by Destination (in \$ million)	25
Exports of Crawfish, by Destination (in \$ million)	26

#### **Executive Summary**

China's 2007 aquatic production is forecast to reach 54 MMT, up three percent from an estimated 52.5 MMT in 2006. Much of this production growth is due to the continued expansion of aquaculture, which accounted for 67 percent of total aquatic production during 2005. Already the world's largest aquaculture producer, Chinese aquatic production growth is linked both to a strong export market as well as its growing domestic market. China's rapid economic growth has given its consumers increased disposable incomes, thereby encouraging greater aquatic product consumption. According to the 11<sup>th</sup> Five-Year Plan for Fishery Development (2006-2010) released by China's Ministry of Agriculture (MOA), total aquatic production is expected to increase by more than three percent annually in the next five years, reaching 60 MMT by 2010. With annual growth rates of six percent, aquaculture production increases will be the result of yield increases triggered by technological advances coupled with a moderate expansion in aquaculture farm area. Concurrently, the aquatic processing sector, which is mainly export-driven, is also expected to expand further in the coming years.

Aquatic trade is forecast to grow in 2007 with China's trade surplus expected to hit \$5 billion, mainly due to the dynamic processing trade and export-oriented aquaculture. Aquatic trade between China and the United States is forecast to grow in 2007, with "Fish/Frozen" (HS Code 0303) continuing to be the major category imported from the United States, while the export mix to the United States is diversified and valued added.

Sustained high GDP and disposable income growth rates will boost domestic consumption of aquatic products in 2007. However, aquatic imports for domestic consumption are growing at a rather slow pace. Nevertheless, high quality natural aquatic products from the United States are expected to steadily increase market volume and value.

Definition of terms: Aquatic products are both defined as the cultured (farmed) and wild caught aquatic products; Aquatic products include fish, shrimp/prawn/crab, shellfish, algae and other; Aquatic catch production is total volume of both fresh and sea water caught wild aquatic products; Aquatic culture production is the total volume of both fresh and seawater cultured (farmed) aquatic products. This report will use Chinese terminology to maintain consistency between Chinese statistics and product categories.

#### Production

#### 2007 Aquatic production is forecast to increase to 54 MMT

China remains the world's largest aquaculture producer. The rise in aquatic production is attributable to the country's rapid economic growth, rising disposable incomes and greater consumption of aquatic products, together with strong growth of aquatic exports. China's aquatic production for 2007 is forecast to reach 54 MMT, up by three percent from the estimated 52.5 MMT for 2006. While official 2006 production data is not yet available, total 2005 aquatic production was 51 MMT, up four percent from the prior year. Industry sources estimate 2006 production growth to drop slightly to three percent. According to MOA's 11<sup>th</sup> five-year (2006-2010) plan for the fishery industry, aquatic production is expected to grow by more than three percent annually, reaching 60 MMT by 2010. Aquaculture production is likely to reach 45.5 MMT while catch production is expected to decrease to about 14.5 MMT.

China's continued aquatic production growth is driven by aquaculture expansion, which in 2005 accounted for an estimated 67 percent of total aquatic production. According to MOA, the yearly aquatic production growth rate during the 10<sup>th</sup> five-year period (2001-2005)

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averaged four percent. During this same period, the annual aquaculture production growth rate grew to more than 6 percent. While aquatic catch production grew slightly from 16.9 MMT in 2004 to 17.1 MMT for 2005, such marginal growth is attributable to the increased freshwater fish catch of 130,000 MT. For 2006, however, industry sources estimate aquatic catch production to decline to 17 MMT. Such a trend is likely to continue both domestically and worldwide in the foreseeable future and will be limited by declining wild fishery resources. Aquaculture production, in contrast, will be driven by the further exploitation of water resources along with higher yields.

Freshwater and seawater culture production both increased in 2005, up six percent and five percent over the previous year, respectively. MOA reported that in the first nine months of 2006, aquatic production increased more than three percent over the corresponding period of 2005; fresh water aquatic production increased 6 percent; and seawater culture production grew six percent, while sea catch dropped by one percent.

Category	2002	2003	2004	2005	2006*		
Total Aquatic Production	45,651,790	47,061,064	49,017,671	51,016,530	52,500,000		
-Seawater Aquatic Production	26,463,371	26,856,182	27,677,907	28,380,831	28,700,000		
Seawater Catch	14,334,934	14,323,121	14,510,858	14,532,984	14,500,000		
Seawater Culture	12,128,437	12,533,000	13,167,049	13,847,847	14,200,000		
-Freshwater Aquatic Production	19,188,419	20,204,882	21,339,764	22,635,699	22,800,000		
Freshwater Catch	2,247,926	2,462,148	2,419,792	2,551,045	2,500,000		
Freshwater Culture	16,940,493	17,742,734	18,919,972	20,084,654	20,300,000		
Source: Ministry of Agriculture Yearbooks; 2006* Estimated by FAS/Beijing							

Table 1 China's a	quatic production	(Unit: Metric Ton)
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Cultured fish production reached 18.9 MMT for 2005. It remains the largest category, accounting for 56 percent of the total cultured production, followed by shellfish and crustaceans at 32 and six percent, respectively. Freshwater cultured fish reached 18.3 MMT, accounting for 97 percent of the total cultured fish production. Carp is the most popular cultured freshwater fish with a total production at 14.1 MMT for 2005, accounting for 75 percent of total freshwater cultured fish production. Tilapia production grew rapidly and is expected to reach 1.1 MMT in 2006, up 10 percent over 2005's 978,135 MT. Though 2005 catfish production remained small at 101,096 MT, it grew by 61 percent over 2004. Its production is likely to exceed 150,000 MT in 2006. Shellfish is the largest group of sea-cultured species, with 2005 production reaching 10.7 MMT and accounting for 32 percent of total cultured production. Cultured crustacean production in 2005 was 2.1 MMT, up 8 percent from 2004. In all, freshwater production represented 61 percent of the total cultured crustacean production in 2005.

Table 2 China's a	quatic catch and	I culture by area.	/volume	(Unit Metric To	)n)
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Total Aquatic Production	2002	2003	2004	2005	2006*
-Aquatic Catch	16,582,860	16,785,269	16,930,650	17,084,029	52,500,000
Seawater Catch	14,334,934	14,323,121	14,510,858	14,532,984	14,500,000
Bohai Gulf	1,329,807	1,314,064	1,251,716	1,233,328	NA
Yellow Sea	3,154,883	3,000,281	3,171,236	3,204,389	NA
East China Sea	5,144,434	4,980,583	4,967,374	4,870,790	NA
South China Sea	3,587,517	3,703,562	3,604,032	3,767,253	NA
Other Territorial Seas	1,118,293	1,324,631	1,516,500	1,457,224	NA
Freshwater Catch	2,247,926	2,462,148	2,419,792	2,551,045	2,500,000
- Aquatic Culture	29,068,930	30,275,795	32,087,021	33,932,501	34,200,000
Seawater Culture	12,128,437	12,533,061	13,167,049	13,847,847	14,200,000
Freshwater Culture	16,940,493	17,742,734	18,919,972	20,084,654	20,300,000

#### Source: Ministry of Agriculture Yearbooks

# Table 3 China's seawater and freshwater aquatic production by category (Unit: Metric Ton)

Category	2002	2003	2004	2005	2006*
Seawater Fish Production	10,205,250	10,250,563	10,172,677	10,388,209	NA
Seawater Shrimp, Prawn, and Crab	3,098,010	2,980,610	3,124,022	3,240,594	NA
Seawater Shellfish	11,324,345	10,659,370	11,094,019	11,560,628	NA
Seawater Algae	1,331,395	1,413,128	1,505,216	1,541,754	NA
Seawater Other	504,371	1,552,511	1,781,973	1,649,646	NA
Freshwater Fish	17,101,773	17,941,904	18,934,217	20,093,959	NA
Freshwater Shrimp, Prawn, and Crab	1,226,398	1,389,270	1,533,884	1,637,505	NA
Freshwater Shellfish	551,021	537,496	534,581	539,629	NA
Freshwater Algae	NA	6,055	4,666	6,028	NA
Freshwater Other	309,227	332,416	330,157	358,578	NA
Source: Ministry of Agriculture Yea	arbooks	•			

Shandong, Fujian and Guangdong provinces are the three largest aquatic product producers, mainly because of their large sea cultured production. Hubei, Guangdong and Jiangsu provinces rank as the top three in terms of freshwater production.

	Total production	Sea production	Freshwater production			
Total	51,016,530	28,380,831	22,635,699			
Shandong	7,361,381	6,261,128	1,100,253			
Fujian	6,022,167	5,318,809	703,358			
Guangdong	6,952,346	3,979,516	2,972,830			
Zhejiang	4,837,669	4,023,680	813,989			
Liaoning	4,253,388	3,641,624	611,764			
Jiangsu	3,886,555	1,134,311	2,752,244			
Hubei	3,180,255	0	3,180,255			
Guangxi	2,839,435	1,737,081	1,102,354			
Other	11,683,334	2,584,682	9,398,652			
Source: Ministry of Agriculture Yearbooks						

#### Table 4 China's aquatic production by provinces for 2005 (in Metric Ton)

Freshwater aquaculture exists nationwide, particularly for carp. Some species' production, however, is limited to certain regions due to available resources and climate conditions. For instance, three provinces—Guangdong, Guangxi and Hainan produced 77 percent of tilapia (2005). Catfish production, on the other hand, is located primarily in Sichuan, Hubei and Jiangxi, which collectively produced 57 percent of the national total. Shrimp and prawns culture is conducted both in fresh and seawater, with the largest producers in Guangdong, Jiangsu, Guangxi and Hainan provinces. Eel production is concentrated in Fujian, Guangdong and Jiangxi provinces, with much of it destined to the Japanese market. The combined cultured shellfish production of Shandong, Fujian, Guangdong and Liaoning provinces accounted for 80 percent of the 2005 total.

#### Aquatic catch production remains stable

The total 2007 catch production is forecast at similar levels to 2006's estimated 17 MMT. According to MOA, annual seawater catch between 2002 and 2005 averaged approximately 14.5 MMT and accounted for 85 percent of the total catch. Freshwater catch production remained small at about 2.5 MMT in past few years. Industry sources report that total catch is unlikely to increase significantly in the foreseeable future due to limited freshwater and seawater natural resources. Though seawater catch data for other territorial seas is not officially released, most industry insiders believe it is difficult to increase production significantly.

#### Aquaculture farmed area expansion continues

The total aquaculture area continued expanding in 2005, reaching 7.5 MHa, or a two percent increase over 2004. Freshwater and seawater areas increased by 190,000 HA and 80,000 HA, respectively, between 2004 and 2005. Qinghai, Henan, Heilongjiang and Liaoning provinces collectively added 101,500 HA of freshwater culture area in 2005, mainly expanding in reservoirs and lakes. However, some industry insiders believe there is still potential to increase freshwater culture area because some reservoirs/lakes are not fully maximized for aquaculture purposes due to growth constraints such as lack of transportation and technical service. Seawater culture area is also likely to grow moderately in the coming vears. However, MOA indicated that limited water resources and environmental concerns pose new challenges to aquaculture area expansion; additional production gains shall be achieved through technology dissemination and innovation.

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Year	Total	Freshwater	Seawater					
2006	NA	NA	NA					
2005	7,545,019	5,850,488	1,694,531					
2004	7,281,252	5,663,800	1,617,452					
2003	7,103,648	5,571,496	1,532,152					
2002	6,814,637	5,469,883	1,344,754					
2001	6,648,760	5,362,302	1,286,458					
Source: Ministry of	Agriculture Yearbooks							

#### Table 5 China's Aquaculture Area Resources (Unit: Hectares)

#### Table 6 China's Seawater Aquaculture Area Resources (Unit: Hectares)

Area	2004 Total	Fish	Shrimp/	Crab	Shellfish	Algae	Other		
			Prawn						
Total	1,694,531	79,679	230,468	80,282	1,059,621	96,711	147,770		
Tianjin	4,807	346	3,516	736	0	0	209		
Hebei	90,404	6,071	20,072	1,623	60,773	0	1,865		
Liaoning	449,302	4,158	25,333	1,581	336,674	14,259	67,297		
Shanghai	84	0	83	1	0	0	0		
Jiangsu	172,950	4,237	10,059	12,875	130,996	13,873	910		
Zhejiang	112,436	6,509	18,165	18,081	60,010	8,977	694		
Fujian	152,691	10,626	16,252	8,624	85,227	31,481	481		
Shandong	407,390	8,660	52,742	18,710	240,524	22,970	63,784		
Guangdong	224,399	36,046	53,444	15,179	108,177	2,909	8,644		
Guangxi	61,974	1,792	19,420	1,463	35,409	34	3,856		
Hainan	18,094	1,234	11,382	1,409	1,831	2,208	30		
Source: Min	Source: Ministry of Agriculture Yearbooks								

#### Table 7 China's Inland Fish Breeding Area Resources (Unit: Hectares)

	Total	Pond	Lake	Reservoir	Stream	Others
2006	NA	NA	NA	NA	NA	NA
2005	5,850,488	2,495,361	964,088	1,808,027	381,533	201,479
2004	5,663,800	2,429,479	939,667	1,689,623	377,432	227,599
2003	5,571,496	2,398,740	936,262	1,660,027	382,170	194,297
2002	5,469,883	2,356,842	873,936	1,643,984	382,532	212,589
2001	5,362,302	2,286,079	874,854	1,630,517	392,420	178,432
2000	5,277,732	2,219,976	894,861	1,620,978	378,097	163,820
1999	5,196,241	2,145,112	910,966	1,610,842	375,156	154,165

#### Source: Ministry of Agriculture Yearbooks

#### Aquaculture production faces new challenges

Despite the fast growth of the aquaculture sector, the industry's expansion has mainly relied on increasing the production scale and farming area. According to MOA the new challenges facing aquaculture production include: low technical innovation by the industry; genetically improved aquatic species account for only 16 percent of cultured species (far below the norm for crops and domestic animals); the occurrence rate of aquatic diseases increased in recent years; the lack of specialized aquatic vaccines and drugs resulted in the use of inadequate drugs; feeding natural fish/shrimp (instead of industrialized feed), in seawater culture resulted in waste of resource; and water utilization efficiency remains low (because more than 80 percent of the industrialized aquatic farms adopt the "all in, all out" method of water exchange).

#### Aquatic processing is mainly driven by exports

According to MOA, the total number of aquatic processing facilities stood at 9,128 in 2005, up 383 from 8,745 in the previous year. 2005 processing capacity reached 17 MMT, up 2.7 MMT, or 19 percent, compared to 2004. The number of cold storages increased by 274. Additionally, 2.1 MMT more aquatic products were processed in 2005 than 2004, with total volume reaching 15.5 MMT. In accordance with MOA's 11<sup>th</sup> five year plan, processed aquatic products accounted for merely 30 percent of the 2005 total, almost unchanged from five years earlier. Industry sources indicate that this situation reflects the domestic consumer's enduring preference for live aquatic products. Processing capacity expansion is therefore mainly driven by export market demand, which led to the construction of new production facilities.

The dynamic processing trade also spurred greater investment. Industry sources estimate that the processing trade accounts for more than 40 percent of China's aquatic product export value and is expected to grow steadily. Processed products sourced domestically produced raw material is also export driven. Domestic consumption of processed aquatic products remains relatively small as compared to the total aquatic consumption. Although many consumers in large cities have begun purchasing processed aquatic products, most Chinese consumers still prefer live aquatic goods though this consumption pattern is slowly changing. Despite complaints of foreign trade barriers on Chinese aquatic products, MOA acknowledged that the barriers also forced the sector to invest more on producing value-added, quality products.

Aquatic processing bases have set up within or near major aquatic production regions. Out of the total 9,128 processing facilities, 6,431 (or 70 percent) concentrate in Zhejiang, Shandong, Fujian and Guangdong provinces. These provinces are also major aquaculture producers and are equipped with port and cold storage facilities. Many foreign traders have also entered the processing trade industry in these provinces.

#### Consumption

China's per capita aquatic product consumption is expected to increase in 2006. Based on National Statistics Bureau (NSB) information, per capita consumption for urban dwellers in 2005 was 12.6 kg, up slightly from 12.5 kg the previous year, while for rural people it was 4.9 kg, up 0.4 kg. Increased consumption is attributable to both consumer income growth and the Avian Influenza outbreaks shifting consumer preferences away from poultry products. Urban per capita aquatic product consumption exceeded 13 Kg in 2002 and 2003, but fell in 2004 mainly due to increased price (CH6098). Industry insiders believe per capita consumption will continue to increase steadily with the growth potential for the rural population larger than that of the urban. MOA statistics show that average prices for aquatic

#### GAIN Report - CH6122

products in 2005 increased by 4 percent from the previous year. Based on NSB data, aquatic product prices in the first eight months of 2006 remained generally stable, though the nationwide food price average increased by 2 percent over the same period in 2005. The stable price for aquatic products implies that supply and demand are growing simultaneously. Many industry sources expect aquatic consumption by both urban and rural residents to grow in 2006 and continue in 2007. Based on MOA's 11<sup>th</sup> five-year plan, the nationwide per capita aquatic product consumption is expected to reach 12 Kg by 2010.

Per Capita	Per Capita Consumption Trends for Aquatic Products					
	2001	2002	2003	2004*	2005**	2006***
Urban	12.3	13.2	13.4	12.5	12.6	13
Rural	4.1	4.4	4.7	4.5	4.9	5.2
Per Capita	a Consumption	Trends for P	ork, Beef, and	Lamb		
Urban	19.2	23.3	23.7	22.9	23.9	NA
Rural	14.5	14.5	15	14.8	17.1	NA
* Urban Population of 542.83 million. Rural Population of 757.05 million. **Urban						
population of 56157 million. Rural Population of 74471 million. *** Estimated by						
FAS/Beijing						
Source: 2005 China Statistical Yearbook Table 10/9 and 10/29						

#### Table 8 Per Capita Consumption Trends for Aquatic and animal products

The per capita consumption of aquatic products in coastal provinces is higher than others. Apart from obvious geographic differences, coastal city residents' high level of disposable income influences consumption patterns as well. Table 9 lists the top ten provinces/municipalities with the highest expenditures on aquatic products in 2005. This ranking is virtually unchanged from 2004. Clearly, they are either located in coastal regions or rank high in disposal income. Consumption is also related to dietary tradition, as people in western provinces prefer other types of animal protein. Most Chinese consumers are still price sensitive when purchasing aquatic products. Freshwater cultured products such as carp and shrimp/prawns are popular for consumption at home and restaurants due to its affordable price and freshness; seawater products including yellow croaker and ribbonfish continue to be favorites to most people in North China. High quality imported seafood such as lobster, geoducks, salmon and crab, however, are widely used by hotels and restaurants. Along with the growing middle-class in large cities and coastal regions with booming economies, the potential for these products remains promising as Chinese families opt for a more diversified diet.

A typical example is the surge in salmon imports in 2005, valued at \$239 million, up 90 percent from 2004. This growing trend continued into 2006 with the import value reaching \$240 million by October 2006. Although the salmon processing trade increased rapidly (statistics on the volume of re-exported processed salmon are not available), industry insiders believe a large share of salmon imports are for domestic consumption. Fresh or chilled salmon meat is served in many restaurants and hypermarkets in larger cities. The United States became the largest supplier in volume and value in the first ten months of 2006, up from third place in the previous year.

Region	Aquatic Product	Aquatic Product	Disposable	Disposable
-	Expenditure	Expenditure	Income Rank	Income
	Rank	RMB Yuan		RMB Yuan
Fujian	1	623	6	12,321
Shanghai	2	573	1	18,645
Zhejiang	3	515	3	16,294
Guangdong	4	406	4	14,770
Hainan	5	399	21	8,124
Tianjin	6	287	5	12,638
Jiangsu	7	266	7	12,318
Liaoning	8	224	16	9,107
Guangxi	9	178	12	9,286
Beijing	10	174	2	17,653
Nationwide Average	NA	189	NA	10,493
Source: 2005 China	Statistical Yearbo	ook Table 10/15,10/	/16; US\$1=RMB8	

#### Table 9 Per Capita Annual Living Expenditure of Urban Resident by Region in 2005

Because Chinese consumers prefer live products to fresh and fresh products to frozen products, most restaurants keep fish tanks that allow customers to choose their own fish, shrimp, crab and other aquatic products when dinning out. Most wet markets and some supermarkets also allow consumers to purchase live aquatic products. This tradition appears to be changing due to the increasingly fast-paced life of cities, as many families prefer ready-to-cook aquatic products to save time. Processed products, including processed fish, shellfish, mollusks and shrimps/prawns, are therefore becoming increasingly popular in hypermarkets in large cities.

#### Trade

#### Aquatic product trade expected to continue growing in 2007

Total aquatic trade value for 2006 is estimated at \$11.2 billion, with imports valued at \$3.2 billion and exports at \$8 billion. The trade surplus is expected to hit \$4.8 billion, up \$500 million from 2005. Total trade value and surplus growth are likely to continue in 2007, fueled by the processing trade and export-oriented aquaculture.

#### Processing trade continues to boost imports

China's total aquatic product imports are estimated to exceed 2.1 MMT for 2006, up by 8 percent over 2005. Imports are valued at an estimated \$3.2 billion. However, growth rates did slow in comparison to 2005. There is no official data on the share of processed goods among the total volume of imports. Industry insiders believe the current export value of processed goods exceeds 40 percent of total exports. Imports for domestic consumption are also growing but at a rather slow pace. It is likely that aquatic imports will continue to grow, partially to supply the rapidly growing processing trade. Government policy favors the expansion of the processing industry, which can absorb much of the growing labor force, with the leftover utilized as a needed protein ingredient for animals. Imports by category are characterized by the rapid increase of frozen fish (HS 0303), and the stable to relative decline of other categories including crustaceans and mollusks. In the first ten months of 2006, frozen fish imports accounted for 78 percent of the total imported volume and 75 percent of the value, respectively. Large imports are destined for re-export with a strong combined export volume of fish/fillet (HS 0304) and prepared or packaged fish (HS 1604), at about 1 MMT, accounting for 46 percent of the total. According to World Trade Atlas (WTA), salmon imports also continued growing in the first ten months of 2006, with a total import value reaching \$240 million, exceeding the \$239 million for the whole year of 2005. Japan,

Russia and the United States continued to be the three largest suppliers. Industry sources indicate most processed salmon enters China in the category of processing trade.

Russia is expected to continue to top the list of origins of China's aquatic product imports, which it has headed for the past consecutive six years, distantly followed by the United States and Japan. Total imports from Russia are estimated to exceed \$1.2 billion in 2006, up 10 percent from the previous year. These account for 38 percent of China's total 2006 aquatic imports.

Imports from the United States continued growing during the first ten months of 2006. The import value totaled \$380 million and is expected to exceed \$400 million for the whole year, up 17 percent from 2005. The United States has been the second largest supplier since 2004. In the first ten months of 2006, frozen fish remained the largest category, accounting for 83 percent of the total import value. Imports by species include plaice (\$106 million out of the total \$108 million for all flatfish), followed by salmon (\$72 million), cod (\$69 million) and mollusks (\$45 million). It is worth noting that salmon imports from the United States are expected to soar to \$77 million in 2006, up 70 percent from the previous year. Excluding the export oriented processing trade, strong salmon imports are driven by domestic demand. Industry insiders believe China will become one of the world's largest salmon markets in the near future. Despite improved cold storage in hypermarkets in large cities, the cold chain needs to be improved in order to shorten the delivery time to reach end-users. China's demands for other high quality and natural seafood are also expected to grow steadily, along with income growth and improved health awareness.

Qingdao and Dalian continue to be the two largest arrival ports for aquatic products, accounting for 85 percent of the total imports. Well-established facilities, including processing factories in Qingdao and Dalian will likely solidify the two cities' status as the largest seafood import hubs in China in the foreseeable future.

#### Fishmeal imports are forecast to reach 1.1 MMT in 2007

Fishmeal imports for 2007 are forecast at 1.1 MMT, up from an estimated 1 MMT in 2006, but much lower than the 1.58 MMT imported in 2005. In May 2006, fish meal prices skyrocketed to more than \$1,300 per metric ton from \$850 in March. High prices continued through late July before falling to \$1,000 per metric ton. As a result, consumption for 2006 is expected to drop to 1.2 MMT, compared to 1.6 MMT the previous year. Feed industry sources reported that other protein meals were added as substitutes in order to reduce costs. Domestic fishmeal production stands at about 300,000 MT per year, with ending stocks for 2006 expected to be small. Imports for 2007 are likely to pick up moderately given the demand by large-scale animal and aquaculture industries, though price and fishmeal availability may restrict imports. Peru remains the largest fishmeal supplier. Imports from the United States for 2006 and 2007 are expected to be similar to past years' at 70,000 MT.

#### Aquatic exports are forecast to continue growing in 2007

China's exports of aquatic products for 2006 are expected to reach \$8.2 billion, up 14 percent from the \$7.2 billion in the previous year. Aquatic exports continued to be the largest category in all-agriculture exports. This growing trend is likely to continue in 2007, mainly because of the strong processing trade in addition to the rapid development of export-oriented aquaculture production.

According to WTA, as of the end of October 2006, three major categories, namely Fish/Fillet (HS Code 0304), Prepared or Packaged Crustaceans and Mollusks (HS Code 1605), and Prepared or Packaged Fish and Caviar (HS Code 1604), continue to dominate the export market, accounting for 76 percent of the total export value. Their combined total export value grew by 27 percent over the same period in 2005. Fish/fillet and prepared or

packaged crustacean and mollusks export value both exceeded \$1.8 billion for the first ten months of 2006. This high growth rate in part reflected the strong trend in the processing trade.

Exports of cultured species showed a different picture in the first ten months of 2006. Shrimp and prawn exports picked up and were valued at \$999 million, up 28 percent over the corresponding period in 2005. The total export value for the entire year (2006) is expected to hit a new record of \$1.1 billion. In 2005, Exports to the United States amounted to \$243 million in comparison to the \$98 million in the 2004. Exports to most other destinations were also strong, with Japan being a marked exception. Exports to Japan are expected to decline in 2006, despite Japan being the largest market over the past two years. Industry sources say the Japanese "Positive List System," enacted in May, caused this decrease.

Tilapia exports in the first ten months of 2006 soared to \$281 million from \$171 million in 2005. The bulk of this growth came from increased exports of prepared and packaged tilapia, which soared to more than 61,000 MT, up 387 percent over the same period in 2005. However, tilapia fillet exports declined and frozen tilapia remained almost unchanged. The strong growth of tilapia (prepared and packaged) also indicates that the industry shifted to value added products. The United States remained the largest destination for China's tilapia products, accounting for 70 percent of total export value in 2006. Crawfish exports are expected to reach \$180 million in 2006, up 44 percent from \$125 million in 2005. The United States is expected to overtake Belgium to become the world's largest crawfish buyer. Exports to new markets such as Russia increased sharply in 2006, though, eel prices declined by 5 percent, reflect in the drop in export value. Although eel exports began to decline in 2005, their further decline in 2006 was still mainly attributable to the "positive listing" imposed by Japan in May 2006, which raised the threshold for eel products entering the Japanese market.

Over the first ten months of 2006, total mollusk product exports surged to \$1,170 million, up 45 percent from the same period in 2005. Excluding the strong growth of cultured mollusk exports, processing trade also contributed to the surge.

Export destinations became more diversified in 2006. In 2005, Japan was the largest export destination, distantly followed by the United States and South Korea. Beginning in 2006, however, this picture began to change. As of the end of October 2006, export value to twelve countries/regions amounted to \$100 million or more. Apart from being the largest destination for China's fish/fillet and tilapia products, the United States is likely to surpass Japan as the largest importer of Chinese shrimp and prawns and to exceed Belgium for crawfish in 2006.

#### Exportation of value added products continues to increase

According to MOA, China's aquatic sector accelerated its pace in diversifying product mix in past years by drawing lessons from foreign anti-dumping cases. Many manufacturers opted to produce more value added products. Tilapia exports in 2006 are characterized by a surge of value added prepared and packaged tilapia, up 380 percent from 2005, while fillet/tilapia and frozen whole are expected to decline. The average export price also increased. The export value of prepared and preserved shrimp and prawns accounted for 73 percent of the total aquatic shrimp and prawns exports, where as this only accounted for 58 percent in the previous year.

#### Food safety remains a hurdle in aquatic product exports

In May 2006, Japan implemented a "Positive List System" for agriculture chemical residues in foods. As many Chinese industry insiders expected, its impact on Chinese aquatic exports

was significant. Some Chinese traders hesitated in signing export contracts with Japan simply because they knew their products could not meet the standard. In the domestic market, duobao fish (Scophthatmus maximus) was detected to have been contaminated by high residues of antibiotics (such as nitrofurans) and banned chemicals (such as malachite) in November 2006. In mid-2006, a parasite (Angiostrongylus cantontensisa) from a cultured snail poisoned about 80 people in Beijing. Industry insiders argued that these incidents were just the tip of the iceberg, reflecting the state of China's lax food safety enforcement practices. Along with China's rapid development of export oriented aquaculture, foreign governments are increasingly concerned about China's aquaculture food safety monitoring/supervising system. The United States Food and Drug Administration (FDA) is planning to cooperate with China in order to better understand China's food safety controls on mollusk shellfish production. However, it is worth noting that many aquatic processing facilities are equipped with advanced processing lines that abide to HACCP requirements. Although Chinese authorities frequently take actions/measures in response to food safety and foreign market demands, implementation and enforcement remains a challenge. The future growth of China's aquatic exports will be predicated on China's food safety control record.

#### Policy

## The 11<sup>th</sup> five-year plan sets production and export targets

In general, China's fishery production policy remains unchanged. In November 2006, MOA released the 11<sup>th</sup> Five-Year (2006-2010) plan for fishery development, with several key production targets. According to the plan, total aquatic production is expected to increase at 3 percent annually to reach 60 MMT, while aquaculture production is expected to increase by 6 percent/year to 45.5MMT by 2010. The domestic catch production, however, is restricted to 12 MMT, down from the 14.5 MMT for 2005. The catch in other territorial seas is encouraged but the expected production will remain stable in general. Total aquatic export value is expected to grow at 9 percent annually to \$12 billion, and 30 export-oriented processing bases will be established (no detailed information as for how the governments will financially support these facilities). The plan emphasized that the coming years will be a crucial period during which China's fishery industry must shift to a more sustainable development model with rational resource utilization. Continued rapid GDP growth will boost domestic demand for aquatic products dramatically, with 2010 aquatic consumption forecast at 12 Kg per capita. The aquaculture development plan by region/province remains unchanged in general. Large aquatic producing provinces will continue to focus on their most competitive products. Export-oriented aquaculture production/processing will continue to be concentrated in coastal provinces.

On March 3, 2006, MOA issued "The Action Plan for Aquaculture Development Model". Through the intensification of the enforcement of relevant laws and regulations and technical extension, the plan aimed at promoting better use of resources, protecting the environment, producing safe products, and raising farmer income. Based on the plan, 130 environment-friendly and healthy aquaculture demonstration bases will be built before the end of 2006. These demonstration bases will meet requirements stipulated by MOA and are subject to supervision.

China's governmental financial support to the aquatic sector is expected to continue. MOA said the government's financial support to the sector remained stable at about \$136 million for 2005. The government mainly invested in capacity building for enforcing relevant laws and regulations, construction of port facilities, and in re-employment resulting from the scrapping of vessels.

#### Implementation of aquaculture licensing system advanced

The implementation of an aquaculture licensing system continued in 2006. According to MOA, thanks to sustained efforts over the past three years, the number of licensed aquaculture entities increased at the end of 2005. These facilities account for 50 percent of all facilities in Shandong, Guangdong and Anhui provinces and 70 percent in Fujian and four other provinces. In 2007, MOA will further push forward the licensing system nationwide in order to better regulate the industry development.

#### Aquaculture area growth is forecast to slow down in 2007

China's aquaculture area continued expanding in 2005, with total area exceeding 7.5 MHa, up 4 percent over the previous year. The net increase of area reached 263,767 hectares, of which 186,688 hectares are a freshwater area mainly distributed in Qinghai, Henan, Heilongjiang and Liaoning provinces. Reservoirs or lakes attributed to the area growth. Based on industry insiders, the area expansion is unlikely to be sustained in 2006-2007 because untapped water resources are declining and existing area is shrinking in some provinces due to urbanization/industrialization etc.

#### The policy on aquatic processing trade remains unchanged

China's government views the processing trade as an advantageous industry due to job creation and leftovers can be utilized as a feed ingredient. Basically, the policy stipulates that imports of aquatic products for re-export purpose enjoy tariff and VAT free treatment. China's industry and official sources both claimed that China is likely to become the world's processing center for cod, mackerel and herrings. Industry sources note that the number of enterprises involved in "Processing Trade" is on the rise, especially in the large fishery provinces, Shandong and Liaoning.

#### Domestic aquatic catch is restricted

The "Zero Growth" policy for domestic wild aquatic catch is to be maintained although overseas catch is encouraged. The 2-month summer fishing moratorium in China's seawater continued in 2006, and the three-month spring fishing ban in the Yangtze River entered its fifth year. In an effort to protect and restore the ecological system, the fishery departments conducted 124 releases of aquatic fingerlings to waters nationwide in the first seven months of 2006. MOA reported that scraping of fishing vessels in the first half of 2006 reached 4,584 and more than 5,000 fishermen were trained and transferred to other industries.

#### **Trade Related Issues**

As China's government policy favors the "Processing Trade" of aquatic products, imports under "Processing Trade" will still enjoy free tariff and value added tax (VAT), the processed products, however, must be re-exported. Imports destined for China are subject to tariff and VAT (CH5089).

On January 1, 2006, based on the "Framework Agreement on Comprehensive Economic Cooperation between China and the Association of South East Asian Nations (ASEAN)", China and ASEAN eliminated tariffs for trade of agricultural products and aquatic products. According to MOA, in the first half of 2006, aquatic trade between China and ASEAN increased significantly, with China's import value up 20 percent and the export up 54 percent.

On July 1, 2006, the Asia-Pacific Trade Agreement (China, India, Korea/South, Bangladesh, Laos and Sri Lanka) was implemented. The agreement reduced tariffs from 5-16 to about 2.5-11 percent for trade of most aquatic products between China and the other five countries, while tariffs for some aquatic products traded with Laos and Bangladesh were completely eliminated. No significant changes on aquatic trade have been reported as a result of the implementation of this agreement.

On October 1, 2006, based on China-Chile Free Trade Agreement, China reduced its import tariffs for fish meal (HS 23012010) of Chilean origin to 1.8 percent from the previous 2 percent.

In June 2005, China signed the first algae export contract with Japan, after more than one year of "trade barrier investigation" on Japan's algae import quota regime, implying that Japan's market is open to China's algae products. Export volume, however, did not pick up as expected in 2006 because quality issues were heightened since the enforcement of the "Positive List System" by Japan in May.

Eight "National Standards" for hygiene of aquatic products took effect on October 1, 2005. These are designed to regulate the guality of domestic and imported aguatic products. They were initially published by China's Ministry of Health in late 2002 (CH3019) and then notified to the World Trade Organization (WTO) (CH4015). Post has not received complaints about the implementation of these standards by traders. The eight Standards are: GB 2733 Hygiene Standard for Fresh and Frozen Marine Products GB 10132 Hygiene Standard for Minced Aquatic Products GB 10133 Hygiene Standard for Aquatic Products as a Flavoring GB 10136 Hygiene Standard for Salt and Liguor Saturated Aquatic Products GB 10138 Hygiene Standard for Salted Fish products GB 10144 Hygiene Standard for Dried Aquatic Products GB 19643 Hygiene Standard for Marine Algae and Algae Products

GB 14939 Hygiene Standard for Canned Fish

### Marketing

Seafood is a popular dish on the Chinese dining table. While only a very small portion of total consumption, imported U.S. seafood is preferred because of its superior flavor and variety. As stated earlier in the report, Chinese consumers prefer to purchase and consume fresh fish. From North to South, China is divided by the Yangtze River and Southern consumers have a strong preference for fresh fish, whereas Northern consumers have recently begun to purchase fresh or frozen fish more often. In hotels and restaurants, seafood is usually considered a high-end dish and it is often imported, thus holding a higher price. It is worth mentioning that the Hotel and Retail Industry (HRI) sector has great influence on consumers when introducing new products or new methods of preparation. Positive media coverage has also contributed to the recent increase in fishery products consumption.



The distribution channel for imported seafood in China is:

#### Competition

With improved market access and increasing demands for high-valued seafood in China, more international competitors have entered the market. During the recent 11<sup>th</sup> China Fisheries and Seafood Expo, apart from the traditional foreign exhibitors from the United States, Russia, Norway, Korea and Japan, there was also presence from Europe and Latin American countries (including Peru and Chile), posing threats to established international players.

#### Variety

U.S. seafood is best known for its abundance, quality and variety, and has gained consumers' trust over the years. From the Atlantic to the Pacific Ocean, ranging in all prices, U.S. seafood has substantial varieties compared with other competitors. Advanced harvesting method, processing facilities and cold storage keep the seafood in their best condition upon capture. Given the shrinking natural resources of Chinese fisheries, more international competitors are looking at China's seafood market potential. These countries include the United States, Russia, Norway, India, Argentina, Chile and Thailand.

#### The Chinese consumer

With changing lifestyles, more and more families choose to buy prepared, pre-cooked or ready-to-eat products at supermarkets instead of going to the fresh market or dining out. Seafood imported into China is mostly processed into fish fillets, packaged and re-exported to other countries, with only a small amount will going to wholesale markets or retail stores. Processed products are usually cod, yellow fin sole, Pacific Ocean perch, Alaska Pollack and surimi. One of the most important reasons for this seafood processing is the low labor cost and the advanced logistic services.

Chinese had traditionally consumed low value products, like squid or hair tail but, they are now consuming high-end imported products such as salmon, black sea bass, halibut, lobster and oyster. U.S. seafood has superior texture and unique flavor prized by chefs. Taking the example of Alaska Snow Crab, compared to Russian or Korean varieties, it is reported that U.S. products have firm meat and texture, and sweet taste. However, consumers will not purchase a product if they are not familiar with it. Therefore it is important for exporters to educate Chinese importers and distributors as well as the HRI food service providers, to inform them of the product features, season of supply, nutrition, methods of preparation and menu combinations. Taking salmon as an example, more and more Chinese like to prepare this highly nutritious and low-saturated fat-containing fish. It is not only easy to prepare, but also delicious in taste, and can be marketed as containing heart-healthy Omega-3 to health conscious consumers.

#### Market entry recommendations

Below are some suggestions to capitalize on the opportunities in China and better position U.S. products in the market:

--When considering entering the Chinese market, exporters should conduct extensive preliminary research to determine if the market is appropriate for your product. It is also recommended to refer to the USDA, Foreign Agricultural Service's websites to obtain more related information or consult with the local offices for an updated brief.

--Attending seafood trade shows or exhibitions in China is a good way of showcasing products and establishes initial, face-to-face contacts with importers, wholesalers, distributors and other food service providers.

--U.S. seafood has good quality but is also high in price. Exporters should invest in a long-term branding strategy to differentiate it from other international competitors.

--The HRI sector has strong influence on consumer behavior for high-end seafood. Match promotional activities directly with the HRI and retail sectors.

--With changing lifestyles, prepared, pre-cooked or ready-to-eat fishery products are now in high demand. Instead of exporting seafood to China for processing and re-exporting, exporters should instead consider marketing directly to Chinese consumers as a long-term market-development strategy.

### **Trade Tables**

## Trade of Certain Aquatic Products (Volume: MT; Value: \$ Million)

#### Imports by Category

HS		Jan-Dec/04		Jan-Dec/05		Jan-Oct/0	6*
Code							
		Volume	Value	Volume	Value	Volume	Value
	Total	1,743,996	2,351	1,955,813	2,904	1,792,519	2,615
0302	Fish, Fresh	44,916	82	18,554	46	3,404	21
0303	Fish, Frozen	1,306,202	1,517	1,579,214	2,200	1,389,446	1,971
0304	Fish, Fillet	25,765	46	22,592	44	17,274	35
0305	Fish, Dried, Salted, Brined	9,158	40	7,631	31	6,890	24
0306	Crustaceans	95,870	312	93,805	290	79,742	241
0307	Mollusks & Other	253,644	332	221,960	268	282,368	293
1604	Prepared and Packaged Fish and Caviar	2,436	5	3,301	8	2,972	9
1605	Prepared and Packaged Crustaceans and Mollusks	6,005	18	8,756	17	10,423	21

#### Exports by Category

HS		Jan-Dec/04		Jan-Dec/05		Jan-Oct/06*	
Code							
		Volume	Value	Volume	Value	Volume	Value
	Total	2,215,293	6,330	2,378,595	7,184	2,199,899	6,750
0302	Fish, Fresh	103,917	221	72,290	173	45,089	117
0303	Fish, Frozen	429,915	508	429,141	571	408,342	530
0304	Fish, Fillet	602,820	1,472	715,013	1,924	650,988	1,849
0305	Fish, Dried, Salted,	41,168	185	50,260	212	43,502	180
	Brined						
0306	Crustaceans	170,417	687	131,034	508	89,850	299
0307	Mollusks and Other	309,110	664	264,966	616	229,994	513
1604	Prepared or Packaged	266,712	1,190	340,380	1,333	365,460	1,421
	Fish and Caviar						
1605	Prepared or Packaged Crustaceans and Molluscs	291,234	1,402	375,511	1,847	366,674	1,841

## Aquatic Products Trade by Country of Origin (in \$ million)

#### Imports by Country of Origin

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct /06*
Total	1,872	2,351	2,904	2,615
Russia	663	781	1,094	1,013
United States	133	245	343	380
Japan	119	110	171	152
Canada	105	137	171	147
Norway	92	130	156	116
Korea, South	49	79	110	64
Korea, North	207	261	93	37
New Zealand	38	57	68	46
Netherlands	24	52	65	74
Thailand	28	41	59	59
India	47	48	57	52
Others	367	410	517	475

## Exports by Country of Destination (in \$ million)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct /06*
Total	5,039	6,330	7,183	6,751
Japan	2,051	2,609	2,642	2,229
United States	989	946	1,259	1,360
Korea, South	665	864	880	740
Hong Kong	316	362	332	226
Germany	185	231	277	296
Spain	41	94	191	189
Canada	83	120	153	146
Mexico	37	140	147	134
United Kingdom	96	106	136	162
Malaysia	47	99	133	139
Others	530	758	1,032	1,132

## Imports of Frozen Fish, by Country of Origin (in \$ million)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	1,195	1,517	2,200	1,971
Russia	644	753	1,060	960
United States	106	201	295	317
Japan	92	80	140	131
Norway	81	109	134	93
Netherlands	23	52	64	73
Canada	15	33	60	44
Korea, South	16	28	52	35
New Zealand	29	39	44	31
Iceland	18	23	39	33
India	18	22	38	33
Others	152	177	274	222

## Imports of Cod, by Country of Origin

Imports (in \$ million)								
Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*				
Total	576	725	954	755				
Russia	500	553	748	549				
United States	25	66	60	69				
Netherlands	11	30	33	36				
New Zealand	12	17	18	11				
Korea, South	4	12	17	12				
Germany	1	3	13	7				
Japan	1	11	12	19				
Norway	5	7	11	19				
Chile	6	2	8	4				
Uruguay	1	3	7	1				
Other	10	19	27	30				
Imports (in MT)								
Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*				
Total	462,949	585,735	669,791	503,419				
Russia	392,314	411,846	499,088	334,285				
Netherlands	23,101	64,719	56,115	54,844				
United States	16,678	37,146	32,643	32,500				
Japan	850	14,986	15,650	18,297				
New Zealand	13,749	13,534	15,510	9,249				
Korea, South	3,171	9,499	12,339	9,479				
Germany	2,360	6,115	8,888	5,694				
Ireland	0	8,614	5,565	7,786				
Norway	2,970	4,777	4,374	9,280				
Korea, North	1,142	1,468	3,595	3,977				
Other	6,615	13,031	16,024	18,029				

#### Imports of Salmon, by Country of Origin (in MT and in \$ million)

	Jan-Dec/0	3	Jan-Dec /04		Jan-Dec/05		Jan-Oct/06*	
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Total	74,202	108	89,084	126	132,865	239	115,889	240
Japan	33,447	50	35,567	44	45,913	87	31,305	64
Russia	18,719	23	22,402	32	41,276	69	34,586	68
<b>United States</b>	12,943	14	17,294	16	32,437	45	37,887	72
Canada	1,583	3	2,061	3	4,891	9	2,300	6
Norway	3,283	10	6,700	24	3,532	20	3,645	21
Other	4,227	8	5,060	8	4,816	8	6,167	10

#### Imports of Flatfish, by Country of Origin (in \$ million)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	98	134	233	206
<b>United States</b>	44	56	104	108
Russia	27	42	70	52
Canada	4	7	16	13
Norway	1	3	8	2
Greenland	2	3	6	4
Other	19	23	29	27

## Imports of Plaice, by Country of Origin

Imports (in \$ million)									
Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*					
Total	77	97	184	170					
<b>United States</b>	43	53	98	106					
Russia	22	29	57	39					
Canada	2	2	10	6					
Korea, South	1	4	3	5					
Iceland	2	1	3	2					
Other	7	8	13	11					
Imports (in MT									
Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*					
Total	79,666	89,732	138,002	120,738					
<b>United States</b>	43,602	45,500	67,524	70,740					
Russia	27,130	30,169	47,397	30,638					
Canada	1,432	1,905	8,236	4,459					

1,773

3,176

7,210

Note: \*Data is through October 2006; Source: World Trade Atlas

1,988

1,369

4,144

Spain

Other

Korea, South

2,768

2,511

9,566

680

3,944

10,277

Γ

Imports (in \$ million)									
Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*					
Total	77	97	184	170					
<b>United States</b>	43	53	98	106					
Russia	22	29	57	39					
Canada	2	2	10	6					
Korea, South	1	4	3	5					
Iceland	2	1	3	2					
Other	7	8	13	11					

## Imports (in MT)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	79,666	89,732	138,002	120,738
<b>United States</b>	43,602	45,500	67,524	70,740
Russia	27,130	30,169	47,397	30,638
Canada	1,432	1,905	8,236	4,459
Spain	1,988	1,773	2,768	680
Korea, South	1,369	3,176	2,511	3,944
Other	4,144	7,210	9,566	10,277

#### Imports of Crustaceans, by Country of Origin (Volume: MT; Value: \$ Million)

•	Jan-Dec.	/03	Jan-Dec/	04	Jan-Dec/0	5	Jan-Oct/	06*
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Total	101,802	288	95,870	312	93,805	290	79,742	241
Canada	37,862	74	38,076	85	38,372	94	31,874	86
Greenland	10,864	20	7,602	15	10,793	23	7,925	16
Russia	2,497	9	3,532	14	5,894	20	9,385	28
Denmark	8,303	12	4,701	9	4,760	9	3,022	5
Japan	2,365	10	3,072	14	4,428	17	3,450	10
Korea, North	11,975	79	11,743	74	4,284	15	878	1
Thailand	4,797	12	4,553	11	4,212	13	3,707	17
India	5,735	20	4,647	17	3,513	14	3,576	14
Indonesia	2,450	8	3,682	15	3,224	12	1,992	9
United States	2,333	9	2,958	12	2,568	11	2,454	9
Other	12,621	37	11,304	46	11,758	59	11,480	45

## Imports of Mollusks and Other, by Country of Origin (Volume: MT; Value: \$ Million)

	Jan-Dec/0	3	Jan-Dec/04		Jan-Dec/05		Jan-Oct*/06	
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Total	205,559	262	253,644	332	221,960	268	282,368	293
Korea, North	60,896	103	71,833	128	53,513	51	35,967	32
Peru	15,402	10	41,205	31	28,582	23	61,761	48
Korea, South	19,897	28	26,882	45	26,551	50	15,434	24
United States	14,252	11	17,477	15	24,508	24	46,511	45
New Zealand	6,732	6	15,667	14	22,928	22	11,970	13
Taiwan	17,860	13	8,080	4	6,373	3	17,064	11
Thailand	5,389	4	5,930	5	5,997	6	5,424	6
Mexico	6,865	7	4,033	5	5,978	6	6,323	7
India	7,686	6	9,193	7	5,698	4	6,011	5
Japan	8,941	11	9,003	11	4,705	10	2,279	5
Other	41,639	63	44,341	67	37,127	69	73,625	98

### Imports of Scabber Fish, by Country of Origin (in MT)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	56,614	80,012	107,542	94,486
India	21,705	31,102	44,244	40,163
Thailand	6,035	21,327	26,827	32,398
Pakistan	11,130	8,021	11,557	6,502
Indonesia	7,468	6,574	9,359	6,406
Malaysia	3,076	8,783	6,070	2,982
Other	7,200	4,205	9,487	6,034

#### Exports of Frozen Fish, by Destination (in \$ million)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	454	508	571	530
Korea, South	228	250	281	244
Japan	113	117	108	90
United States	45	42	60	39
Philippines	4	13	19	31
Taiwan	8	18	18	14
Malaysia	10	17	14	22
Spain	4	5	9	16
Indonesia	2	8	9	12
Mexico	4	8	8	8
Singapore	3	4	6	3
Other	33	28	39	50

## Exports of Fish Fillets, by Country of Origin (in \$ million)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	1,163	1,472	1,924	1,849
United States	330	430	624	523
Japan	293	370	423	360
Germany	175	224	265	281
United Kingdom	94	98	115	139
Canada	58	61	88	84
Netherlands	22	46	71	72
Poland	34	31	52	42
France	27	33	40	61
Korea, South	40	44	36	34
Belgium	14	16	27	27
Other	77	120	181	227

#### Exports of Shrimps and Prawns by Category (Volume in MT; Value in \$ Million)

Exports by Category (in \$ million)								
	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Oct*				
	/03	704	705	706				
Aquatic Shrimp & Prawn	881	1,037	1,087	999				
Shrimps & prawns, inc in shell, frozen	406	411	327	152				
Shrimps & prawns, inc in live, Fr/Ch/Salted/Drd/In Brine	29	37	33	27				
Shrimps & prawns, prepared or preserved	446	589	727	820				
Exports by Category (in MT)								
	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Oct*				
	/03	/04	/05	/06				
Aquatic Shrimp & Prawn	188,716	220,421	223,087	202,226				
Shrimps & prawns, inc in shell, frozen	93,154	90,630	72,293	35,562				
Shrimps & prawns, inc in live,	26,009	27,979	21,870	19,635				
Fr/Ch/Salted/Drd/In Brine								
Shrimps & prawns, prepared or preserved	69,553	101,812	128,924	147,029				

#### Exports of Shrimps and Prawns, by Destination (in \$ million)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	881	1,037	1,087	999
Japan	181	225	248	196
United States	384	189	145	243
Hong Kong	102	133	119	79
Mexico	19	107	112	80
Spain	0	9	104	88
Korea, South	43	70	73	65
Malaysia	20	47	68	59
Vietnam	36	16	32	11
Singapore	6	34	30	4
Australia	30	32	25	35
Other	60	176	132	138

#### Exports of Mollusks and Other, by Destination (Volume in MT; Value in \$ Million)

Country	Jan-Dec/0	3	Jan-Dec/04		Jan-Dec/05		Jan-Oct*/06	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Total	295,634	543	309,100	664	264,966	616	229,994	513
Korea South	105,337	153	103,679	156	87,493	142	83,806	127
Japan	108,217	241	103,737	292	80,005	226	54,321	160
United States	21,957	55	21,131	63	24,341	96	25,026	93
Taiwan	10,368	7	13,606	10	16,124	13	17,059	15
Hong Kong	18,043	22	16,944	25	14,294	25	9,847	19
Other	31,711	64	50,003	117	42,709	114	39,935	98

## Exports of Tilapia Products, by Destination (Volume in MT; Value in \$ Million)

Total Tilapia Exports by Destination (in \$ million)								
Country	Jan-Dec/02	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct*/06			
Total	50	98	156	232	281			
United States	39	76	116	184	198			
Mexico	7	13	28	29	43			
Canada	1	1	2	3	3			
Belgium	0	0	0	3	3			
Israel	0	1	1	3	6			
Russia			0	0	8			
Other	3	7	9	12	21			
US Share	78%	78%	74%	79%	70%			

#### Tilapia Fillet Exports by Destination (in MT)

Country	Jan-Dec/02	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct*/06
Total	9,121	19,015	36,242	53,494	28,715
United States	7,012	14,550	27,293	43,357	20,246
Mexico	1,712	3,291	7,540	6,578	4,144
Puerto Rico (U.S.)	56	186	496	781	268
Germany	52	0	0	619	376
Israel	0	120	152	595	697
Belgium	16	0	0	512	279
Canada	113	11	103	467	224
Hong Kong	44	389	144	141	240
Others	115	467	513	444	2,241

# Exports of Tilapia Products, by Destination (Volume in MT; Value in \$ Million; Continued)

Tilapia/Frozen Whole Exports by Destination (in MT)									
Country	Jan-Dec/02	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*				
Total	20,833	35,162	42,546	38,761	34,303				
United States	16,173	26,816	28,878	26,871	20,327				
Mexico	2,222	4,554	7,776	8,297	7,869				
Indonesia	37	213	1,589	574	252				
Israel	23	387	526	436	457				
Canada	506	459	584	396	210				
Dominican Republic	153	133	117	367	679				
Malaysia	66	1,184	2,085	309	336				
United Arab Emirates	402	0	28	218	835				
United Kingdom	0	0	0	178	70				
Other	1,251	1,416	963	1,114	3,268				

#### Exports of Tilapia/Prepared and Packaged, by Destination (in MT)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*	Jan-Oct/05**
Total	4,725	7,781	14,494	61,109	12,547
United States	3,955	6,622	10,608	40,856	9,214
Mexico	268	568	1,509	11,887	1,192
Belgium	0	0	437	240	339
United Arab Emirates	0	0	364	240	339
Israel	0	0	257	1,389	237
Russia	0	0	0	1,508	0
Other	501	591	1,320	4,989	1,226

Note: \* Data is through October 2006; \*\* Jan-Oct/05 data added to show the rapid increase of this category, of which exports started in 2003; Source: World Trade Atlas;

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*	Jan-Oct/05**
Total	528	860	753	622	658
Japan	461	749	661	532	576
Hong Kong	14	51	42	8	41
<b>United States</b>	16	15	17	22	11
Korea, South	30	31	14	14	14
Indonesia	0	3	6	26	6
Other	7	11	13	20	11

#### Exports of Eel Products, by Destination (in \$ million)

Note: \* Data is through October 2006; Source: World Trade Atlas; \*\* Jan-Oct/05 data added to show the declined exports; Source: World Trade Atlas.

## Exports of Crawfish, by Destination (in \$ million)

Country	Jan-Dec/03	Jan-Dec/04	Jan-Dec/05	Jan-Oct/06*
Total	100	88	125	159
Belgium	12	13	32	47
United States	45	37	29	49
Denmark	15	13	24	29
Sweden	11	11	19	18
United Kingdom	0	2	6	5
Other	17	12	13	10