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## Korea, Republic of

### **Fishery Products**

### Annual

2003

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#### **Report Highlights:**

Korean fishery resources are being steadily depleted, and at the same time, fish catch quotas in foreign waters are being restricted. As a result, domestic fishery production declined seven percent in 2002 to 2.48 million tons (from 2.67 million tons in 2001). Despite the drop in production, total imports of seafood in 2003 are not expected to increase greatly from the \$1.88 million in 2002. The slow economic situation in Korea, combined with rising seafood prices may have led to a decline in consumption. Imports from the US are forecast to decline in 2003 as many US exporters are shifting to the Chinese market.

Includes PSD Changes: Yes Includes Trade Matrix: Yes Annual Report Seoul ATO [KS2] [KS]

#### SECTION I: SITUATION AND OUTLOOK

Korean fishery resources are being steadily depleted and, at the same time fish catch quotas in foreign waters are being restricted. As a result, domestic fishery production declined seven percent in 2002 to 2.48 million tons (from 2.67 million tons in 2001). To cope with this situation, the Korean government has accelerated the downsizing of the Korean fishing fleet and plans to reduce it further over the next several years. Recognizing the potential economic impact of this step and other fishery agreements, the Korean government is undertaking an in-depth study on aquaculture and how to secure higher fish catch quotas in foreign waters.

Despite the drop in production, total imports of seafood in 2003 are not expected to increase greatly from the \$1.88 million in 2002. Rising seafood prices may have led to a decline in consumption. Imports from the U.S. are forecast to decline for 2003 as many U.S. exporters are shifting to the Chinese market. During the first eight months of 2002, total seafood imports from the U.S. amounted to \$94 million, slightly down from \$101 million during the same period last year. Until 2000, Korea enjoyed a trade surplus in seafood. However, they are currently suffering a growing trade deficit in seafood. Korea exported about \$1.16 billion of seafood in 2002, down from \$1.27 billion in 2001.

#### SECTION II: NARRATIVE ON SUPPLY AND DEMAND, POLICY & MARKETING

#### Supply and Demand

Korea harvested 2.48 million metric tons of seafood in 2002, including 1.1 million tons in the on/off shore, 782,000 tons in the shallow sea aquaculture, 580,000 tons in the deep-sea and 18,500 tons in fresh water. Seafood production in Korea is forecast to decrease in the future due to the depletion of fish resources in adjacent waters and the enforcement of Exclusive Economic Zones (EEZ) by Korea's neighboring countries. In addition, Typhoon Maemi in September 2003 seriously damaged the shallow sea aquaculture, which will affect local production in 2003 and the beginning of 2004.

The Alaskan pollack catch declined sharply to 25,000 tons in 2002, from 199,000 tons in 2001, because the Korea fish industry failed to secure private catch quotas for Alaska pollack at Russia's international bid in early 2002. Again in 2003, the Korean fish industry failed to secure any private catch quotas for Alaska pollack and the Korean government was able to secure a government quota of only 22,000 tons in 2003. Total quotas of all types of fish purchased by the Korean government from the Russian government in 2003 were 51,800 tons, including 22,000 tons for Alaska pollack, 2,500 tons for cod, 20,000 tons for saury and 7,300 tons for squid. Russia is expected to reduce the government quota even further in the future, and will likely keep foreign fishing boats from catching fish in Russian waters starting in 2004. However, Korean fishing companies made several private agreements with Russian fishing companies for joint catching of 116,000 tons of Alaska pollack in 2003. This is different from a catch quota where a Korean vessel would catch fish in Russian waters. It may involve Korean investment in Russian fishing infrastructure or Korean fishery instruction.

As ground fish, surimi, and roe production directly correlates with the Alaskan pollack catch, total production of these products is expected to drop significantly in 2003 as well. Deep-sea production is also expected to decline in the longer term as Russia reduces Alaska pollack catch quotas in effort to rebuild its fish stocks in coastal waters. The deep-sea industry catches mainly Alaska pollack, tuna and squid.

Fresh water production is also expected to decline in the foreseeable future as enforcement of relaxed governmental anti-pollution environment regulations tightens. Fresh water production amounted to 18,500 tons in 2002, down from 20,600 tons in 2000.

A Total Allowable Catch (TAC) system was first implemented in 1999 for four fish species: mackerel, jack

mackerel, sardine and large red crab. The Ministry of Maritime Affairs and Fisheries (MOMAF) established the TAC total for 2002 by fish species as follows: mackerel - 160,000 tons, jack mackerel - 10,600 tons, sardine - 17,000 tons, large red crab - 28,000 tons, purplish Washington clams - 9,000 tons, pen shells - 4,500 tons, top shells - 2,058 tons, and snow crabs - 1,220 tons.

The "Monthly Statistics of Korea" (July 2003 Issue) shows that the average monthly household expenditure in cities on fishery products was \$28 in 2002. Annual per capita fish consumption in Korea is estimated at 33 Kg. a year. The success of Korean industry efforts to change consumer perception of fish (as a healthy alternative to red meat), to diversify fish products, to improve quality, and to develop processing technology will be key in expanding domestic demand.

#### Trade

Seafood imports by Korea increased to \$1.88 billion in 2002, up from \$1.65 billion in 2001. Korea remains an important market for U.S. seafood suppliers. Given Korea's high per capita consumption and lower domestic production, imports are expected to rise to meet local demand in the coming years. Although U.S. fish are of high quality compared to competitors, they are also higher priced than those of competitors.

	1999		2000		2001		2002	
	World	USA	World	USA	World	USA	World	USA
Fish & Seafood	1,179	130	1,411	145	1,648	159	1,884	165

# Table 1: Korean Imports of Fishery Products: Total and From USA (US\$ Million)

Sources: Statistical Year Book of Maritime Affairs and Fisheries 2003 and KOTIS

Differences between U.S. export figures and Korean import data are often found. The discrepancies are ascribed to the following:

- Korean importers purchase fish from the United States with open Letters of Credit with the product to be processed in China. The fish is shipped directly to China generally for transformation into fish fillet and imitation crab meat. These processed products are then exported to Europe, the U.S. and Korea. The species for such processing are usually yellow fin sole, cod, Pacific ocean perch, surimi and Alaska pollack. It is reported that the Koreans have about 20 fish processing plants in China, either wholly owned by Koreans or as joint venture companies with Chinese, as the cost of labor in China is much lower than that in Korea.
- Korean importers store the imported product, such as pollack roe, in bonded warehouses and then re-export the product to Japan. Japanese buyers reportedly come to Busan and inspect the roe before they purchase. The storage prices are lower in Busan than in Seattle or Alaska.
- U.S. export figures are based on the FOB value and Korean import data is based on the CIF value.
- There is the time difference between departure from USA and arrival in Korea.

Imported seafood products are utilized for both re-export and domestic consumption. Major suppliers include China, Russia, the United States, Japan and Vietnam. In 2002, these five countries accounted for over 70 percent of total Korean seafood imports on a value basis. In 2002, China became the largest seafood supplier to Korea by exporting \$711 million, followed by Russia at \$214 million, the U.S. at \$165 million, Japan at \$142 million, and Vietnam at \$122 million. The major species imported to Korea in 2002

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were: yellow Corvina, frozen (\$138 million); Alaska pollack, frozen (\$90 million); hair tail, frozen (\$81 million); Alaska pollack roe, frozen (\$80 million); shrimp, frozen (\$51 million); Alaska pollack surimi, frozen (\$49 million); and, poulp squid, frozen (\$40 million).

Fish Species	From USA	From World
Pollack surimi, frozen	\$48,439	\$48,772
Angler, frozen	\$37,486	\$69,990
Roes of Pollack, frozen	\$20,108	\$80,174
Other surimi, frozen	\$8,730	\$64,818
Hagfish, frozen	\$5,529	\$7,098
Other flat fish, frozen	\$4,832	\$18,632
Alaska Pollack, frozen	\$4,468	v89,492
Cod, frozen	\$3,469	\$14,602
Angler, fresh	\$2,925	\$3,865
Atka mackerel, frozen	\$2,921	\$13,117
Other roes, frozen	\$2,556	\$7,227
Ray, frozen	\$1,871	\$12,052
Prepared sea cucumber	\$1,411	\$4,892
Rock fish, frozen	\$1,323	\$9,646
Sable fish, frozen	\$903	\$919
Plaice, frozen	\$881	\$1,865
Sardines, frozen	\$811	\$5,928
Cod, fresh	\$652	\$3,425
Rock lobster, frozen	\$589	\$3,796
Shrimps and prawns other than peeled, frozen	\$589	\$51,482
Pacific salmon except Sockeye	\$565	\$2,876

#### Table 2: Imports of Major Fishery Products: 2002 (U.S. \$1,000)

Source: Statistical Year Book of Foreign Trade 2002

Korea also exports a large volume of fish products. In 2002, Korea exported 429,884 metric tons valued at \$1.16 billion. The major species exported to other countries in 2002 were tuna (\$274 million), oysters (\$76 million), squid (\$65 million), conger eels (\$58 million), imitation crab meat (\$44 million), and flat fish (\$42 million).

#### Policy

The Korean government has used the higher adjustment tariffs ranging from 30 to 70 percent for 12 fish species to protect select domestic seafood, mainly from China. The normal applicable tariffs are between

10 percent and 20 percent. To further support the domestic industry, the Korea government is focusing on aquaculture in shallow waters to secure a stable supply of fish and working hard to purchase fish quotas from other countries, including Russia.

Korea and China reached an agreement on the fishing quota for 2003, which allows Korean vessels to catch 60,000 tons inside China's EEZ and in return, Chinese vessels can catch 93,000 tons in the Korean zone. Korea also agreed with Japan on the 2003 fish catch quota in each other's EEZ, which allows each country to catch 80,000 tons.

One of the pending issues on fishery products the U.S. has with the Korean government is the 70% adjustment tariff applied to frozen croaker. The U.S. fish industry is very interested in exporting croaker to Korea. The Korean tariff for croaker is "unbound" within the context of the World Trade Organization, meaning there is no ceiling on the rate. For further detailed information on the croaker, please refer to "Croaker Product Brief" KS2039 dated September 4, 2002, available on the USDA/FAS website.

Constraints built into bilateral and multilateral fishing accords will further impact total harvest from on/offshore fishery zones. On/off-shore fish species consist mainly of squid, mackerel, corvina, hair tail and anchovy. Government efforts to boost aquaculture production in the shallow sea areas clearly indicates the importance of this sector as a future seafood resource. In order to cope with the depletion of fishery resources in the adjacent waters and restrictions of fish catch in the neighboring countries' waters, the Korean government accelerated the downsizing of Korea's fishing fleet and plans to reduce it further over the next several years. Recognizing the potential economic impact of this and other fishery accords, the Korean government is undertaking an in-depth study of the aquaculture industry and how to secure fish catch quotas in foreign waters.

#### Marketing

Fish importers distribute their products to all types of entities in the marketing chain: processors, distributors, wholesalers, retailers, restaurants, hotels and end-users.

Consumers purchase seafood products through many different outlets. According to an industry survey conducted in April 2001, 32 percent of consumers said that they purchase seafood at the conventional or open-air markets. The following table provides a breakdown of where consumers purchase seafood in Korea.

Market	Market Percentage					
Conventional Market	32%					
Supermarket	21%					
Discount Store	19%					
Department Store	18%					
Seafood Wholesale Market	5%					
Others	5%					
Total	100%					

#### Table 3: Where Korean Consumers Purchase Seafood April 2001

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Flatfish is a popular dish in Korea. All flat fish are freely importable. Live halibut is in high demand for its popularity as Sashimi. Imported U.S. halibut is high priced and generally distributed to hotels and upscale restaurants. Stiff competition comes from locally-farmed flatfish. Russia, China, the E.U. and Guinea Bissau are our major competitors for flatfish.

Ground fish composed of major commercial species, such as Alaska pollack and cod, appears to offer a promising market for U.S. suppliers given Korea's production outlook. The Korean government has applied an adjustment tariff of 30 percent on frozen Alaska pollack instead of 10 percent normally applied to frozen fish. Russia, Japan and China are our major competitors.

Frozen surimi imported by Korea is processed into ground fish sausage and imitation crab meat for both local and overseas markets. Vietnam, China, Thailand, Canada, Malaysia and India are major competitors for US suppliers.

The Korean market for Korean Alaska pollack roe is large. For U.S. suppliers, imported roe is processed for local consumption and re-export. Alaskan pollack roe is the most popular and is used for salted/spiced roe. It is a very popular and traditional side dish over rice at the Korean table. Russia, though the dominant supplier, may have difficulties fully servicing Korean demand if its resources continue to deplete rapidly. Russia, China, Japan and New Zealand are major U.S. competitors.

SECTION III: STATISTICAL TABLES

·	(Vessel, Gross/Tons)								
20	00	2001		2002					
Number	Capacity	Number	Capacity	Number	Capacity				
95,890	923,099	94,935	884,853	94,388	816,563				

#### Table 4: Korean Fishing Fleet (Vessel, Gross/Tons)

Source: Statistical Yearbook of Maritime Affairs and Fisheries 2003

## Table 5: Korean Fishery Production by Group of Species and Fisheries: 2002(Metric Tons)

Types of Seafood	On/off Shore	Shallow Sea Aquaculture	Deep- Sea	Fresh Water	Total			
Fish	714,058	48,073	423,696	16,280	1,202,107			
Crustacea	57,327	1,403	13,663	77	72,470			
Mollusks	308,722	212,458	142,987	2,049	666,216			
Seaweed & others	15,680	519,610	0	105	535,395			
Total	1,095,787	781,544	580,346	18,511	2,476,188			

Source: Statistical Yearbook of Maritime Affairs and Fisheries 2003

# Table 6: Korean Fishery Production by Year \_\_\_\_\_(Metric Tons)\_\_\_\_\_

Year	Volume
1997	3,243,725
1998	2,835,015
1999	2,910,450
2000	2,514,225
2001	2,665,123
2002	2,476,188

Source: Statistical Yearbook of Maritime Affairs and Fisheries 2003

#### Table 7: Korean Production of Processed Fishery Products by Group (Metric Tons)

(Metric Tons)									
Product	1998	1998	2000	2001	2002				
Dried/Salted/Cooked	58,055	36,349	33,794	45,364	41,991				
Preserved/Pickled	43,354	63,398	57,131	48,076	42,598				
Canned	48,140	42,796	50,404	80,569	83,043				
Frozen	1,110,160	1,179,024	1,042,648	1,128,026	996,482				
Dried Seaweed	92,375	100,936	47,662	79,732	82,946				
Agar-Agar	639	365	961	361	397				
Ground Fish Meat	121,480	108,443	166,682	94,079	92,271				
Flavor Seasoned	6,466	8,072	14,532	17,250	19,343				
Fish Meal and Oil	50,700	45,361	37,732	36,013	19,843				
Others	9,880	9,281	13,546	17,369	64,996				
Total	1,541,249	1,594,025	1,465,092	1,546,839	1,443,910				

Source: Statistical Yearbook of Maritime Affairs and Fisheries 2003

Year	Imp	orts	Exports					
	Volume	Value	Volume	Value				
1997	522,381	1,045,474	509,090	1,492,588				
1998	375,224	587,481	590,390	1,369,014				
1999	746,327	1,178,968	475,644	1,520,534				
2000	749,191	1,410,598	533,824	1,504,470				
2001	1,056,252	1,648,372	435,691	1,273,619				
2002	1,186,400	1,884,417	429,884	1,160,435				

## Table 8: Korean Imports and Exports of Fish and Seafood by Year (Metric Tons, US \$1,000)

Imports are based on CIF values and Exports are based on FOB values.

Source: Statistical Yearbook of Maritime Affairs and Fisheries 2003

#### Table 9: Applied Tariff Schedule for Fishery Products

Description	H.S. Code	2002 (%)	2003 (%)
Live Fish	0301 XX XXXX	10	10
Fish, Fresh or Chilled	0302 XX XXXX	20	20
Fish, Frozen	0303 XX XXXX	10	10
Fish Fillet/Fish Meat, FR/CH	0304 10 XXXX	20	20
Fish Fillet/Fish Meat, Frozen	0304 20 XXXX	10	10
Fish Surimi, Frozen	0304 90 XXXX	10	10
Fish, Dried/Salted/Brine/Smoked	0305 XX XXXX	20	20
Crustaceans	0306 except 0306.14.3000 and 0306.14.9000	20	20
Blue Crabs, frozen	0306.14.3000	14	14
Other crabs, frozen	0306.14.9000	14	14
Oyster Spat	0307 10 1010	5	5
Oyster	0307 10 XXXX	20	20
Scallops	0307 2X XXXX	20	20
Mussels	0307 3X XXXX	20	20
Cuttle Fish and Squid	0307 4X XXXX	10	10
Octopus	0307 5X XXXX	20	20
Snails (other than sea snails)	0307 60 0000	20	20
Other Molluscs	0307 9X XXXX	20	20
Fish Extracts and Juice	1603 XX XXXX	30	30
Fish, prepared, preserved	1604 XX XXXX	20	20
Crustaceans/Molluscs, prep/psrd	1605 XX XXXX	20	20

Source: Korea Customs Research Institute, Tariff Schedule of Korea, 2002

Table TO. Adjusted Tariff Schedule For Fishery Froducts								
Description	H.S. Code	General (%)	2001 (%)	2002(%)				
Eel, Live	0301.92.xxxx	10	30	30a/				
Sea Bream, Live	0301.99.4000	10	60	55b/				
Sea Bass, Live	0301.99.9050	10	60	55				
Croakers, Live	0301.90.9095	10	40	40				
Alaska Pollack, Frozen	0303.79.1000	10	30	30				
Saury, Frozen	0303.79.8000	10	40	40				
Skate, Frozen	0303.79.9093	10	40	35				
Croakers, Frozen	0303.79.9095	10	70	70				
Shrimp, Not Pld, Frozen	0306.13.9000	20	35	30				
Shrimp, In Brine	0306.23.3000	20	55	55c/				
Squid, Frozen	0307.49.1020	10	40	35				
Poulp Squid, Frozen	0307.59.1020	20	35	30d/				

Table 10: Adjusted Tariff Schedule For Fishery Products

a/ 30% or 1,908 Korean won per Kg., whichever is higher is applied.
b/ 55% or 4,023 Korean won per Kg., whichever is higher is applied.
c/ 55% or 363 Korean won per Kg., whichever is higher is applied.
d/ 30% or 533 Korean won per Kg., whichever is higher is applied.

Note: These adjustment tariffs have precedence over the applied tariffs described before. Source: HS General Guide Book 2003

(Teal 2000 – 100)							
Year	All Item	Food	Meat	Fishes	Vegetable & Seaweed		
1997	90.2	88.7	85.4	86.5	77.6		
1998	97.0	96.4	87.3	93.8	86.9		
1999	97.8	99.1	92.3	99.4	93.6		
2000	100.0	100.0	100.0	100.0	100.0		
2001	104.1	103.5	106.8	105.5	101.7		
2002	106.9	107.7	123.1	109.8	108.4		

Table 11: Korean Consumer Price Indices Of Food And Beverages (Year 2000 = 100)

Source: Monthly Statistics of Korea, July 2003, Korea National Statistical Office

#### Fish/Urchin Roe/Caviar Lvr PSD Unit: Metric Ton

PSD Table							
Country:					Korea,	Republic of	
Commodity:	Fish,Urchin	Roe/Caviar	,Livers				
	200	02	20	03	20	2004	
Market Year Begin	Old	New	Old	New	Old	New	
	01/2	002	01/2	2003	01/2	004	
Beginning Stocks	0	0	0	0	0	0	
Total Production	2200	2432	2000	2500		2500	
Intra-EC Imports	0	0	0	0	0	0	
Other Imports	13500	13896	14000	14000	0	14000	
TOTAL Imports	13500	13896	14000	14000	0	14000	
TOTAL SUPPLY	15700	16328	16000	16500	0	16500	
Intra-EC Exports	0	0	0	0	0	0	
Other Exports	4500	3992	4500	4500	0	4500	
TOTAL Exports	4500	3992	4500	4500	0	4500	
Domestic Consumption	11200	12336	11500	12000	0	12000	
Other Use/Loss	0	0	0	0	0	0	
TOTAL Utilization	11200	12336	11500	12000	0	12000	
Ending Stocks	0	0	0	0	0	0	
TOTAL DISTRIBUTION	15700	16328	16000	16500	0	16500	

Note: PSD Tables stand for Products Supply and Demand Tables

Korea: Import Trade Matrix - Fish and Urchin Roe/Caviar/Lvr	
Units: Metric Ton	

Import Trade Matrix						
Country:	Korea, Republic of Units: TONS					
Commodity:	Fish,Urchin F	Fish,Urchin Roe/Caviar,Livers JAN/DEC				
Time period:	JAN/DEC					
Imports for	2001		2002			
U.S.	2369	U.S.	3809			
Others		Others				
Russia	6778	Russia	7331			
China	1064	China	913			
New Zealand	735	Japan	505			
Japan	523	New Zealand	258			
Total for Others	9100		9007			
Others not listed	1411		1080			
Grand Total	12880		13896			

#### Export Trade Matrix

Country: Commodity:	Korea, Reput Units: TONS Fish Urchin F	blic of Roe/Caviar,Livers	
Time period:	JAN/DEC		
Exports for	2001	J	2002
U.S.	143	U.S.	96
Others	L	Others	
Japan	4245	Japan	3692
EU	162	China	154
Total for Others	4407		3846
Others not listed	177		50
Grand Total	4727		3992

# Table 12: Korean Production of Fish Roes, Urchin(Metric Tons)

Items	1998	1999	2000	2001	2002
	5,058	7538	2,955	2,197	
Roes of Alaska Pollack (from distant seas)1/					2,361
Herring Roes	-	_	_	-	_
Sea Urchin	58	0	103	92	71
Total	5,116	7,538	3,058	2,289	2,432

Source: Statistical Yearbook of Ministry of Maritime Affairs and Fisheries 2002

(Metric Toris)					
		2001		2002	
Species	H.S. Code	World	U.S.	World	U.S.
Livers, Fresh	0302.70.1000	6	5	10	9
Roes, fresh	0302.70.2000	0	0	0	0
Livers, Fz	0303.80.1000	165	78	7	2
Roes/AK Pollack,FZ	0303.80.2010	7,869	702	9,062	2,448
Other Roes, Frozen	0303.80.2090	4,128	1,582	3,938	1,32
Livers, dried, salted	0305.20.1000	16	0	0	0
Roes, dried	0305.20.2000	10	0	0	0
Roes, smoked	0305.20.3000	0	0	0	0
Roes/Alaska Pollack	0305.20.4010	13	0	0	0
Roes/Yellow Corvina	0305.20.4020	0	0	0	0
Roes/Herrings, Dried	0305.20.4030	27	0	52	0
Other roes, Salted	0305.20.4090	11	0	0	0
Sea Urchin, Fresh	0307.91.9010	0	0	2	1
caviar	1604.30.1000	1	0	1	0
Caviar, Substitute	1604.30.2000	634	2	824	7
Total		12,880	2,369	13,896	3,809

Table 13: Korean Imports of Fish and Urchin Roe/Caviar/Liver (Metric Tons)

Source: Statistical Yearbook of Foreign Trade 2001, Korea Customs Service

	(Metric 1	0113)			
		200	)1	2002	
Species	H.S. Code	World	U.S.	World	U.S.
Livers, Fresh	0302.70.1000	3	0	2	0
Roes, Fresh	0302.70.2000	0	0	0	0
Livers, Frozen	0303.80.1000	0	0	0	0
Roes/AK Pollack,FZ	0303.80.2010	820	29	242	0
Other Roes, FZ	0303.80.2090	748	0	301	0
Livers, dried, salted	0305.20.1000	0	0	0	0
Roes, dried	0305.20.2000	0	0	0	0
Roes, smoked	0305.20.3000	0	0	0	0
Roes/ ollack, salted	0305.20.4010	197	66	109	48
Roes/Yellow Corniva, salted	0305.20.4020	0	0	0	0
Roes/Herrings, Dried	0305.20.4030	0	0	0	0
Other roes, Salted	0305.20.4090	64	2	53	3
Sea Urchin, Fresh	0307.91.9010	170	0	101	0
caviar	1604.30.1000	0	0	0	0
Caviar, Substitute	1604.30.2000	2,725	46	3,184	45
Total		4,727	143	3,992	96

Table 14: Korean Exports of Fish and Urchin Roe/Caviar/Liver
(Metric Tons)

Source: Statistical Yearbook of Foreign Trade 2001, Korea Customs Service