

PART III
Chapter 21

Korea

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Main characteristics of the Korean fishing sector

Fishery production in 2004 was 2 519 000 metric tonnes (mt) valued at KRW 4 730 billion (USD 4 113 million), an increase of 32 000 mt (1.3%) from 2 487 000 mt in 2003, due to increased production in mariculture.

To address chronic overexploitation of marine fishery resources by over-capacity in coastal and offshore waters, a fleet reduction program known as the “General Buy-Back Program”, has been active since 1994.

Moreover, another buy-back scheme, the “Buy-back Program by International Agreements”, was introduced by the “Special Act for Supporting Fishermen Affected by International Fishery Agreements” which entered into force on 7 September 1999, and aimed to compensate fishermen for losses resulting from international fishery agreements, including agreements with Japan and China. In accordance with this Act, the Korean government scrapped 1 328 fishing vessels between 1999 and 2002, for which KRW 866.4 billion (USD 753.3 million) was spent by 2004.

In addition, the Total Allowable Catch (TAC) system – an alternative to the current fishing license system has been implemented for nine species in full scale since 2004 to aid the implementation of an optimal management system for sustainable fisheries.

The total export value of fishery products in 2004 was USD 1 279 million (406 435 mt), exporting mainly to Japan, China, and the USA. The total import value of fishery products in 2004 was USD 1 961 million (1 238 603 mt), importing mainly from China, Russia, and the USA.

Korea – Summary statistics

Figure III.21.1. **Harvesting and aquaculture production**

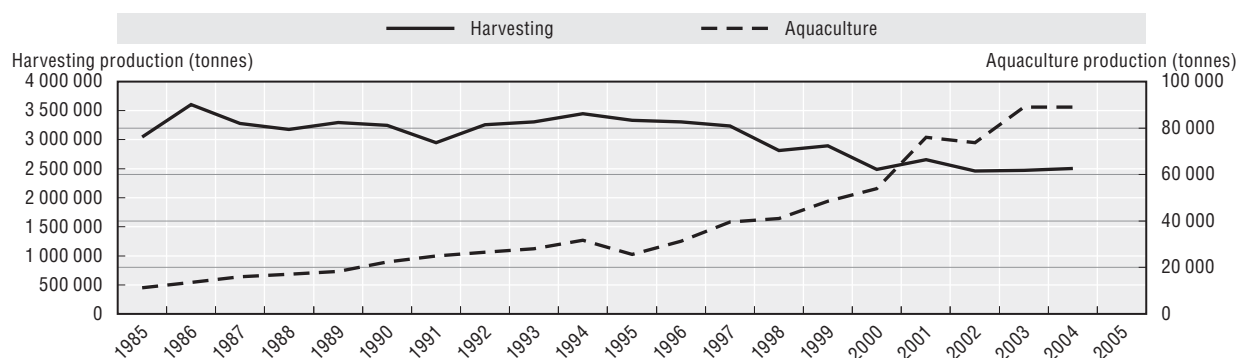


Figure III.21.2. **Key species landed by value in 2005**

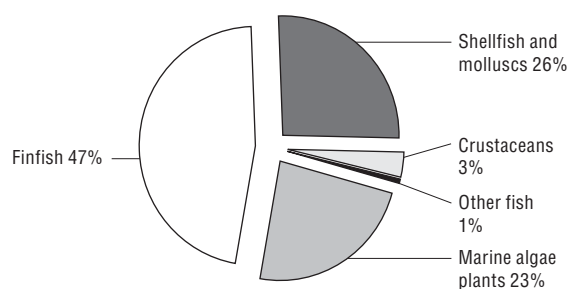


Figure III.21.3. **Age structure of fishers**

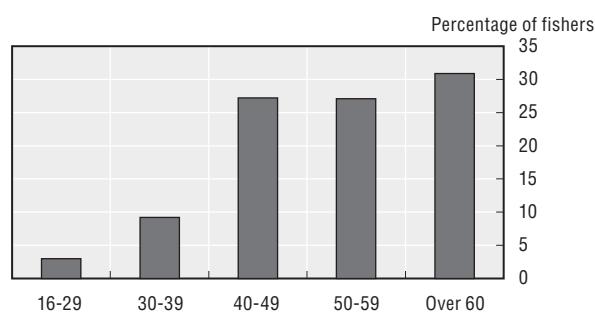


Figure III.21.4. **Evolution of government financial transfers**

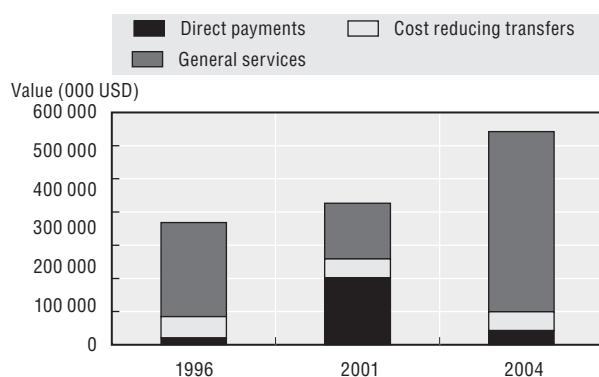


Figure III.21.5. **Trade evolution**

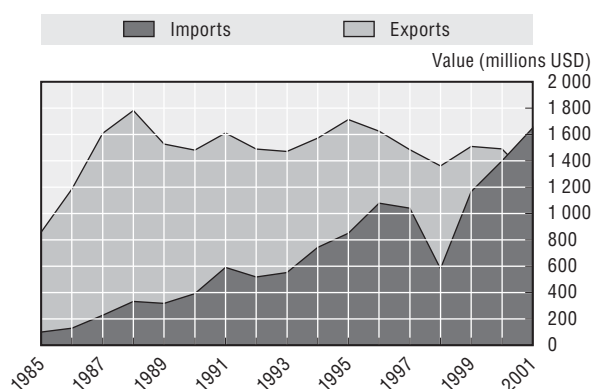


Figure III.21.6. **Production profile**

	1996	2004
Number of fishers	191 365	84 634
Number of fish farmers	63 106	40 609
Total number of vessels	75 244	91 608
Total tonnage of the fleet	971 808	724 980

Source: Figures III.21.1 and III.21.5: FAO; Figures III.21.2, III.21.3, III.21.4 and III.21.6: OECD.

ADDITIONAL DETAILS

Legal and institutional framework

Korean fisheries management is based on the Fishery Act together with many related acts and regulations. According to the Act, the Ministry of Maritime Affairs and Fisheries (MOMAF) is largely responsible for fishing vessels in offshore and distant waters and foreign-flagged vessels fishing within the Korean EEZ, while local governments at province, city and district levels are mainly responsible for fishing licenses of vessels in the coastal areas. Fisheries resources have been protected mainly through governing the mesh size of fishing nets, fishing grounds, fishing seasons, etc. The TAC system was introduced in 1999 and has been implemented for 9 species since 2004.

The Korean government also started a fishermen-oriented co-management system for more effective implementation of responsible fisheries. Under this system, organisations of fishermen such as a fishery corporation or a group of fishermen in fishing villages set up self-regulations according to relevant fishery-related laws and regulations with the endorsement of the local government; thereby a fishery is controlled. The fishermen-oriented co-management system is designed to enhance the sense of responsibility of the fishermen and to prevent illegal fishing.

Capture fisheries

Performance

Catches from coastal, offshore, distant water, and inland fisheries were 1 601 386 mt (valued at KRW 3 514 billion (USD 3 055 million)) in 2004, a small decrease from 1 660 797 mt (KRW 3 605 billion) in 2003. The main factor for the decrease was a fall in catches from distant waters.

In coastal and offshore fisheries, production in 2004 totalled 1 076 687 mt, nearly unchanged from 2003 (1 096 526 mt). The major species in coastal and offshore fisheries were anchovy, squid, hairtail, and horse mackerel. In particular, anchovy, which accounts for the largest proportion of the total catches, was 196 640 mt in 2004, a 21% decrease from 250 106 mt in 2003. The production of squid was 212 760 mt in 2004, a decrease of 8.7% from 233 254 mt in 2003. The production of mackerel was 184 274 mt in 2004, a 50.9% increase from 122 044 mt in 2003.

In distant water fisheries, production in 2004 accounted for 499 400 mt, a decrease of 8.2% from 544 591 mt in 2003. The decrease in production resulted from a dropoff in catches of squid, skipjack, and Alaska pollock.

The population employed in fisheries has been dropping steadily. The number of fisheries households dropped 0.3% from 72 760 in 2003, to 72 513 in 2004. The number of fisheries households in 2004 can be broken down to 52% with fishing vessels, 19.4% without fishing vessels, and 28.6% in aquaculture. The number of households in 2004 in vessel fishing increased by 1.0% (406 households), and in aquaculture increased by 5.1% (1 118 households) from the previous year. The number of fishing vessels decreased in 2004 by 1 649 from 93 257 vessels (744 335 G/T) in 2003 to 91 608 vessels (724 890 G/T). The decrease in number and gross tonnage was a result of the government's fleet reduction program.

Status of fish stocks

Fishery resources in coastal and offshore waters are reported to be somewhat overexploited, particularly in commercially important species such as redlip croaker and Alaska pollock. Catches have been stagnant during recent years with no significant changes despite government policies such as the buy-back program to reduce fishing capacity.

Pelagic species such as anchovies, squid, mackerels, etc., have been found to be relatively abundant, while demersal species such as Alaska pollock have declined due to increased water temperatures.

Management of commercial fisheries

Major management instruments in coastal and offshore areas include: maximum numbers to be licensed, minimum mesh size, fishing grounds, fishing seasons and size of fish, etc. As of 2004, the number of fishing licenses was 66 063 for 17 fishing types including coastal gillnet.

MOMAF (Ministry of Maritime Affairs and Fisheries) implemented a full-scale TAC system for 9 species in 2004, after an experimental period from 1999-2000, which covered four species (mackerel, sardines, jack mackerel, red snow crabs). To operate the TAC system, observers are employed to check the amount of catches at landing places and to collect biological data of the catches. The Korean government will gradually expand the number of species to be covered by the TAC system in order to manage fisheries on the basis of high-quality scientific data.

To effectively implement responsible fisheries, MOMAF introduced fisher-oriented self-management systems in 2001, under which 174 fishing villages were registered as of 2004. Through the system, fishery management focuses on not only preventing illegal fishing and the overexploitation of fishery resources, but also on stabilising incomes for fishermen.

Access arrangements

In June 2001, both the Korea-China Fishery Agreement and the Korea-Japan Fishery Agreement entered into force. As a result, Korea has bilateral fishery management regimes under the UNCLOS and the EEZ systems with neighbouring countries. According to these bilateral agreements, only Chinese and Japanese vessels can gain access to the Korean EEZ on a reciprocal basis.

Management of recreational fisheries

Recreational fishing is popular in Korea. Typically, recreational fishing boats of less than 10 GTs transfer anglers during the commercial fishing off-season. The companies that provide these services for fishing onboard must file with local governments according to relevant acts and regulations. The number of registered fishing boats recorded was 5 191 and the users of these registered boats reached 1 880 000 as of 2004.

Monitoring and enforcement

Monitoring and enforcement are conducted by MOMAF, the Maritime Police and local governments, which together have 101 fishing guidance (and surveillance) ships, 268 patrol vessels, 13 helicopters, 1 aircraft, and 6 969 staff members as of 2004. It was reported that 3 673 national vessels and 443 foreign-flagged vessels violated Korean laws and regulations within the Korean EEZs in 2004.

In order to abide by the conservation and management measures adopted by Regional Fisheries Organisations, the government has been implementing an “Ordinance on Complying with the Conservation and Management Measures of International Fisheries Organisations”. In spite of the government’s efforts to eradicate illegal fishing activities, this issue still remains one of the top priorities in fisheries policy. Thus, the Korean government established a relevant national action plan in February 2005, based on the “International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing”, which was adopted at the 24th FAO/COFI in March 2001.

Multilateral agreements and arrangements

The first APEC Ocean-related Ministerial Meeting was held in Seoul in April 2002. At the meeting, the APEC member economies adopted the “Seoul Ocean Declaration”, which signifies a major milestone for co-operation in the region to work towards the sustainable management of marine and coastal resources. Following this conference, the second APEC Ocean-related Ministerial Meeting was held in Bali, Indonesia in September 2005, where member economies including Korea, adopted the “Bali Plan of Action” aimed at healthy oceans and coasts for the sustainable growth and prosperity of the Asia-Pacific community.

Korea deposited the letter of acceptance concerning the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, in April 2003. Also, Korea has been actively participating in global efforts to promote sustainable use of fishery resources as a member of 16 international fisheries organisations such as ICCAT, CCSBT, IWC, IATTC and WCPFC.

In addition, the Korean government established its basic position for ratification of the United Nations Fish Stocks Agreement (UNFSA) in July 2005, and is currently undertaking due domestic procedures.

Aquaculture

The Culture-based Fishery Promotion Act was established on 14 January 2002. In accordance with this Act, the government set up a 5 year-basic plan to promote culture-based fisheries. In particular, this Act introduces a fish-doctor system to provide expert consultations on fish diseases. Currently, the Korean government is implementing the Aquatic Animal Disease Management Act, in order to establish an efficient response system against cultivated fish diseases and also secure safety of imported fishery products.

The area devoted to mariculture in 2004 was 123 169 hectares, an increase of 1 316 ha (1.0%) from 121 853 ha in 2003. Production in 2004 was 917 715 mt (KRW 1 217 105 million [USD 1 058 352 thousand]), about an 11% increase from 826 245 mt (KRW 1 165 675 million [USD 1 013 630 thousand]) in 2003. The number of households in 2004 was 20 696, a 5.1% decrease from 21 814 in 2003. The major species in mariculture are bastard, jaco pever, oyster, short neck clam, sea mussel, laver, and sea mustard.

Fisheries and the environment

To inspect the environmental impacts on fisheries and estimate the environmental capacity for sustainable fisheries, assessments for factors such as water quality, sediments, distribution of benthos and the status of the use of fishing grounds have been conducted regularly since 1999.

The Korean government has also been operating an effective system to provide early warning forecasts for red tides to mitigate the damages they cause to coastal and offshore fisheries and aquaculture.

In addition, an artificial reef project established 24 types of artificial reefs on 181 000 hectares by 2004, in order to restore fishery resources in an environment-friendly manner.

Another project, the quality seedling/releasing project, has been allotted KRW 21.4 billion (USD 18.6 million) by 2004. The work involves the release of high-value fry suitable for the local marine environment. The Ministry will also invest about KRW 158.9 billion (about USD 156 million) by 2010 to create marine ranches fitting individual sea environments.

Korea is currently managing seven designated special areas amounting to 34 385 hectares to produce shellfish for export. Apart from these areas, the Korean government designated ten fishery resource conservation zones, equivalent to 3 868 km², and has made a significant effort towards the development of environment-friendly fisheries.

Government financial transfers

Total government financial transfers in 2004 were KRW 647 billion (USD 562 million), a decrease of KRW 31.8 billion from KRW 678.8 billion in 2003. Most of the transfers in 2004 were used for fisheries infrastructure such as the improvement of fishing ports (KRW 336 billion [USD 292 million], 51.9%) and resource enhancement (KRW 71.2 billion [USD 61.9 million], 11%). Priority for the transfers has been accorded to the improvement of fish farms (KRW 60.8 billion [USD 52.8 million], 9.4%) as well as the modernisation of fish markets (KRW 44 billion [USD 38.3 million], 6.8%).

Post-harvesting policies and practices

To ensure that seafood is safe and meets international quality standards, the HACCP (Hazard Analysis Critical Control Point) system has been introduced in accordance with the Fishery Products Quality Control Act, which was established in January 2001 through integrating laws controlling fish product quality. Currently, as a trial run, the HACCP system is operating for flatfish and eel species from 20 fish farms.

Meanwhile, the government introduced a traceability system in 2005, and is currently implementing a pilot project for 13 stocks including eel and trout.

Korea is also conducting research on feasibility of the domestic introduction of an eco-labelling system in line with the "Guidelines for the Eco-labelling of Fish and Fishery Products from Marine Capture Fisheries", adopted by the FAO in March 2005.

The total number of fish processing facilities in 2004 was 777. Among them there were 701 freezing and refrigerating facilities, 46 processing and handling facilities on ships and 30 others. The number and capacity of freezing and refrigerating facilities are increasing to meet rises in market demand.

Markets and trade

Markets

The scale of the Korean fishery market in 2004 was about 55.6 million mt. In terms of supply, total production reached 25.1 million mt (45.2%) while imports recorded 24.7 million mt (44.5%), showing a similarly equivalent ratio.

With regard to demand, domestic consumption recorded 39.2 million mt (70.4%) while exports showed 11.1 million mt (20%). The domestic consumption of fishery products rose to 48.7 kg in 2004 from 33 kg in 1998, indicating that annual consumption of fishery products per capita is steadily on the increase.

Trade

Exports of fishery products were USD 1 279 million (406 435 mt) in 2004, an increase of 13.3% from 2003 due to increasing exports to Japan. Imports of fishery products in 2004 rose 15.3% in value to USD 2 261 million (1 280 915 mt) from 2003, due to increasing imports from China and Japan. The leading export items were tuna, oysters, squid and bastard, and import items were yellow croaker, roe, shrimp, hair tail and Alaska pollock. The main countries exported to were Japan (65.3%), the US (6.3%), and China (9.7%), and the leading countries imported from were China (40.2%), Russia (12.3%), and Japan (8.0%).

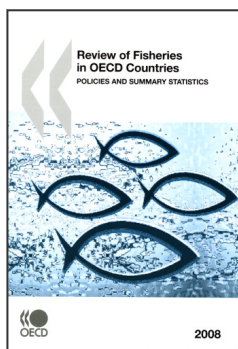
Korea concluded an FTA with Chile in 2002, and with Singapore and EFTA in 2005. Fishery trades between contracting parties are expected to expand, as the Korean government is currently in negotiation for free trade agreements with the USA, Canada, and Mexico.

Outlook

The primary objective of fishery policy is to improve both fisher and consumer welfare by protecting and recovering fishery resources. For fishermen, the government focuses on the following: a) facilitation of the fishing fleet buy-back program; b) promotion of efforts to foster culture based fisheries and fishery resources; c) expansion of applicable species for the TAC system; d) amendment of fishery-related institutional regimes to harmonise with the fishermen-oriented self-management fishery system; e) prevention of marine pollution; and f) strengthening law enforcement activities to eliminate illegal fishing activities.

To protect consumers, the Korean government will emphasise the quality of fishery products, reinforce rules and regulations relating to seafood sanitation such as the expansion of the HACCP system, and devise a better system to avoid any unnecessary competition in fish markets.

The government will invigorate tourism projects linking fishing villages, fishing ports, and fishery resources to boost the incomes for fishermen. Korea will do its utmost to adapt itself to the ever-changing fishing environment and share in international efforts for the optimum management and sustainable use of marine resources.



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