

KNFC's Marketing and Supply Business

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Preface

The management innovation movement continued in 2016 to make the KNFC(Korean National Federation of Fisheries Cooperatives) a distribution, sales and export oriented organization. To improve the structure of fishery product distribution, fishery product distribution infrastructure was established including the modernization of Noryangjin Fish Market, Chuncheon Comprehensive Distribution Center and Gangwon Logistics Center.

A joint market business was conducted to provide quality and fresh fishery products to consumers in a stable manner. The business was conducted focusing on promoting information exchanges regarding joint markets and the systemic management of asset soundness thereby conducting business stably and strengthening information collection regarding production location. As a result, the business outcome reached 231.2 billion won.

In the utilization and processing business, high quality and hygienic processed fishery products were produced in HACCP facilities and the processing process was improved to achieve a project outcome of 87.8 billion won. In particular, Gangwon Logistics Center was established in Chuncheon to strengthen the military meal service in Gangwon.

With respect to the military meal service, support for the military was provided including improvements to the method of cooking fishery products through education, trial events and the installation of freezers in the military camp, resulting in the outcome of 103.9 billion won for the military meal service and 25.3 billion won for the group meal service.

For the duty-free oil supply business, 466.6 billion won was earned by providing 5,640,000 D/M of duty free oil for fishing purposes. 3.2 billion won of the oil fund was provided to expand a refueling facility for tankers and improve the refueling facility. In addition, 90.3 billion won and 26.1 billion won were earned respectively for the equipment business and fishing gear business.

For the economic business, 1.223 trillion won was earned realizing a net income of 9.5 billion won.

Joint Market Business

1) Operation of Joint Markets



The joint market business is broadly classified into sales on consignments and the buying and selling business. Under sales on consignments, fishery products produced by fishermen are gathered in the joint markets to be distributed in large volume through a transaction method that guarantees transparency and fairness, playing the role of supplying fresh and quality fishery products to consumers in a stable manner.

By doing so, the business plays the role of collecting and distributing fishery products smoothly, improving the prices received by producers and stabilizing fishery products prices, thereby promoting distribution. The buying and selling business is to purchase hard-to-source items through sales on consignments or where an intermediate wholesaler is required to promote the stability of supply and demand of fishery products.

Currently, 7 joint markets are operating: 6 are located inland (Garak, Guri, Gangseo, Jeonju, Daegu and Gwangju) and 1 is located near the coast (Incheon). An all-out effort yielded a business outcome of 231.2 billion won. That effort involved the stable conduct of business and strengthened information collection activities through information exchange on joint markets. It also included the systemic management of asset soundness despite a shrinking distribution environment and ensuing slowdown in consumption caused by a domestic economic recession, a sharp decrease in coastal fishery stocks and reports of a cholera outbreak.

Outcome of Joint Market Business

(Unit : ton, 1 million won)

Classification		2015		2016		Change	
		Quantity	Amount	Quantity	Amount	Quantity	Amount
Total		70,095	247,440	61,250	231,234	△8,845	△16,206
Inland	Sub-total	66,159	233,020	57,906	219,234	△8,253	△13,786
	Garak	26,188	81,627	22,710	76,499	△3,478	△5,128
	Guri	17,380	56,377	15,559	55,430	△1,821	△947
	Gangseo	15,383	50,731	13,766	47,647	△1,617	△3,084
	Jeonju	536	3,089	433	2,359	△103	△730
	Daegu	2,465	12,416	1,483	6,850	△982	△5,566
	Gwangju	4,207	28,780	3,955	30,449	△252	1,669
Costal	Incheon	3,936	14,420	3,344	12,000	△592	△2,420

2) Nurturing Intermediate Wholesalers for Joint Market



Intermediate wholesalers are responsible for dispersing fishery products, which are subject to sales on consignment in joint markets. The KNFC provided 645 million won to 400 intermediate wholesalers in 7 joint markets in 2016 to encourage and support smooth dispersion activities. The foundation for nurturing sound intermediate wholesalers was established by securing the effectiveness of the account receivables management system in the joint market including a reduction in account receivables (non-performing loans) by 63.4%(548 million won) as part of continuous management and supervision of asset soundness.

Price Support Business

The price support business is conducted on behalf of the government (the Ministry of Oceans and Fisheries) and the business is conducted using the fisheries development fund as a major financial resource. The business is for adjusting supply and demand and stabilizing prices by purchasing and storing those fishery products that can be stored for a long time during the production season and releasing them when the prices of fishery products increase rapidly over certain periods such as during the lunar new year or Korean Thanksgiving day.

Outcome of Price Support Business

(Unit : ton, 1 million won)

Classification	Business outcome		items subject to price support
	Quantity	Amount	
2015	24,142	78,554	Squid, Mackerel, Pollack, Hairtail, Corbina, Spanish mackerel, Bay salt, Dried anchovy(8 items)
2016	18,835	64,907	Squid, Mackerel, Pollack, Hairtail, Corbina, Spanish mackerel, Bay salt, Dried anchovy(8 items)
Change	△5,307	△13,647	

Utilization and Processing Business



The utilization and processing business plays an important role in the distribution of fishery products by increasing the income of fishermen through the ice-manufacturing, refrigeration and freezing businesses that are essential for the distribution of fresh products. The processing business is to improve the added value of products and promote stable prices through the adjustment of supply and demand.

Cold storage and ice manufacturing facilities, as well as logistics centers and processing plants are in operation in major cities across the country including Cheonan, Busan (Gamcheon Port) and Incheon. In particular, Incheon Fishery Products Processing and Logistics Center, the largest domestic fishery products processing plant (completed in Apr. 2010) was established on 11,960m² (3,618 pyeong) as a modern processing facility equipped with information systems.

Incheon Fishery Products Processing and Logistics Center, with the capacity to process 10,000 tons of high quality fishery products a year, was designated and obtained HACCP by the Ministry of Food and Drug Safety (Dec. 21, 2010) following Gamcheon Port (designated as HACCP as of July 21, 2008). This shows that the capability of sophisticated food safety management exists both at home and abroad, and serves as momentum to strengthen the image of leadership in terms of safe fishery products distribution.

In addition, Northern Gyeonggi Logistics Center (completed in Mar. 2015) was established in Gyeonggi province to improve old warehouses for the stable supply of fishery products for both military and school meal services. Gangwon Logistics Center (completed in Dec. 2016) was established in Gangwon province. As such, efforts are being made to expand the distribution of fishery products and develop utilization and storage businesses.

Outcome of Utilization and Processing Business

(Unit : 1 million won)

Classification	2015		2016		Change	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Total	720,763	90,708	695,348	87,757	△25,415	△2,951
Ice manufacturing (M/T)	6,405	290	7,303	353	898	63
Freezer (M/T)	401	246	388	234	△13	△12
Refrigeration (C/S)	702,718	8,392	679,921	8,422	△22,797	30
Processing (M/T)	11,239	81,780	7,736	78,748	△3,503	△3,032

Group Meal Service Business



The group meal service started with the school meal service in 1996 for the purpose of promoting the consumption of fishery products and improving public health by providing quality fishery products to places where group meal services are needed such as schools. In 2016, fishery products were provided to 900 elementary schools, middle schools, high schools, public organizations, hospitals and companies located in metropolitan areas and the southeastern part of Korea.

1) School meal service

The purpose of the school meal service business is to contribute to the improvement of public health by providing fresh fishery products to students in the development stage and laying the production foundation for fishermen by generating ongoing demand for fishery products. In 2016, fishery products were provided to about 900 schools located mainly in metropolitan areas, in Dangjin, Chungnam and in the Gyeongnam area.

In 2011, quality and safety were improved by producing products for school meal services at the Incheon Processing and Logistics Center, which is equipped with modern equipment. The business base was expanded to the Busan and Gyeongnam areas from the school meal service business in Gamcheon Port Logistics Center, Busan in 2013. In addition, with the expansion of school meal support project led by local governments, the KNFC started to provide quality school meal service based on its credibility and quality fishery products.

The school meal service has been broadened from Goyang, Gyeonggi province to include Seongbuk, Dobong, Eunpyeong and Seongnam in 2013, Gwangmyeong, Hwaseong, Bucheon, Anyang, Euiwang and Gunpo in 2014, Suwon and Shiheung in 2015 and Dangjin in 2016, laying the foundation for a stable business.

Under the circumstances, where there has been an expansion of electronic competitive bidding such as government e-procurement (G2B) and the school meal service e-procurement system (e-At), the abolishment of negotiated contracts under the guideline of the education administration and the increasing number of designated HACCP large companies and SMEs, the number of schools where the KNFC provides meal services increased by 62 in 2016 from the previous year.

2) Company Meal Service

The company meal service is to provide food for group meals to public organizations, hospitals and companies. By establishing a partnership with FOODMERCE, fishery products for meal services targeting 7000 kindergartens and childcare centers are being provided. The gamma nuclide analyzer, a device that offers a precise radiation measurement, was introduced to improve food safety and produce high quality products for the comprehensive food resource business.

Outcome of Group Meal Service

(Unit : 1 million won)

Classification	2015	2016	Change	Remarks
Total	25,942	25,253	△689	
School Meal	22,496	21,661	△835	
Company Meal	3,446	3,592	146	Public organization, hospital, company, etc.

Military Meal Service Business

The purpose of the military meal service is to improve the diet of military personnel and support prices for fishermen while promoting the economic business of member cooperatives via the smooth supply of quality fishery products. As of late 2016, 3 logistics centers, 3 joint markets and 7 member cooperatives provide military meal services.

Efforts are being made to ensure the supply of fishery products to military by purchasing offshore fishery products during the main catching season and purchasing deep sea fishery products frequently through competitive bidding with consideration to the inflow of those products and distribution prices in the market.

Support for military camps continued in the form of the installation of freezers while new items were developed such as thinly sliced squid, boneless hairtail and semi-processed flatfish to diversify the fishery products provided to military personnel. In addition, workshops for nutritionists working for military camps and cooking education and food tasting are being conducted to bolster the preference toward fishery products for military meal services and marketing capabilities targeting the military.

Outcome of Military Meal Service

(Unit : ton, 1 million won)

Classification	2015		2016		Change	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Total	9,441	99,214	8,882	103,884	△559	4,670
Frozen	7,879	77,916	7,434	82,430	△445	4,514
Dried	859	16,562	796	15,381	△63	△1,181
Fermented	564	3,208	533	4,647	△31	1,439
Seaweeds	139	1,528	119	1,426	△20	△102

Direct Sales Business

The direct sales business is composed of bulk sales (through large distributors), direct sales to consumers (through the internet), purchase support (for the purpose of increasing fishermen's income and promoting consumption), special sales to companies, KNFC Shopping, homeshopping businesses and B2B (Online wholesale market) to contribute to improving the structure of fishery products distribution as well as in-Store business.

1) Purchase Support

The purchase support business operates to improve the prices received by fishermen and improve consumer prices by adjusting the supply and demand of fishery products. The outcome of this business was 126 billion won in 2016 as a result of taking steps to support prices by purchasing mackerel, pollack and squid, all of which lead prices and greatly contribute to the dietary life of people during the catching season. This ultimately leads to increasing the incomes of fishermen and protecting consumers.

2) Special Sales

Special sales are to provide original fishery products (hairtail, squid and anchovy) and processed products (corbina) to large distributors (Shinsegae Department Store, Lotte Mart, Lotte Super and GS Retail). Various kinds of fishery products are developed targeting general customers and wholesalers to expand the sales channels of various fishery products. The business outcome was 33 billion won in 2016.

3) KNFC Shopping



KNFC Shopping is a fishery product mall (<http://www.shshopping.co.kr>) run directly by the KNFC to make sure that consumers can purchase various kinds of fishery products online in a rapid and safe manner. The shopping mall focuses mainly on selling domestic fishery products and contributes to the consumption of fishery products disseminating information about the excellence of our fishery products through various kinds of events. The business outcome was 6 billion won in 2016.

4) Homeshopping

In response to accelerating market openings (Korea-China FTA, TPP, etc.) the KNFC made a capital investment of 4 billion won (5% share) in public homeshopping(IM Shopping) together with Small & Medium Business Distribution Center and Nonghyup Economic Holdings in Feb. 2015 for the purpose of improving the efficiency of fishery products distribution. The purpose of the investment is to expand the online distribution and sales channels linked with securing the self-sustaining capability of the domestic fisheries industry and establishing sound distribution infrastructure for fishery products. The Public homeshopping(IM Shopping) was launched in July 2015 to facilitate sales. In terms of handling accounts, the business outcome for 2016 was 28 billion won.

5) B2B(Online Wholesale Market)



The B2B(<http://www.shb2b.co.kr>) business has been operating since Jan. 2017 to respond actively to the online business era and improve the structure of fishery products distribution. Capital liquidity is provided for payments by providing various kinds of transaction processes (B2B e-payments, a free trading market, bidding and trading based on quotations) to entities while linking guarantee organizations and commercial banks. The business is a new paradigm for the wholesale distribution of fishery products and is expected to contribute to improving

the distribution structure for fishery products and strengthening the competitiveness of the fishery industry. The transaction volume was 220.4 billion won in 2016.

6) In-store

The in-store business (<http://instore.shb2b.co.kr>) has been operating since Nov. 2012 to provide the opportunity for the joint growth of economic businesses through active information exchanges among member cooperatives and easy access to various KNFC brand products through distribution networks of member cooperatives across the nation.

Member cooperatives, which are transaction entities, can improve convenience in transactions by making it possible to check the price and composition of products, as well as the status of orders and delivery using the in-store system. The promotion effect can be improved along with sales figures by selling local special products to the direct sales markets of member cooperatives and KNFC Mart. The transaction volume of in-store business was 600 million won in 2016.

Trade Business



1) Export

As of 2016, 1,535 tons (or 6,124,000 dollars) of Badachan products and original fisheries were exported to countries such as the US, Australia, Japan and China and efforts are being made to explore sales channels and promote consumption through promotional activities on our fishery products.

Shanghai Export Support Center, Qingdao Export Support Center, Weihei KNFC International Trade Corporation and Beijing Export Support Center were newly established in June 2014, July 2015, April 2016 and June 2016 respectively to utilize those bases as an opportunity to facilitate the entry of domestic fishery products into the Chinese market in response to the Korea-China FTA.

Accordingly, promotional events regarding Korean fishery products are being conducted in Chinese distributor locations (department stores, discount stores and medium size stores). In addition, efforts to promote the consumption of Korean fishery products are being made through various distribution channels including homeshopping and Internet shopping.

2) Import

2,384,000 dollars of raw materials, namely complete feeds (fish meal) were imported by KNFC Feed, which was established as a subsidiary of KNFC for the purpose of providing high quality feed for those in the aquaculture business.

Outcome of Trade Business

(Unit : ton, 1,000 dollars)

Classification	Item	2015		2016		Change	
		Quantity	Amount	Quantity	Amount	Quantity	Amount
Total		2,189	6,849	2,662	8,508	473	1,659
Export	Sub-total	1,889	6,357	1,535	6,124	△354	△233
	Processed	136	1,653	146	2,010	10	357
	Original	1,753	4,704	1,389	4,114	△364	△590
Import	Sub-total	300	492	1,127	2,384	827	1,892
	Fish meal	300	492	1,127	2,384	827	1,892

Purchase Business

1) Supply of duty-free oil for fishing



The amount of duty-free oil for fishing in 2016 was 5,641,000 drums, which is an increase of 375,000 drums on the previous year though the handling amount fell 69.1 billion won to 466.6 billion won due to the global trend of low oil prices. However, the fishing expense reduction amount contributed by duty-free oil supply was 705.8 billion won, which contributed significantly to the actual income increase of fishermen.

For the smooth supply of duty-free oil, support was provided by way of installation of tankers, refueling tanks and other facilities. Refurbishment, manipulation, repair and rental costs were supported to the tune of 3.2 billion won by member cooperatives while refurbishment, new establishments and relocations are underway for old refueling facilities as part of the oil supply facility refurbishment project (government budget 50%, self-collateralization 50%).

In 2008, 5 member cooperatives established 7 tanks. In 2009, 4 member cooperatives established 12 tanks. In 2010, 7 member cooperatives established 17. In 2012, 11 member cooperatives established 21 tanks. In 2013, 8 established 15 tanks while 4 member cooperatives established 2 barges and 4 tanks. In 2015, 5 member cooperatives established 12 tanks and 1 tanker and in 2016 9 member cooperatives established 19 tanks.

Outcome of Duty-free Oil Supply for Fishing

(Unit : 1,000 D/M, 1 million won)

Classification	2015		2016		Change	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Duty-free oil	5,266	5,357	5,641	4,666	375	△691

To reduce the share of fuel cost, which accounts for a large share of fishing expense, efforts are being made to maintain the duty-free oil system for fishing. As a part of that effort, the KNFC and fishermen joined forces to conduct activities that might persuade the government to extend the deadline for duty-free fishing oil by 3 years, from Dec. 31, 2015 to Dec. 31, 2018.

Since Jan. 12, 2006, Yeosu oil storage, with a capacity of 220,000 drums, has been in operation to promote the stabilization of oil prices for fishing and the stable supply of oil to fishermen in a timely manner by responding flexibly to oil price increases. With this, the KNFC contributes significantly to the stabilization of oil prices for fishing by reserving and supplying oil flexibly depending on oil price increases and decreases.

We have continued to expand the scope of fishermen subject to duty-free oil for fishing to expand tax incentives for fishermen. The following is a list of measures and facilities that have been added to support the industry. A heating facility in the locker of employees in fishery without oxygen feeder in 1990, a fishery product production basic facility in 1991, on-shore fishery facilities and on-shore feed production facilities in 1997, an inland fishery onshore aquaculture facility in 1998, a ship for inland fishery and an inland fishery aquaculture ship in 2000, a shrimp boiling and drying facility, a clam boiling facility, a water pump and washer for aquaculture facilities in 2002, a tangle weed, gulfweed boiling and drying facility in 2004, a facility for bank-type aquaculture, a fisheries transport vessel and a fishing boat in 2005, a ship for transporting employees to fishery without an oxygen feeder and a green laver drying facility in 2009, a cultivator, tractor and small

freight car in 2013, a sea cucumber boiling and drying facility in 2014 and a crane for fishing and clam screening equipment in 2014 and a fishing net washer in 2016.

Facility Status (as of 2016)

① Refueling facility

(Unit : number of places, boats)

Oil storage	Refueling station	Barge	Tanker	Oil truck
1	141	6	3	91

※ Refueling station includes oil supply station and temporary oil supply station(excluding directly run gas station)

② Oil transport vessel

(Unit : D/M)

Classification	Total	KNFC	Member cooperatives
Number of vessels	13	10	3
Capacity	37,900	29,900	8,000

2) Purchasing and supplying fishing gears



The purchasing fishing gear business is to purchase fishing gear (rope and paint, etc.), necessities (beverages, commodities, etc.) and eco-friendly fishing gear (biological decomposition gear, eco-friendly buoys) through member cooperatives and the outcome increased by 5.4 billion won in 2016 to record 26.1 billion won.

Among the fishing gear purchasing business, the business of eco-friendly fishing gear (biological decomposition gear, eco-friendly buoys) is a government support program to prevent marine pollution caused by the reckless release of nylon fishing nets and low-density buoys into the ocean, playing a significant role in preserving the marine ecosystem. By encouraging the participation of member cooperatives and making an effort to remove the difficulties in using eco-friendly fishing gear, the business contributed to the protection of fishery resources and vitalization of sales by member cooperatives.

Outcome of Supplying Fishing Gears

(Unit : 1 million won)

Classification	2015	2016	Change
Total	20,689	26,134	5,445
Fishing Gears	4,653	5,253	600
Eco-friendly fishing gears	13,550	18,625	5,075
Necessities	2,486	2,256	△230

3) Supply of equipment for fishing

The supply of equipment for fishing is to provide equipment, facilities and outboard engines for coastal fisheries. The outcome from the business was 90.3 billion won in 2016, which is a 16 billion increase on the previous year. The share for boilers and equipment was 29.6 billion won and outboard motors was 60.7 billion won. The business is to make an effort to identify and distribute good equipment for fishing to improve productivity, reduce the cost of fishing and contribute to safe operations.

Outcome of supplying Equipment for Fishing

(Unit : 1 million won)

Classification	2015	2016	Change
Total	74,381	90,340	15,959
Equipments	15,356	29,598	14,242
Outboard motor	59,025	60,742	1,717

Establishment of Distribution Infrastructure for Fishery Products

1) Modernization of Noryangjin Fish Market



The purpose of the business is to take Noryangjin Fish Market, which faced structural limitations in that it was high-cost and low efficiency due to the aging of facilities suitable for a premodern market structure, and transform it into a future-oriented fishery product wholesale market able to respond to a rapidly changing distribution environment where it could be competitive, establishing it as the hub of fishery logistics information.

It is a large project where experts from each field are involved from the planning stage of the project through to design, ordering, construction and maintenance. To this end, a construction management system (CM) was introduced to make sure that the best quality construction output can be achieved within the given budget and construction time by managing all processes in an integrate manner. In May 2008, a master plan to modernize Noryangjin Fish Market was established with a total project cost of 202.4 billion won, which is a 14.2 billion won increase on the preliminary feasibility study amount KDI made in 2006, factoring in inflation.

In addition, a modernization committee was established in Nov. 2008 to build consensus among stakeholders and implement the project smoothly and opinions from various people were collected through an MOU between the KNFC and merchants working in the market.

In July 2009, Hyundai Engineering & Construction consortium was selected as a qualified company to complete a detailed design after a bidding process was conducted for design and construction and in April 2010, the application for urban management plan decision(or change) was filed with Seoul City to determine the facility and change purpose of the land. However, Seoul City advised that constructing a building under the high-level road (planned) between Jangseungbaegi and Nodeulro that would pass through the market would not be permitted. Accordingly, the modernization project faced challenges. It was necessary to utilize the space under the high-level road to place the auction house (the main function of the wholesale market), and retail store, horizontally.

As the discussion with Seoul City dragged on, 2,047 Noryangjin Fish Market workers submitted a petition in April 2011 calling for the early implementation of the modernization project. This went to the Blue House, the Prime Minister's office and Ministry for Food, Agriculture, Forestry and Fisheries (currently the Ministry of Agriculture, Food and Rural Affairs) as well as Seoul City. Seoul City made its official decision on the modernization project in May, 2011. The major contents of the letter from Seoul City were the following: that a master plan linking the fish market to the development of the surrounding region, from the perspective of spatial structure and regional link, was needed, as well as a master plan on the overall market site from the perspective of a land use plan as a prerequisite to pursuing the modernization project.

The modernization project came to a standstill due to the delayed approval of the urban planning submission but as an agreement was made between the Ministry of Agriculture, Food and Rural Affairs and relevant organizations regarding ways to utilize the reserve base, it became possible to place the auction house and retail store horizontally. Accordingly, the modernization project gained momentum.

The contents of the original urban management plan in October 2011 were revised and submitted and the opinions of the urban management committee of the Seoul Municipal Council and the KNFC were collected in Feb. 2012. In March, 2012, the plan was approved by the urban planning committee and a decision on the urban management plan(change) was completed in April. As a result, the detailed design for the modernization project resumed thus accelerating the implementation of the project.

From Apr. to Oct., 2012, the licensing process including traffic impact analysis, improvement measures, construction plan review, environmental impact assessment, approval for detailed plan and construction permit was completed within 6 months from the decision on the urban management plan (change) and the project passed the qualification review on detailed design by the Public Procurement Service with a good score in Nov. 2012.

Finally, in Dec. 2012, the modernization of Noryangjin Fish Market, which is the largest fishery product wholesale market, started.

At the ground-breaking ceremony, about 500 people participated including the Minister of Food, Agriculture, Forestry and Fisheries, chairman of Agriculture, Food, Rural Affairs, Oceans and Fisheries Committee of the National Assembly, members of the fishery industry and press. In particular, the Minister of Food, Agriculture, Forestry and Fisheries stressed that Noryangjin Fish Market would be a famous tourist destination with live culture, would be competitive through e-auctions, providing happiness and pleasure.

The modernization project was implemented based on a step-by-step approach to make sure that workers at the market, and indeed the wholesale function of the market, suffer no inconvenience during the construction period.

The first phase and second phase of construction were completed. The first phase of construction was conducted from Dec. 2012 to Apr. 2014 to construct facilities including a waste water treatment facility and cold storage warehouse on the agricultural product reserve base. During the second phase of construction that started in Feb. 2014, the existing cold storage warehouse was removed by applying the safety first blasting method that applies absorbing blasting and crusher method together in cooperation with relevant organizations in Aug. 2014 and construction of the auction house and retail store were done. From 2015, a temporary use approval for building was obtained in Oct. after completion of internal finishing and exterior works. Construction is expected to be completed in 2017 where relocation of market merchants, removal of the existing market and ring road construction are completed.

After the modernization of Noryangjin Fish Market, the transaction volume increased and the function of forming prices and adjusting demand and supply were strengthened, leading to the expectation that the initiative would contribute to an income increase for fishermen and consumer price stabilization. In addition, the market will be run as the most sophisticated future market through the integrated management of all processes from shipping, auction and distribution with a market operation information system. Along with this, the cold storage warehouse has a barcode system and currently distributed market facilities will be relocated efficiently making a rapid logistics flow possible.

A low temperature auction house and cold chain system are applied to some facilities to prevent pollutants in the fish market fundamentally and infrastructure is established to make HACCP facilities possible. Accordingly, it is possible to secure the safety of the fishery products and eco-friendly fish market with new and renewable energy such as geothermal energy and a photovoltaic power generation system. As we plan to make the fish market an urban park type market where people can see, eat and enjoy, the fish market is expected to be born again as a world-class fishery product wholesale market frequently visited by domestic and overseas visitors.

2) Establishment of Distributed Logistics Center at Consumption Site



The establishment of the distributed logistics center at the consumption site was done as part of the government's master plan on the improvement of the fishery product distribution structure (July 2013). It was intended to reduce the distribution steps (from 6 steps to 4 steps) by strengthening the logistics distribution function and logistics hub function thereby creating a new distribution channel led by a producer group. Currently the center is under construction and the additional establishment of such centers in the southern part of the metropolitan area, in the Honam, Yeongnam and Chungcheong areas is planned.

The distributed logistics center in Incheon will be completed in 2019 with total project cost of 37.8 billion won (government budget 50%, self-collateralization 50%).

3) Chuncheon Fishery Products Distribution Center Construction

Chuncheon Fishery Products Distribution Center construction is complete with a total project cost of 11.6 billion won (government budget 50%, local government budget 10%, self-collateralization 40%) for the purpose of assuming the sales and distribution function in the Gangwon inland area by procuring fishery products from production places including from producers and FPC. The center was completed in June, 2016.

4) Establishment of Gangwon Logistics Center

Gangwon Logistics Center was established by inputting a total project cost of 5 billion won (self-collateralization 100%). The purpose of the center was to improve the quality of fishery products for the military meal service by expanding new distribution infrastructure in Gangwon province.