

# FISHERY IN NORTH KOREA

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1. **What is the Fishery?**
2. **Status of the Fishery in North Korea**
  - **Production**
  - **Infrastructure**
  - **Political Issues**
  - **SWOT**
3. **Implications**

# 1. What is the Fishery?

English



## fishery

### Definition

Generally, a fishery is an activity leading to harvesting of fish. It may involve capture of wild fish or raising of fish through aquaculture.

### Definition source

FAO Fisheries and Aquaculture Department, FAO, 2014.

### Definition

A unit determined by an authority or other entity that is engaged in raising and/or harvesting fish. Typically, the unit is defined in terms of some or all of the following: people involved, species or type of fish, area of water or seabed, method of fishing, class of boats and purpose of the activities.

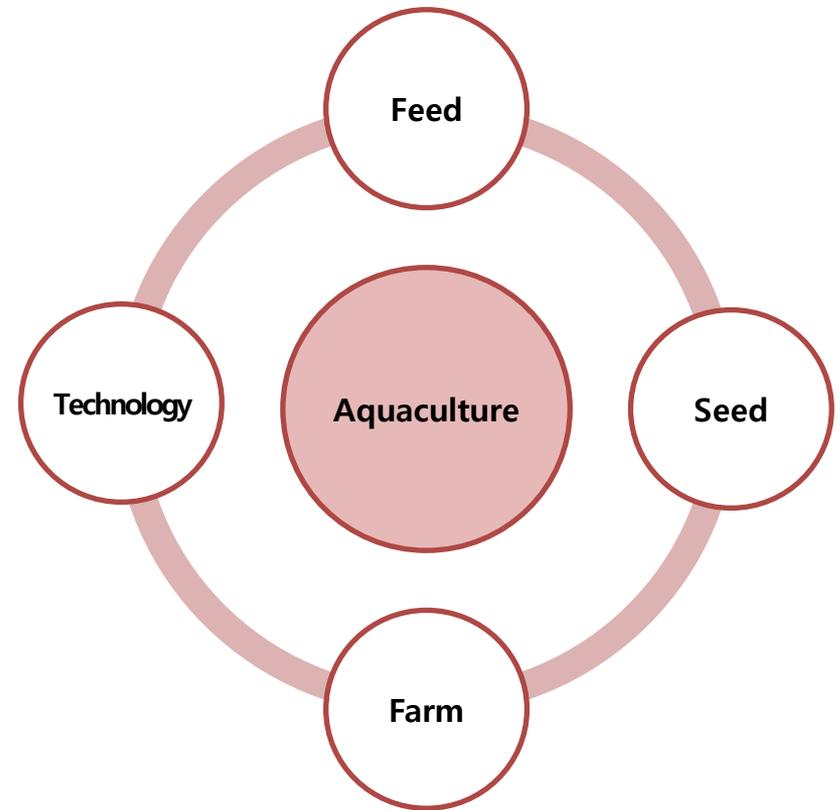
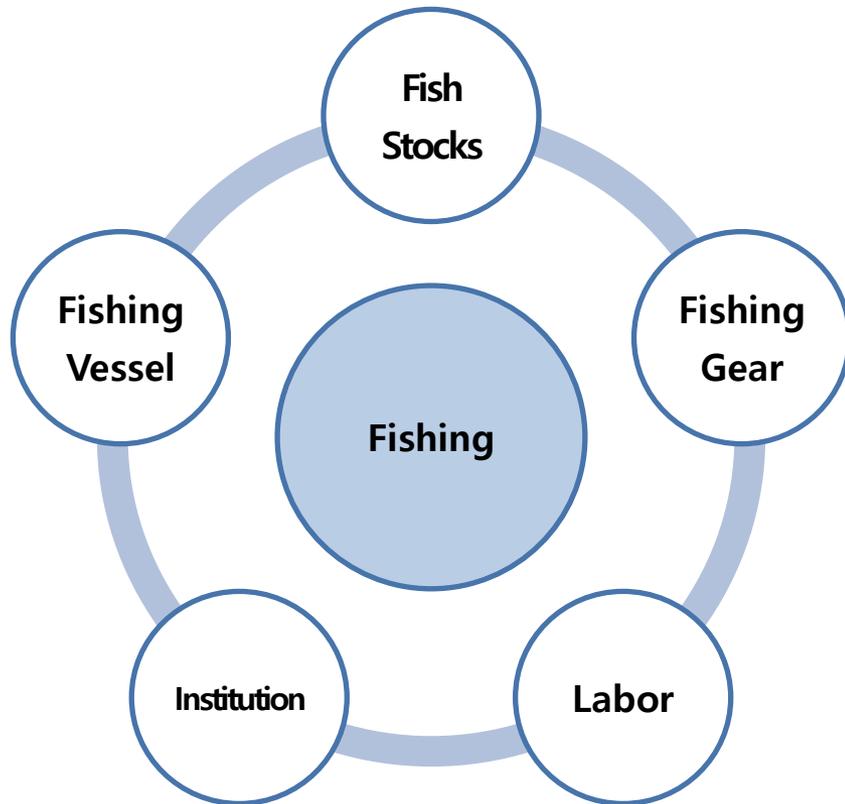
### Definition source

Fletcher, W.J., Chesson, J. Fisher, M., Sainsbury K.J., Hundloe, T. Smith A.D.M., and B. Whitworth (2002): National ESD reporting framework for Australian fisheries: The "How To" guide for wild capture fisheries. FRDC Project 2000/145. Canberra, Australia

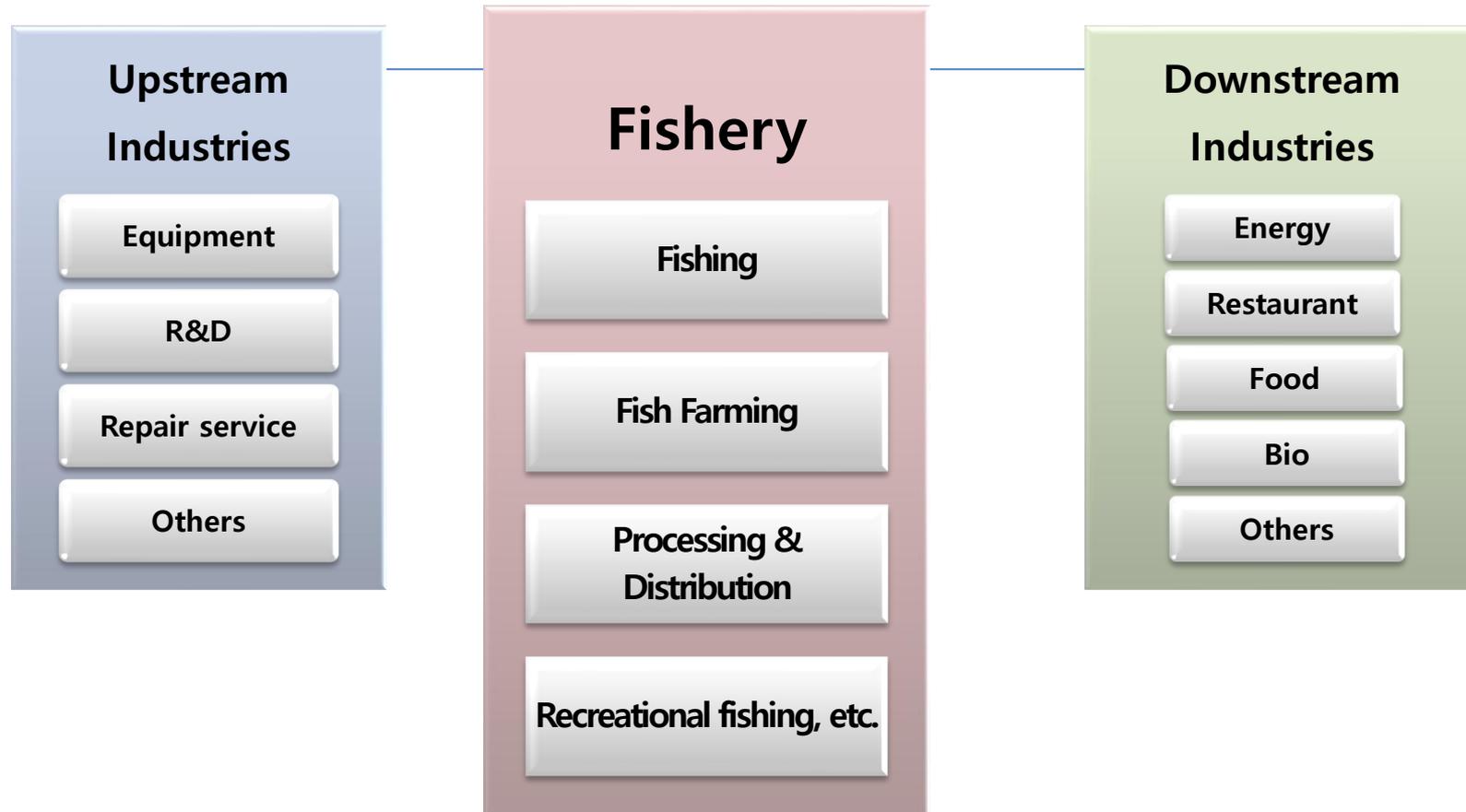
### Related terms

Fishing

# 1. What is the Fishery?



# 1. What is the Fishery?



# 2. Status of the Fishery in North Korea

Category	East Sea			West Sea		
	Species	Main fishery	Main season	Species	Main fishery	Main season
Fish	Anchovy	Littoral sea	May-June	croaker	Pyeonganbuk-do, Hwanghae-do	Apr-June
	Pollack	Hamkyong-do, Gangwon-do	Nov-Jan	Mackerel		June
	Mackerel	Littoral sea	May-Aug, Sept-Oct	Whitebait	Pyeonganbuk-do, mouth of Amnokgang	Apr-June
	Herring	Littoral sea	Feb-Apr	Shotted halibut	Littoral sea	May-Sept
	Cod	Littoral sea	Oct-Jan	Kingfish	Littoral sea	June-July, Oct
	Sole	Littoral sea	Whole year	Pomfret	Littoral sea	May-Sept
	Yellow tail	South of Hamkyong-do,	Nov-Jan	Hairtail	Littoral sea	Sept-Oct
	Atka mackerel	Hamkyong-do, Gangwon-do	Sept-Nov	Spanish Mackerel	Hwanghae-do	June-Nov
	Sardine	Littoral sea	June-July	Gray mullet		Feb, Apr, Sept
	Saury	Littoral sea	June-Aug	Sea-bass		June-July
Crustacean	Blue crab	South of Gangwon-do	May-June, Sept-Nov	Shrimp	Littoral sea	Sept -Dec
				Blue crab	Littoral sea	Mar-May, Oct-Nov
Shellfish	Oyster	Coast of Gangwon-do	Nov-Mar	Baekhaph (Asian hard dam)	Pyeongannam-do, Hwanghae-do	
	Scallop	Entire longshore		Manila clam	Entire longshore	
	Shellfish	Entire longshore		Cockle	Entire longshore	
Mollusk	Squid	Gangwon-do, South of Hamkyong-do	July-Aug, Sept-Oct	-	-	-
Others	Seaweed	Gangwon-do,, Hamkyongbuk -do		Seaweed	Hwanghae-do	-
	Sea cucumber	Entire longshore				
	Sea urchin	Gangwon-do,, Hamkyongbuk -do				



# 2. Status of the Fishery in North Korea

- ❖ **Fishery production (estimated by BoK) : 880,000 tons in 2018 (South Korea: 3.79 million tons)**
  - Fishing in the offing such as waters between N. Korea-Japan, boundary waters between N. Korea-Russia
  - Chinese fishing vessels were allowed due to difficulties in fishing offshore in the East Sea (2014:1,904 vessels, 2018: over 1,000 vessels)

		2018	2017	2016	2015	2014	2013	2012	2011	2010
N. Korea(A)	10,000 ton	88.0	88.4	100.9	93.1	84.2	74.9	73.7	69.1	63.0
S. Korea(B)	10,000 ton	379.1	372.5	326.9	333.1	330.5	313.5	318.3	325.6	311.1
(B/A)	fold	4.7	4.2	3.2	3.6	3.9	4.2	4.3	4.7	4.9

- ❖ **Aquaculture production(estimated by FAO): Total 153,000 tons incl. 138,000 tons of seaweed (South Korea: 1.7 million tons)**
- ❖ **Fishery technology: 20-60% of South Korea (KMI report)**
- ❖ **Fishery workers: Approx. 178,000 workers (2008 Census)**
- ❖ **Aquaculture workers: Approx. 90,000 people in aquacultural hubs under the Ministry of fisheries, cooperative union**
- ❖ **Export to China: 162.8 million USD (2017), no official figures after Sept. 2017**
- ❖ **Marine-related North Korean trading companies: 19(military(6), ruling party(2), cabinet(4) & affiliation unidentified(4), dealing with marine products, shellfish, processed goods, etc.)**

# 2. Status of the Fishery in North Korea

Trading companies	Affiliated organization	Major roles
<b>Chosen Marine &amp; Shipping Company</b>	Cabinet Fisheries Committee	Marine product related transportation
<b>Chosen Eunpasan Trading Company</b>	Union of Socialist Workers Youth of Kim Il Sung (border garrison under the MPAF)	Production of feed additives for aquiculture
<b>Chosen Prosperity Trading Company</b>	Ministry of the People's Armed Forces General Rear Service Department	Marine product export and production hub: Chungjin, Shinpo, Wonsan, Oncheongun, Haejusi, owns dozens of fishing vessels
<b>Chosen Birobong Trading Company</b>	Reconnaissance Bureau in the MPAF	Operation of marine product processing plant in Wonsan
<b>Chosen Maebong Trading Company</b>	Ministry of the People's Armed Forces (MPAF)	One of the largest trading companies specialized in earning foreign money for MPAF. Responsible for exporting the source foreign money (marine products, etc) collected from the affiliated department & corps
<b>Chosen Cheogun-san Trading Company</b>	Ministry of the People's Armed Forces (MPAF)	Largest military trading company (related to Myung Rok Cho, Minister of the People's Armed Forces )
<b>Chosen Daeheung Marine product Trading Company</b>	-	Specialized in exporting and importing marine products
<b>Chsen Sambang Joint Venture</b>	-	Production of processed marine products
<b>Chosen Marine Product Trading Company</b>	-	Specialized in processing and exporting marine products
<b>Chosen Joint Marine Trading Company</b>	-	Agent for selling seafood such as sea cucumber, abalone, etc
<b>Pyeongyang Sulkyong Trading Company</b>	-	Exporting marine products such as squid, shellfish (owns Haeju export goods processing establishment)

Source: Current status of North Korean marine product trading related organization and implications, Marine trend and issues, KMI Marine Trend (Mar, 2011)

# 2. Status of the Fishery in North Korea

## ❖ Fishing infrastructure

- Fishing vessels: 1,500 motor fishing vessels, 4,000 - 9,000 non-power fishing vessels
- Work mainly with 2-7 tones of small-sized wooden vessels and engine vessels (approx.400 vessels)
- No. of small-sized wooden vessels owned by the N. Korean military surged from 2014
- 80% of fishing gears are imported (90% for fishing nets)
- Fishing gears: Trap, Stow nets on stake, Stow nets on anchor, fixed shore net, dragnet, gill net , trawl

Category	Size(Ton)	No.
<b>Factory ship</b>	10,000	8
<b>Refrigerated cargo carrier</b>	3,000-7,000	12
<b>Full-sized trawler</b>	3,750	11
<b>Multi-purpose vessel</b>	450-485	554
<b>Net fishing vessel</b>	270	16
<b>Trap fishing vessel</b>	30-100	766
<b>Small-sized trawler</b>	30-100	170

## 2. Status of the Fishery in North Korea

- ❖ **Main fishery office:** Regional administrative institutions responsible for North Korea's fisheries industry. Some 10 offices designated throughout the country
  - West Sea: Ryongampo, Cheolsan, Jeongju, Mundeok, Hancheon, Nampo, etc
  - East Sea: Jan. 8 fishery office, May 27 fishery office, Sinpo fishery office, Wonsan fishery office
- ❖ **Aqua Farms**
  - Around 40 farms are estimated to be in the East Sea, and around 5 large farms in the West Sea
  - Increasing investment in aqua farms aiming to restore the 80s level
  - Main items: kelp, blue mussel, oyster, etc. Since production of blue mussels and oysters yield high ROS, large investments are expected to increase
  - Currently over 100 tones of kelps are being harvested from 1ha farm in the West Sea

## 2. Status of the Fishery in North Korea

- ❖ **Lack of modern fishery equipment & infrastructure**
  - The production capability is not fully utilized due to outdated fishing vessels, deteriorated fishing equipment and technology, lack of oil , fishing gears, cold storage
  - High production of marine products encouraged focusing on 'abundant fish harvest' (2015)
  - In 2015, as fisheries became the major task for the Labor party and the cabinet, it is likely to result in excessive fish capturing and culturing.
  - Aquaculture lacks in feed and infrastructure
  - Due to lack of marine product distribution infrastructure, there are limits in utilizing marine products as a source of food supply
- ❖ **Shortage of fund to operate fishing vessels**
- ❖ **Damage of fishery resources**
  - Fishery resources are damaged as a side effect of excessive expansion of fishing
  - April and July are designated as fishery resources protection months, but it is not properly kept.

# 2. Status of the Fishery in North Korea

## ❖ Objectives of Fishery Policy in North Korea

- Solve nutritional problem of the residents and acquire foreign money
- Before announcing the 4 economic priorities of the Kim Jong Un administration, fishery was highlighted as the big 3 axis along with agriculture and stockbreeding ※ 4 economic priorities: electric power, coal, metal, railway
- Short-term fishery production increase using the military: The military became the standard for increasing fishery and this was then expanded to the private sector, thus increasing the production of marine products: the performances of August 25 fishery offices (military camp) became the benchmark: 3 fish farms and fish farming offices are operated under the 810 military camp
- **Military camp fishery office: Targets to improve the lives of the soldiers, so it is irrelevant to the improvement of general people's economic lives**

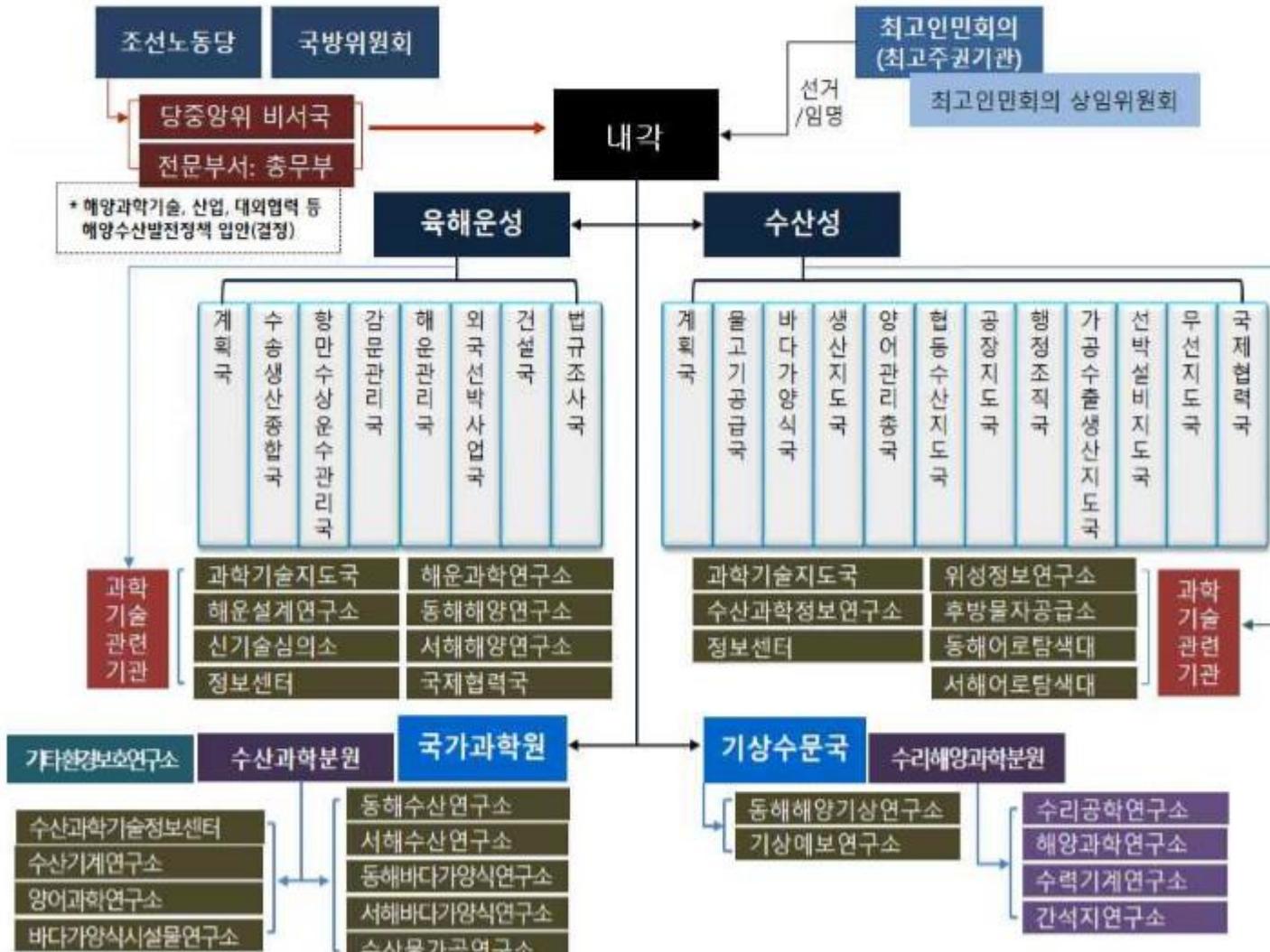
# 2. Status of the Fishery in North Korea

- ❖ **Built a system to establish national countermeasures for the fishery sector**
  - In the 2014 New Year's address, net fishing was stated as priority and sea farming as subsidiary business
  - **Fishing: increasing fishing days, modernizing fishing gears and vessels**
    - Increase fishing days by repairing fishing boats controlled by the fishery offices
    - Modernize fishing gears, install fish finder in fishing boats, utilize satellite information by accepting sea water temperature transmission system
  - **Sea Farming: Introduce technologies and secure superior species of fish**
    - Focused on securing superior species of fish without any plans to increase feeds in fish farms
    - Pyungnam Gamapo fishery office promoted that it succeeded in sea farming of fresh water fish
- ❖ **Modernization and science-based fishing industry**
  - Puts importance on modernizing fish storage, refrigeration and processing facilities, and fishing vessels, and science-based fishing methods
    - In the National Meeting of Activities in the Fishery Industry report (Dec 2013), the importance of increasing fish storage and refrigeration capability, and modernizing processing equipment were highlighted

## 2. Status of the Fishery in North Korea

	Kim, Il-sung	Kim, Jong-Il	Kim, Jong Un
<b>Objective</b>	Obtain foreign currency, source of food supply	Obtain foreign currency, source of food supply	<ul style="list-style-type: none"> <li>① Solve people's nutritional problem</li> <li>② Realize pro-people policy</li> </ul>
<b>Policy</b>	Started farming business, expanded deep-sea fishery	Farming & deep-sea fishery, improved foundation for fishery	<ul style="list-style-type: none"> <li>① Increased fishing utilizing the military</li> <li>② Modernization &amp; Science-based fishery</li> </ul>
<b>Actions</b>	Modernized fishing tools Added more fishing vessel repair shops	Developed fish farming business	<ul style="list-style-type: none"> <li>① Modernized fishing gears and vessels</li> <li>② Scientified fishing technology</li> <li>③ Secured superior species of fish</li> </ul>

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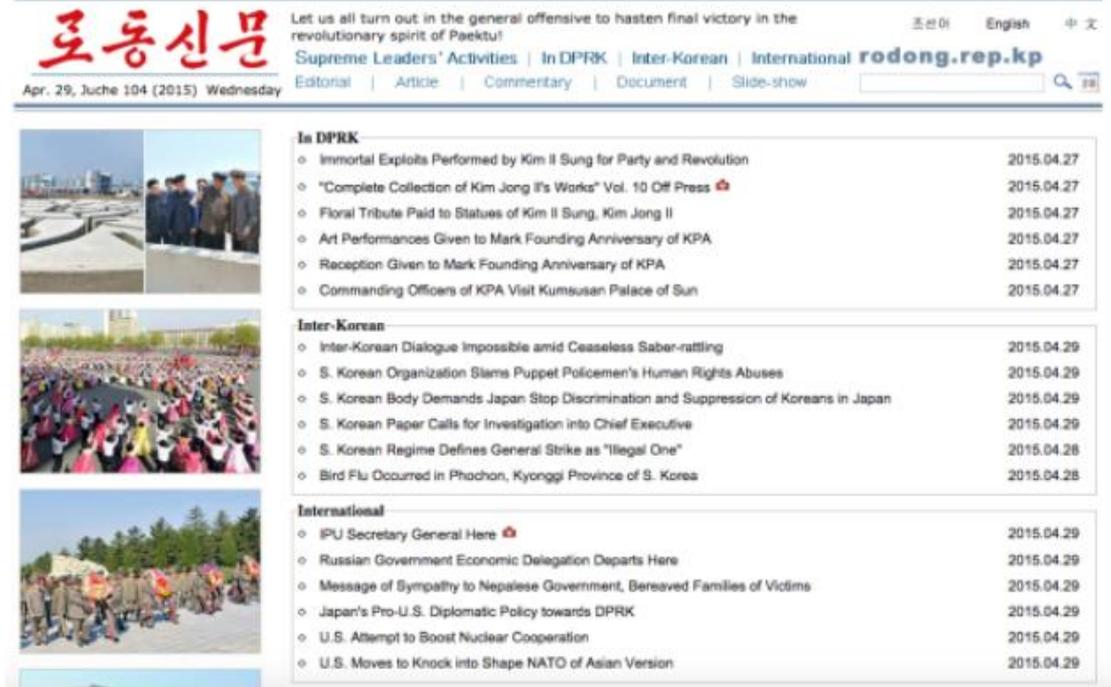


자료 : 양희철(2017), 동북아 해양의 평화적 관리협력을 통한 남북한 통일시대 해양정책 수립 연구, 한국해양과학기술원

# 2. Status of the Fishery in North Korea



The front page of the Rodong Sinmun website



The English language news page of the Rodong Sinmun as seen on April 29, 2015 (Photo: NorthKoreaTech)

# 2. Status of the Fishery in North Korea

연도	Fishery related tasks
2000	<b>Farming sector:</b> Stage mass campaign for the fish farming industry
2001	Farming production: Raise highly productive fish such as catfish
2007	Light industry: Make fish farms to pay silver so that the people can benefit from it
2008	Farming sector: Operate fish farms well
2009	Fishery sector: Marine product production and farming-fishery should be developed to contribute to the improvement of people's dietary life.
2011	-
2012	Stressed the need to increase production in fish farms to solve food problem
2013	Revitalize the <b>fishing sector</b> to improve the dietary lives of the people
2014	<b>Modernize fishing vessels and gears</b> , highlight the need for <b>fish farming and efforts to protect and expand marine resources</b>
2015	Need to improve the level of people's dietary lives based on the three axis of agriculture, stock breeding and fishery. Efforts should be made to normalize production in fish farming facilities around the country and to invigorate the fishery industry.
2016	-
2017	Plans to significantly develop light industry, agriculture and fishery industry: active fishing, fish farming and invigorating the fish farming industry. Strengthen material and technical foundation of the fishery industry through construction of modern fishing vessels and establishment of <b>comprehensive fishing gear production bases in the East Sea area.</b>
2018	Enhance fishing vessel construction and repair capabilities, and invigorate fish farming and aquaculture through scientific fishing
2019	Strengthen material and technical foundation of the fishing industry. <b>Science-based</b> fishing and aquaculture to protect and expand marine resources, thus achieving the development of the fishing industry.

## 2. Status of the Fishery in North Korea

### ❖ Ghost Ships on the Japanese Coast

- Increasing Fishermen
- Decreasing Fish Stock
- Privatization of the Fishing Industry

❖ 만선의 꿈 vs 죽음의 항해...北 수산업의 두 얼굴(2016.12.24)

<http://news.naver.com/main/read.nhn?mode=LSD&mid=sec&sid1=001&oid=056&aid=0010399675>

## 2. Status of the Fishery in North Korea

북한 어업분야 여성 선주들 증가



[http://www.rfa.org/korean/in\\_focus/ne-je-06132017085745.html](http://www.rfa.org/korean/in_focus/ne-je-06132017085745.html)

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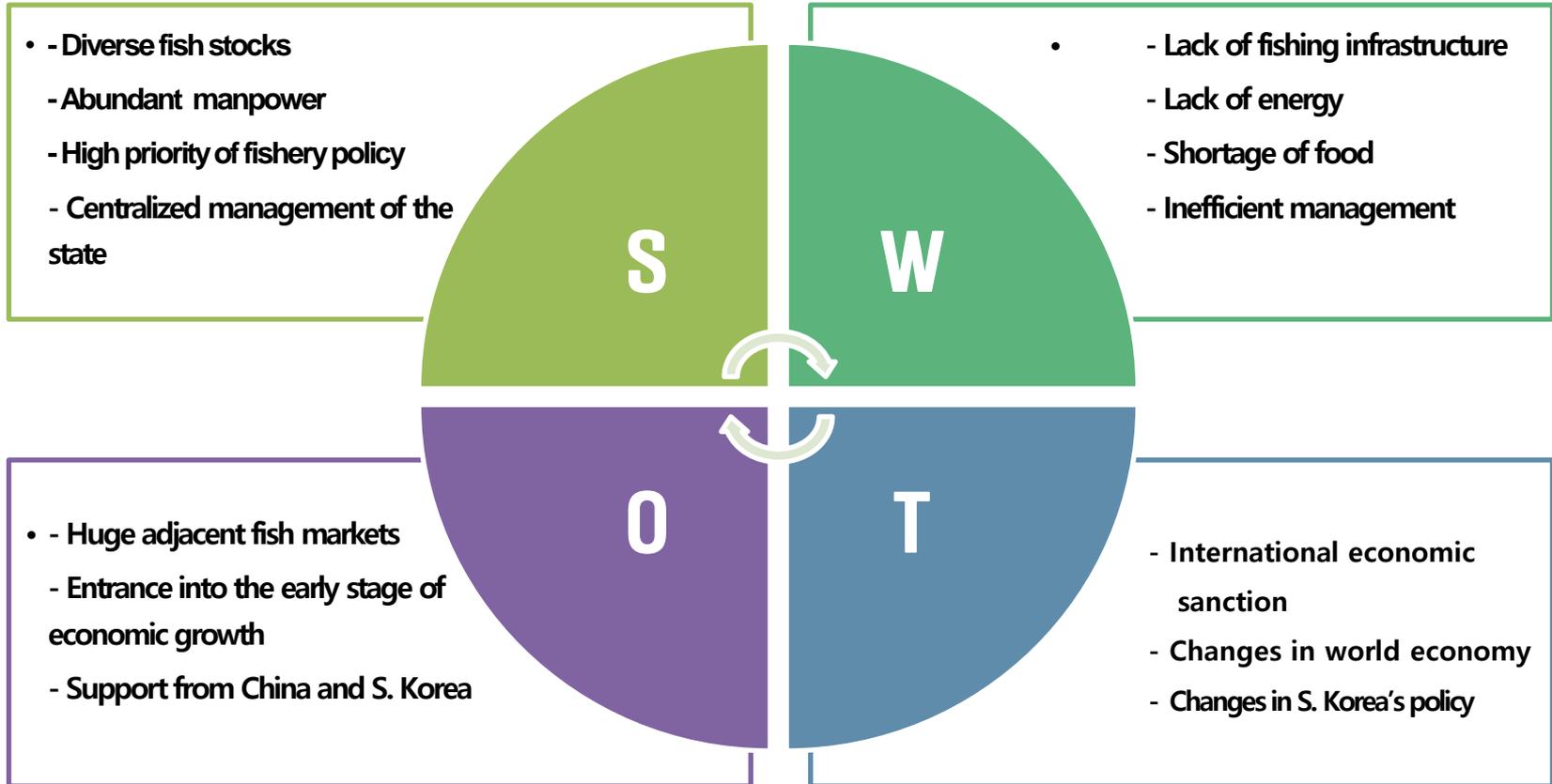
북한 처녀어로공의 만선가



## 2. Status of the Fishery in North Korea



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# 3. Implications

## Restrictions

- ❖ **Conflict with military security issues**
- ❖ **Internal conflicts in South Korea**
- ❖ **Technical restrictions in Fisheries**

## Cooperation

- **North Korea's centralized administrative system**
- **Irrationality in the system and practices**
- **Poor infrastructure & lack of energy**

## Cooperations

- ❖ **Connect boosting North Korean economy with fisheries cooperation**
- ❖ **Technology support**
- ❖ **International organizations: FAO, WFP, etc**
- ❖ **Gradually implementation of cooperation projects**
- ❖ **Solve internal conflicts in South Korea**
- ❖ **Marine clusters and special zones first**

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- 유엔식량농업기구(<http://fao.org>)

# Thank You!

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