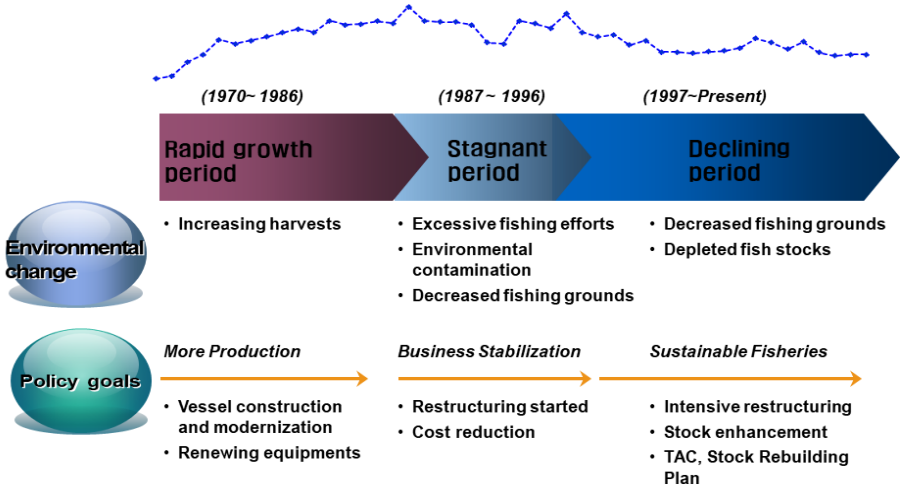
Limited access by a fishing permit system in RO Korea

Summary

1. Changes in fishery policy in accordance with production decrease

Policies for the coastal and offshore fisheries in Korea are closely associated with changes in the fishery production. The production of the coastal and offshore fisheries rapidly grew in the 1970s, however the growth started to slowed down gradually in the early 1980s. This period is called the period of growth of the coastal and offshore fishery, as the government's policies for the coastal and offshore fishery were focused on "More Production". The policies were particularly focused on efforts to build more fishing vessels and to modernize catching equipment in the 1970s in order to keep up with the competition of new fishing grounds with Japan in the offshore waters of the Korean peninsula.

<Figure 1> Changes in the coastal and offshore fishery production as well as the policy goals



After reaching the highest production of 1,726,000 tons in 1986, the growth of the coastal and offshore fisheries stagnated for about 10 years. This stagnation in production could be result of the accumulation of effects such as the rapid expansion in fishing capacity during the growth period, expansion of coastal development with the country's economic growth and deterioration of the marine environment. Therefore, a project on the reduction of the number of fishing vessels emerged in the policies of the coastal and offshore fisheries along with more frequent discussions on cost reduction in fisheries.

In Korea, the coastal and offshore fishery production already started to decline in the early 1990s. The two critical environmental factors associated with the reduction in the coastal and offshore fisheries are the reduction of fishing grounds and decreased fisheries resources. With regard to the reduction of fishing grounds,

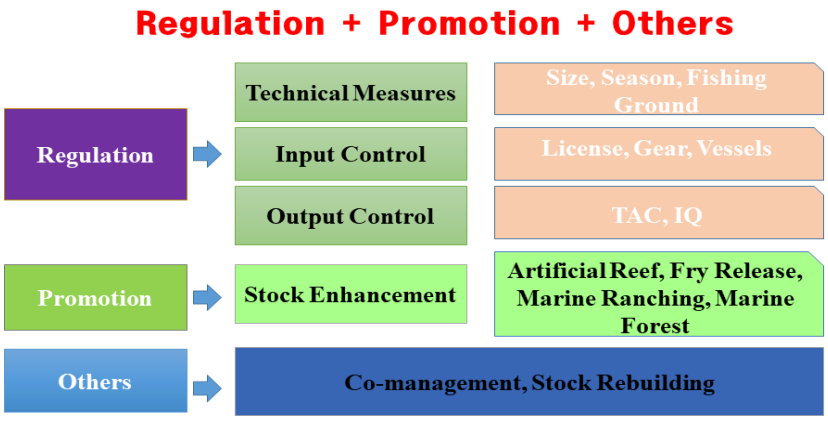
Korea ratified the UN Convention on the Law of the Sea in 1996 and declared 200 nautical miles of exclusive economic zone which limited a country's fishing grounds less than 200 nautical miles. In addition, as Korea signed on Fisheries Agreement with Japan in 1998 and then with China in 2001, fishing grounds where Korean fishing vessels can freely operate were significant reduced . Hence, the policy goal of the coastal and offshore fishery shifted from the "More Production" to "Sustainable Fisheries". In accordance with the renewed policy goal with the signing of the fisheries agreements, Korea became more active in reducing fishing vessels and also adopted the Total Allowable Catch (TAC) system in 1999, which is a catch limit management measure, starting in the large purse seine fishery. Later, in 2005, the government established the "Fisheries Stock Rebuilding Plan" to concentrate its efforts to rebuild stocks of seriously depleted species and started pilot projects for 4 fish species[1].

2. Fisheries Management of Korea

[1] Rye et al., 2005 "Study on the promotion of the medium and long term plan for fisheries stock rebuilding" Ministry of Oceans and Fisheries, p. 164.; Lee 2009 "Works to improve practical effectiveness of policies for fisheries stock rebuilding" Korea Maritime Institute.

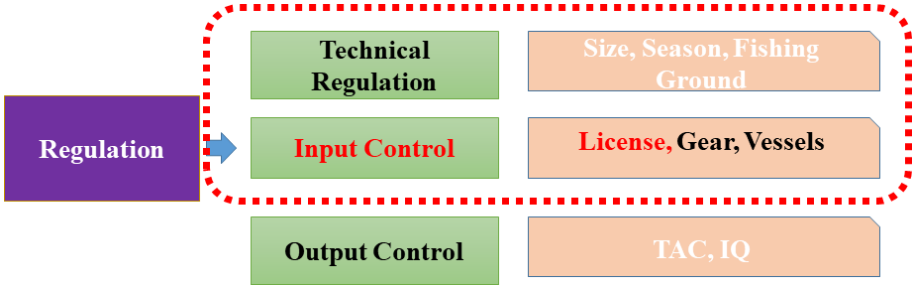
Fisheries management system refer to tools that are used to regulate or maintain fisheries resources at a certain desirable level. In this regard, Korea's fisheries management system consists of regulatory, promotional and other measures.

<Figure 2> Categories of fisheries management tools in Korea



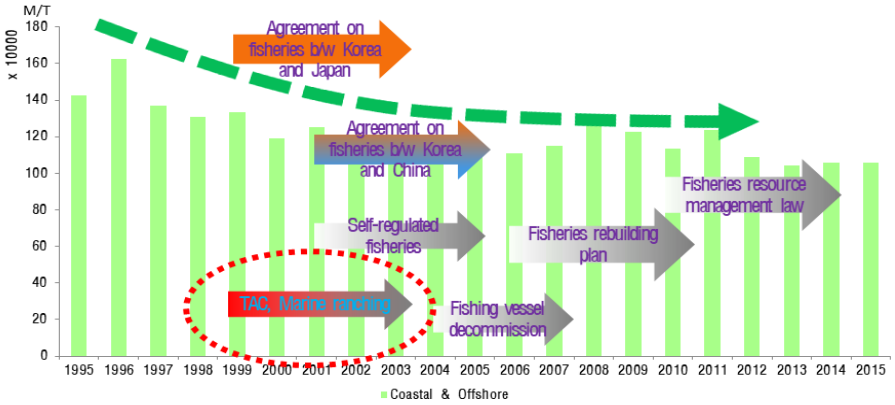
Traditionally, technical measures and input control were used to manage fisheries in Korea. Before the adoption of TAC in 1999, Korean fisheries were mainly managed through traditional fisheries management system, which are input control measures based on fishing permits and technical measures as a supplementary measure. However, with the adoption of TAC in 1999, output control tools were added to the traditional fisheries management schemes, particularly for the offshore fishery.

<Figure 3> Traditional regulations for fisheries management



As the production of the coastal and offshore fisheries has been declining in the mid 1990s, Korea started to expand the fisheries management system including the TAC system, marine ranching programs, fisheries stock rebuilding programs, etc. When the system was first introduced, the TAC system was started with 4 target fish species(mackerel, jack mackerel, sardine, and red snow crab), which were commercially important, heavily caught and seriously depleted to be in an urgent need for conservation[2]. Since then the number of species targeted by the TAC system continued to be increased to 11 species.

<Figure 4> Recent fisheries management measure and institutional changes



[2] Rye et al. 2002, "Study on yearly expansion of target species of the total allowable catcy system", Ministry of Oceans and Fisheries, p.21.

3. Limited Access by a Permit System

Korea's coastal and offshore fisheries can be largely divided into Licensed Fisheries, Permitted Fisheries and Reported Fisheries. Among them, the licensed fisheries include aquaculture, communal fishing business and set-net fishery business. The characteristic of licensed fishery is that a person who obtains a license for a certain demarcated area of waters is allowed to exclusively use that certain area of waters.

With regard to a permitted fishery, a permit is issued for a fishing vessels operating in coastal and offshore waters. A fishing permit[3] is an administrative act to remove relative prohibitions imposed on a certain area of waters by law for purposes of the conservation of fisheries resources, regulation of fishery, and other public necessities for a certain person under certain specified conditions so that the water area is restored to its natural state.

Reported fisheries refer to all other fisheries than the above-mentioned fisheries pursuant to Article 47 of the Fisheries Act, including diver fishery, fishery without gear, etc.

In Korea, the coastal and offshore fisheries are categorized into offshore fisheries, coastal fisheries, and sectional fisheries according to the size of the fishing vessel

[3] A permit is distinguished from a license in that (1) a permit is a behavior to remove a legal ban imposed on natural liberty inherent in humans so that the liberty is recovered for humans while a license is a behavior to set a new right which does not belong to natural liberty. Even though both the permit and the license result in economic benefits, the former leads to reflection benefits while the latter leads to benefits as legal rights (Jeon Yun-cheol, "The concept of the licensed fishery and fishing rights contained in the license", Article, July 1969)

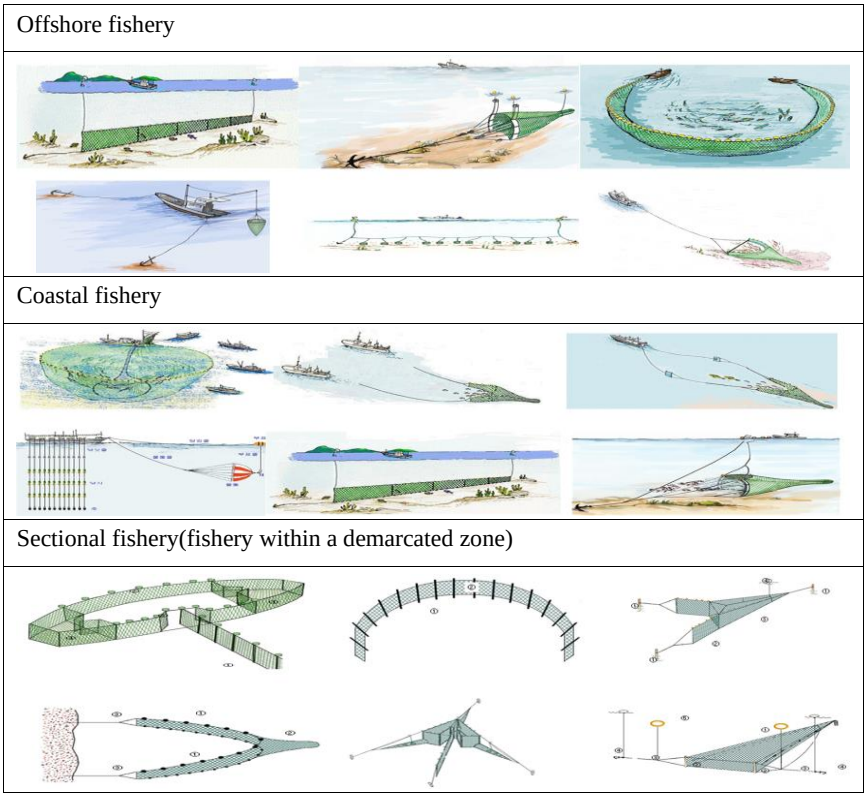
pursuant to Article 41 of the Fisheries Act. The Enforcement Decree of the Fisheries Act specified detailed types of fishing methods of each fishery. There are a total of 41 types business, including 21 types in the offshore fishery, 8 types in the coastal fishery and 12 types in the sectional fishery.

<Table 1> Category of permitted fisheries and acquisition of a fishing permit

Category of fishery	Obtaining a fishing permit
Offshore fishery	Article 41 (1) Any person who intends to run any fishery business that uses a powered fishing vessel with a gross tonnage of at least ten tons or a powered fishing vessel with a gross tonnage of less than ten tons as prescribed by Presidential Decree because of particular needs for protection of fishery resources and coordination of fisheries shall obtain a permit for each fishing vessel or fishing gear from the Minister of Oceans and Fisheries.
Coastal fishery	Article 41 (2) Any person who intends to run any fishery business which uses a non-powered fishing vessel or a powered fishing vessel with a gross tonnage of less than ten tons, other than an inshore fishery business and the fishery business under paragraph (3), shall obtain a permit for each fishing vessel or fishing gear from the competent Mayor/Do Governor.
Sectional fishery(fishery within a demarcated zone)	Article 41 (3) Any person who intends to run any of the following fishery business shall obtain a permit for each fishing vessel, fishing gear or facility from the head of the competent Si/Gun/Gu. 1. Fishery business within a demarcated zone 2. Business of cultivation in inland sea water

Source: “Fisheries Act”

<Figure 5> Main fishing gears by fishery



4. Conclusions and Policy Implications

In 2016, Korea's coastal and offshore fisheries recorded the lowest production. Making an even more extreme comparison, the production in 2016 resulted in 903,000 tons as it was about half the amount of the catch in 1986, when the production hit the record high at 1,726,000 tons. Thus, experts have come up with various interpretations on the cause of the drastic decline in the coastal and offshore fisheries production in Korea. The decline in the production in 2016 was due to accumulated or mixed results of both artificial and natural causes.

Experts in fisheries resources management points out that overexploitation, polluted fishing grounds, reduced areas of fishing operation and climate change as the main factors of the decline in the fisheries resources and the fishery production.

Responding to the recent reduction of catches in Korea's coastal and offshore waters, the Korean government has been implementing stronger resources management to restore fisheries resources. In an attempt to prevent overexploitation in the overall areas of the coastal and offshore waters, the government has been operating a working group consisting of experts from the public and private sectors, universities and, institutes to work to expand TAC target species and fishing gears since 2017. Through this effort, the government plans to shift its policy on fisheries resources management from input control to output control.

The government is also considering of increasing the size limit on main target species of the coastal and offshore fisheries to reduce overexploitation of immature fish. Especially for hairtail and small yellow croaker, it is planned to block trades of illegal catches that are below the size limit by designating the point of fish sales at landing ports. In addition, to minimize damage caused by the increasing number of discarded fishing gears and ghost fishing, the government is expanding its projects to collect discarded fishing gears and is also considering the adoption of a fishing gear tracking system to minimize the number of lost or discarded fishing gears.

Meanwhile, cooperation with neighboring countries for establishment and promotion of various plans as mentioned above is very critical. In particular, migratory fisheries resources in the Yellow Sea are shared by Korea and China. In other words, Korean swimming crabs and small yellow croakers are the same as the Chinese ones. Hence, it is very difficult to effectively restore the fisheries resources with the efforts of only one country.

Recently, the Chinese government has also implemented its pilot TAC programs and will expand the TAC target species. The Korean government also plans to promote the TAC system as the main management measure for the coastal and offshore fisheries. In this regard, it is expected that a coordinated effort by the Korean and the Chinese government to include same fish species in their lists of TAC target species in the Yellow Sea will accelerate the recovery of fisheries resources in this area. The mutual cooperation will be particularly more effective through the YSLME project which the two countries have promoted for several years to carry out joint researches.