

A Study on the Korean Fisheries Response in Promoting Conservation and Management of Marine Mammals

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1. Purpose

- ▶ With the recent development of international regulations for the conservation of marine mammals, this study aims to present comprehensive countermeasures to Korea's fisheries industry, mainly based on the comparative legal analysis.
- This study specifically intends to minimize the impact of trade restrictions imposed by the U.S. Marine Mammal Protection Act import provisions in the short term, while building a coherent policy framework for co-existence between fisheries and marine mammals.

2. Methodology

- ▶ This study conducted literature review, qualitative comparative analysis, and expert consultations aiming at identifying legal and policy options to reduce bycatch of marine mammals in fisheries.

- A comparative study includes an analysis of international legal regimes governing the conservation of marine mammals and relevant domestic laws in the South Korea, Japan and U.S..
- This study also carried out semantic network analysis as a method for qualitative research. After extracting keywords from relevant legal texts in South Korea, the U.S. and Japan respectively, the study analyzes its semantic relationships among keywords. The result of this analysis shows ethical and cultural implications in law while quantitatively confirming the principal agents of legal enforcement and managing governance of marine mammals.
- Furthermore, the study carried out a scenario analysis in order to understand the impact of marine mammal conservation policies on the Korean fisheries exports. This analysis was conducted on the premise that the U.S. MMPA import provisions would be implemented in 2022 with the 2020 draft version of the List of Foreign Fisheries (LOFF) as well as comparability findings.

3. Research findings

1) Summary of main findings

- ▶ Global governance for the conservation of marine mammals has been developed in a fragmented way with the specific focus on cetaceans and pinnipeds.
- The International Whaling Commission (IWC), originally established to manage whaling, has been transformed into a

conservation-focused regime. With the growing consciousness of cetaceans' intelligence and cognitive ability, the *opinio juris* that whales are entitled to life has evolved in the customary international law.

- Current global regime for the conservation of marine mammals has been evaluated as being fundamentally weak in general, with alternative governance being suggested to overcome limitations.
- ▶ The analysis shows that bycatch of marine mammals in fisheries is commonly occurred within South Korea's EEZ. The most significant bycatch is finless porpoise (stow net), followed by common dolphin (gill net, set net), mink whale (set net), and pacific white-sided dolphin (gill net).
- Having started stock assessment on marine mammals since 2000, South Korea has found 11 species of cetaceans, and 2 species of pinnipeds. Korea is conducting regular stock assessment for 6 species including mink whale, common dolphin, finless porpoise, common bottle-nosed dolphin and Indo-Pacific bottlenose dolphin.
- ▶ According to the results of the scenario analysis, it is expected that Korea's exports of fishery products will decline by 10% compared to the average exports over the last 10 years as the U.S. Marine Mammal Protection Act (MMPA) Import Provisions Rule implemented in 2022
- This analysis consists of three options based on whether Korea's fisheries exports are able to meet the requirements stipulated in the MMPA 'Import Provisions Rule.' First scenario assumes that the Korean fisheries industry can comply with all the

requirements for U.S. imports and maintain the current level of fishery product exports. Second scenario assumes the opposite of the first situation. And the third supposes that products exported to the U.S. partially meet the requirements of comparability findings and allow for the construction of a system for verifying that products are produced in fisheries comparable to the U.S. standards.

- ▶ As the result of a qualitative comparative analysis of the laws and institutions related to marine mammals in South Korea, the U.S. and Japan, South Korea needs to improve the legal system in regards to the conservation of marine mammals including stock assessments, bycatch management and establishment of “Take Reduction Plans” and etc.
- ▶ In particular, South Korea’s governance on marine mammals are fragmented with the mixed value of protection and exploitation, which pose limitations on consistent implementation of policies over marine mammals.
 - In other words, Korea is currently lack of proper governance and implementation for the conservation of marine mammals. For example, Korea is only conducting stock assessments for only a few marine mammal species, reporting bycatch only limited to certain protected species, and allowing the distribution and sales of accidentally killed whales (excluding protected species) as a traditional diet, only in cases where illegal activities are not identified. These factors will work against South Korea’s comparability findings for exporting fishery products to the U.S. over the short-term, while serving

as an potential obstacle for Korean fishery exports worldwide over the long run.

- This study includes an examination of a number of case studies, identifying that the U.S. has established a legal foundation under the MMPA which includes: exceptional allowance for incidental take of marine mammals as well as mandatory requirements, issuing the permits for incidental take of marine mammals and marine mammal authorization program for the fishery, conducting stock assessments of all marine mammals, and developing and implementing “Take Reduction Plans (TRP)” for each “strategic stock” of marine mammals to limit incidental take from commercial fisheries to below the potential biological removal (PBR) level.
- Japan, one of the major whaling nations, conducts a scientific stock assessment to estimate the stock available for whaling in accordance with the “Act on the Implementation of Cetacean Scientific Research for the Implementation of Commercial Whaling (Law No. 76 of 2017)”. In addition, requirements for whaling are specified, including restrictions to fishing gear and a closed season whereby whaling cannot occur, while incidental mortality and serious injury of marine mammals besides whaling are limited to those caught on ‘set net fisheries’. In other words, the sale and possession of marine mammals who have been killed incidentally or has been seriously injured is banned in principle other than from whaling and dolphin/porpoise fisheries and bycatch from set net fisheries. Moreover, Japan has published annual reports on the status of bycatch, incidental take and stranding, while providing a manual for rescuing stranded marine mammals.

2) Policy suggestions

- ▶ This study proposed following aspects of policy options for marine mammal protection in South Korea with taking into consideration of fisheries industry; which includes legal and institutional improvements, measures to reduce interactions with marine mammals, and ways to strengthen international cooperation.
 - With regard to legal and institutional improvement, this study proposed suggestions on the following areas: i) legal revision draft to have jurisdiction over stock assessment and evaluation on marine mammals in Korea's EEZ and high seas where distant fisheries are in operation; ii) legal improvement measures for mandatory reporting of incidental take of marine mammals, and iii) short and long-term measures to curb the distribution and sale of marine mammal meat.
 - To reduce interactions with marine mammals, this study has given rise to a number of suggested improvements in the following areas: i) strengthening R&D to investigate interactions between marine mammals and the fishery industry, ii) establishing measures for reducing the incidental mortality and serious injury of marine mammals by major fishery industry and iii) specific measures and its implementation roadmap to certify a fishery that has reduced incidental take of marine mammals.
 - To strengthen international cooperation regarding marine mammal, this study proposed following suggestions, i) strategically enhancing international cooperation in marine

mammal-related international organizations including IWC, and ii) presenting the necessity and an implementation roadmap for the tentatively named ‘International trend analysis survey on Marine Mammals’ in order to preemptively respond to international discussion on the protection of marine mammals such as FAO and RFMOs.

- ▶ The study proposed enacting a legislation and amendment of specific laws, establishment of a new organization and expansion of workforce to allow the fisheries industry to effectively implement measures for protecting marine mammals.
 - In the long-term, the government needs to consider drawing a law of the tentatively named ‘Korean Marine Mammals Protection Act’ and establish the ‘Verification System of Incidental Take of Marine Mammals’ as well as the ‘Legal Notice on Incidental Take Survey of Marine Mammals by Exporting Fishery’.
 - Considering that Korean response for U.S. LOFF revision, submission of Progress Report on marine mammal protection and application of Comparability Findings in accordance with the MMPA Import Provisions Rule will be required every four years in order to export seafood to U.S., this study presented measures for formulating a task force and establishing a network that participates various stakeholders from fishermen, NGOs, government, universities to research institutions for protection and rescue of marine mammals in Korea.

3) Expected outcomes

- ▶ In order to promote the conservation of marine mammals in Korea, this study proposes countermeasures in preparation for potential export restrictions on domestic fisheries which possibly involves in incidental mortality or serious injury of marine mammals
 - Over the short-term, this study allows for responding against the U.S. export restrictions on domestic fishery products in 2022. Over the mid-to-long term, it contributes to fundamentally eliminating a potential risk that the absence of a system for reporting the incidental mortality or serious injury of marine mammals in Korea can result in the domestic fishery industry being considered as IUU fishing, especially unreported and unregulated fishing.
- ▶ Improvement of domestic laws and systems regarding the protection of marine mammals will contribute to laying the foundation for co-existence between the fishery industry and marine mammals.
 - This study concludes that the Korean government need to recognizes importance of whales, dolphins and porpoises to our unique marine ecosystems and establish laws and regulations stipulating specific requirements and limitation on fishing industry. Based on that, fishermen need to change their perception on marine mammals from being subjects of 'exploitation' towards being considered 'life' in need of 'protection'. The study serves as basic research material to

improve policies relevant to the protection of marine mammals in Korea.

- Improvement of domestic systems will promote Korea's efforts to join in on the international endeavor to protect marine mammals. In addition, this study can be utilized as basic materials for preparing the governments' position in regards to a ban on commercial whaling in international organization.