

수산식품 품질·안전관리 제도 개선방안 연구

A Study on Improvement Plans for Seafood Quality
and Safety Management System

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A Study on Improvement Plans for Seafood Quality and Safety Management System

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1. Purpose

- ▶ The purpose of this study is to identify the present status and problems of Korea's seafood quality and safety management system in responding to internal and external environmental changes of seafood consumption and trade, and subsequently to prepare reasonable improvement plans.

2. Methodology and Feature

1) Methodology

- ▶ A variety of preceding studies were reviewed including international regulations, systems by each nation and Korea's laws, systems and policies in relation to seafood quality and safety.

- ▶ The study conducted a survey targeting 1,000 consumers on the perception of seafood quality and safety, while carrying out an empirical analysis for assessing the importance of seafood quality components utilizing an econometrics model.
- ▶ A Delphi survey was conducted with 15 experts to extract problems of Korea's seafood quality and safety management system and improvement tasks.
- ▶ This study conducted interviews and consultations with experts and those working in the seafood industry in order to draw improvement measures for seafood quality and safety management.

〈Table〉 The content scope of this study

Classification		Specific content
Overseas	International organization	• Trends of international regulations including CODEX, WTO and ISO in regards to seafood quality and safety
	Major country	• Trends of seafood quality and safety management in the US, the EU, China and Japan
Korea	Relevant laws	• 'Agricultural and Fishery Products Quality Control Act', and 'Fishery Products Distribution Management and Support Act'
	Administrative organization	• Ministry of Oceans and Fisheries, Ministry of Food and Drug Safety, National Fishery Products Quality Management Service etc.
	Policy	• Existing policy: Current policy on seafood quality and safety management • New policy: Additionally proposing by reflecting internal and external environmental changes
	Distribution stage	• All areas of value chain ranging from production, distribution, processing, export and import to consumption of seafood

Source: Prepared by the author

2) Feature

- ▶ Most preceding studies have primarily dealt with quality and safety issues in the production stage of seafood. However, this study differentiates itself from other studies in that it encompasses the present status of quality and safety management ranging from all stages of value chain ranging from production, distribution, processing and consumption, while suggesting problems of laws and systems and improvement measures.
 - In particular, domestic and foreign quality and safety management issues are considered since the content scope of this study includes the trends of international regulations related to seafood quality and safety as well as case studies in the US, the EU, Japan and China.
- ▶ Preceding studies in Korea have been primarily focusing on the improvement of seafood sanitary and safety management, falling short of presenting the overall status and problems of quality management system and drawing improvement plans.
 - This study differentiates itself by taking a comprehensive view not only in regards to sanitary and safety management of seafood but also improvements of quality management system.
- ▶ This study is the first to apply the Best-Worst Scaling (BMS method) in fishery related research, which is a widely utilized methodology for measuring consumers' preferences.

3. Results

1) Summary

- ▶ With international regulations on seafood quality and safety as well as regulations imposed by each nation increasingly becoming stringent, it is necessary to take a preemptive approach against potential non-tariff barriers including the establishment of regular monitoring system.
- ▶ This study extracted problems surrounding the seafood quality and safety management system.
 - (Quality management) This study identified problems as follows; insufficient performance of the Seafood Quality Certification System, the absence of price premium of certified seafood products, the lack of effectiveness of seafood quality manager system and poor application of seafood standards to actual fields.
 - (Safety management) This study found problems as follows; insufficient overall coordination in case of seafood safety related accident, blind spot of safety management found in the production stage, vulnerable safety management compared to livestock products and the lack of awareness on the Seafood Traceability System as well as HACCP in Aquaculture farms
- ▶ Consumers possess an extremely low awareness on the governmental seafood certification system, while considering freshness and safety as the most important factor in consuming seafood, all of which should be reflected in improving relevant systems.

- The result of Delphi survey on experts show that tasks such as improving the sanitary and safety management in fishery products auction house at the place of origin and distributing the cold chain system turn out to be significantly urgent than other improvement tasks.
- ▶ This study presented a basic direction for improving seafood quality and safety management system from the perspectives of consumer, producer and the government, while listing 4 implementation strategies and 15 specific action plans.
- (Consumer) Laying the foundation for consuming high-quality and safe fishery products
- (Producer) Building the foundation for enhancing added-value and market value of seafood, diversifying sale channels and securing the competitiveness in global exports by strengthening seafood quality and safety management
- (Government) Promoting the effectiveness and enhancing the internal stability of quality and safety management administration by maximizing social welfare through the reduction of food safety related incidents
- (Implementation Strategy) This study suggested 15 specific action plans for the following implementation strategies in 4 sectors; ① harmonizing with international regulations and enhancing export competitiveness, ② improving seafood quality management system, ③ reforming seafood sanitary and safety management system and ④ advancing quality and safety management in preparation for Post COVID-19 era.

2) Policy suggestions and relevant activities

- ▶ Given the fact that the current Agricultural and Fishery Products Quality Control Act alone cannot ensure the effectiveness of the seafood quality and safety management, this study proposed the legislation of the Fishery Products Sanitary and Safety Management Act which reflects the special characteristics of seafood.
- ▶ The study proposed the establishment of a sanitary and safety monitoring system to preemptively respond to potential non-tariff barriers including strengthening international regulations as well as seafood safety management regulations imposed by each nation.
- ▶ The study also presented the necessity for amending the Fishery Products Distribution Act in order to respond to expanding contactless consumption and improving the quality and safety of seafood distributed via online since the outbreak of COVID-19.
- ▶ Besides, a number of measures were suggested including improving risk communication on seafood, innovating quality and safety management from all stage of seafood from catch to retail sales and organizing and expanding the manpower of the National Fishery Products Quality Management Service.
- ▶ Presented in the ‘The 3rd Food Safety Policy Forum’ organized by the Committee of Food Safety Policy (Subcommittee on Seafood) of the Office for Government Policy Coordination, the

result of this study will be actively utilized in further discussions for institutional improvements.

3) Expected benefits including policy contribution

- ▶ Improving the seafood quality and safety management system can contribute to strengthening export competitiveness of Korean seafood, stable supply of safe seafood to the public and increasing added value of the seafood industry.
- ▶ Furthermore, trust among the general public can be enhanced by strengthening the production stage of seafood to which quality and safety management has been prone to vulnerable as well as restructuring the governmental seafood certification system.