EXECUTIVE SUMMARY

A Study on Price Stabilization Measures for Seafood Products

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1. Purpose

- This study aims to formulate policy strategies for reducing price fluctuations and ensuring price stability of seafood and seafood products.
  - Examines the structural characteristics of seafood prices and current management systems through analysis of seafood price trends and review of domestic and international price management policies
  - Conducts surveys and analyzes perceptions and awareness levels regarding seafood prices among key stakeholders, including suppliers such as seafood processing companies and seafood importers, as well as consumers and producers
  - Identifies key factors and impacts of seafood price fluctuations and quantitatively analyzes their ripple effects to propose policy

tasks for mitigating seafood price volatility and ensuring price stabilization

2. Methodology

1) Academic methods

- This study employs key research methods including literature review, statistical data analysis, supplier and consumer surveys on price perceptions, analysis of key drivers and impacts of price fluctuations and their ripple effects, and price transmission analysis.
  - Through a comprehensive literature review, this study organizes prior research on food and seafood prices from both domestic and international sources. The study investigates current price volatility, seafood supply-demand conditions, household food expenditure patterns, and price stabilization policies and practices across different countries. These analyses provide both theoretical insights and empirical findings.
  - The quantitative analysis uses data from the Korea Customs and Trade Development Institute, Statistics Korea (covering fishery production, household finances, and consumer prices), Bank of Korea (producer and trade price indices), and Korea Agro-Fisheries & Food Trade Corporation (raw material consumption patterns). Using these data sources, the study quantitatively analyzes price fluctuations in seafood and seafood

products as well as the structure of food consumption expenditure.

- Surveys are conducted among suppliers, including seafood processors and importers, as well as consumers to assess their perceptions and awareness levels regarding seafood and seafood product price fluctuations. In-depth interviews with mackerel producers are also performed to explore specific field challenges and price formation mechanisms.
- Employing Input-output analysis, the study estimates the price ripple effects of changes in key variables, such as production factors including wages, exchange rates, and oil prices, on seafood product prices, other industries, and final demand. Furthermore, asymmetric price transmission analysis was conducted to test the asymmetry in price transmission structures across distribution stages during both price increases and decreases.

2) Policy-making Methods

▪ The research employs expert consultation, result validation, and industry-academia-government policy forums as primary instruments for policy formulation

- Expert advisory meetings were convened to identify the structure and volatility trends of seafood prices and the key factors driving price fluctuations.
- To ensure the validity and robustness of research findings, the study held consultation sessions with relevant experts who

assessed the analytical results and examined their potential for policy implementation.

- Policy forums were held with stakeholders from industry, academia, and government agencies to propose policy directions, institutional improvement tasks, and response measures for mitigating seafood product price volatility.

3. Result

1) Summary

▪ This study systematically diagnoses the status and causes of seafood price fluctuations and identifies the need for enhancing price indices and establishing a precise price management system for price stabilization.

- The analysis encompasses variation rates for each seafood price index, consumer price index item weightings, supply-demand dynamics and raw material consumption for processing, and food consumption expenditure trends. These findings provide policy implications for enhancing price indices and establishing a precise price management system to mitigate price fluctuations and ensure stabilization.
- Price index systems and item compositions differ across import, production, and consumption stages, which limit the analysis of price structures across these stages. This necessitates enhancing price indices through improved item linkage,

segmentation, and weighting methods.

- The use of imported raw materials is primarily driven by price competitiveness and the ability to supply. To address this, domestic seafood competitiveness must be strengthened by improving productivity and reforming distribution structures.
- Rising Engel coefficients increase concerns about food cost burdens for low-income households and deepening income inequality. This necessitates measures to mitigate income-based vulnerabilities and reduce food costs for low-income households in conjunction with seafood price stabilization policies.

▪ The study analyzes domestic and international price management policy cases and conducts surveys on stakeholder perceptions of seafood prices. Based on these analyses, it proposes measures to enhance the effectiveness of seafood price stabilization policies.

- Supplier survey results reveal that raw seafood material costs constitute a substantial proportion of processed seafood production costs. The survey also identifies a time lag in the transmission of raw material price changes to final retail prices. For imported products, production volumes in exporting countries are identified as the primary factor influencing price fluctuations.
- For processed seafood products heavily reliant on imported raw materials, price stabilization requires securing stable raw material supplies at consistent prices. At the same time, escalating labor costs represent another significant factor driving price

increases, calling for labor-saving measures such as automation.

- Low-income households show relatively lower seafood consumption shares, making them more vulnerable to seafood price fluctuations.
- Among seafood price stabilization initiatives, seafood discount policies have an experience rate of only approximately 30%. Despite their recognized importance, these policies are rated as having low effectiveness, suggesting that expanding discount programs and strengthening promotional efforts are critical for sustaining and growing the seafood consumption base.

▪ Quantitative analyses were performed to assess ripple effects of various price fluctuation factors and to examine price transmission patterns across distribution stages from import to consumption

- Input-output analysis demonstrates that shocks from wages, oil prices, and exchange rates are transmitted mainly through the aquaculture and processing sectors. Given their extensive forward and backward linkages, processed seafood products act as key pathways through which price shocks spread to other food and service sectors.
- In the price transmission process from import to final consumption, price increases are transmitted rapidly and strongly to consumer prices, while price decreases are reflected with delays and reduced magnitude. This asymmetry is statistically significant in both the short and long term.
- The mackerel case study shows that import and producer price

increases are transmitted strongly to consumer prices in the short term, while consumer prices exhibit downward rigidity during price declines. This indicates a structure in which rising supply costs are disproportionately concentrated on consumers.

- A comprehensive policy framework is required to address structural price shocks. In the short term, strategies include releasing stockpiles, implementing tariff quotas and flexible tariffs, establishing group purchasing and long-term shipping arrangements, and strengthening crisis monitoring. For the medium to long term, priorities include reducing processing costs, increasing distribution cost transparency, supplementing auction mechanisms while expanding direct trade, diversifying import sources, securing long-term supply contracts, and transitioning to alternative fuels.

▪ This study proposes basic directions and policy implementation tasks for mitigating and stabilizing seafood price volatility.

- Based on research findings from each chapter, the study establishes basic directions for seafood price stabilization and presents three major implementation strategies and nine detailed implementation tasks to achieve these goals.

2) Policy Recommendations and Policy-making Activities

▪ This study proposes government-level support and investment to mitigate and stabilize seafood price volatility, including the establishment and operation of an integrated and precise price stabilization system.

- A comprehensive price stabilization system is necessary to address volatility from supply factors such as catch volumes, climate change, oil prices, and exchange rates. Key elements include expanding seafood coverage in price indices with revised weightings, designating and intensively managing price-sensitive items, establishing price stability targets, and operating a 'Price Index Review Committee' to ensure objective index compilation and publication.

▪ Policy recommendations also include advancing seafood price stabilization programs while expanding an inclusive consumption base. This requires both improving existing initiatives and developing new policies to broaden consumer access.

- Existing price stabilization policies such as seafood stockpiling and purchasing, mutual discount programs, and quota tariffs have achieved partial success. However, strengthening and improvement in program design and operation are needed to enhance policy effectiveness.
- Customized price stabilization policies are particularly needed targeting small-scale seafood processing companies and low-income households that are vulnerable to price volatility.
- Existing data collection systems for processed seafood products provide insufficient detail by specific product categories, limiting the reliability of price analyses and evidence-based policy formulation. Addressing this gap requires refining the

processed food survey system and strengthening linkages with public data.

- In other words, core tasks for seafood price stabilization and consumption base expansion include: systematic improvement of existing price stabilization programs, policy supplementation targeting vulnerable groups and industries, and establishment of data-driven precise survey and analysis systems.

▪ This study recommends reforms to distribution and market structures as essential mechanisms for seafood price stabilization. Key measures include reducing inefficiencies throughout the distribution chain from overseas raw material imports to final consumption and improving price transmission structures.

- To ensure a stable supply of imported seafood raw materials replacing domestic sources, institutional mechanisms are needed.
- To stabilize seafood prices, securing stability at the raw material price stage is essential. Urgent priority should be given to reviewing and introducing financial support programs, particularly low-interest loans for purchasing domestic and imported seafood raw materials.
- Fluctuations in overseas raw material import prices, rising logistics costs, and exchange rate instability impose direct financial burdens on seafood processing companies. Therefore, implementing price management frameworks for both raw material procurement and processing sectors is necessary.

- When international commodity prices rise and exchange rates fluctuate, overseas supply chains face potential disruption. Contingency measures are essential and should encompass: leveraging existing flexible tariff systems for imported seafood, diversifying import sources to mitigate country-specific dependencies, simplifying emergency customs procedures, and stabilizing supply through FTA trade cooperation. Such interventions must be integrated with comprehensive supply chain resilience programs.

▪ **The study undertook efforts to translate seafood price stabilization measures into actionable policies;**

- Preliminary consultation with Ministry of Oceans and Fisheries officials (Dec. 24, 2024)
- KMI-Ministry of Oceans and Fisheries convening Fisheries Policy Council (Jan. 13, 2025)
- Expert meeting on quantitative analysis methods for developing seafood price stabilization measures (Mar. 26, 2025)
- Industry-academia-government council on research related to seafood price stabilization measures (May 14, 2025)
- Expert meeting to review analysis results of seafood price ripple effects and price transmission (Sep. 4, 2025)
- Regular meetings with industry representatives, ministry officials, and experts to propose policy tasks related to seafood price stabilization measures

3) Expected Outcomes including Policy Contribution

- This study contributes to enhancing seafood price management systems, formulating efficient policies, stabilizing seafood prices, and establishing strategic policy directions for national dietary stability.
- This study can be employed as fundamental data for evidence-based policy formulation through its quantitative analyses of seafood price fluctuation factors, ripple effects, and price perceptions among suppliers and consumers.
- Implementing these seafood price stabilization measures is expected to achieve three following objectives: strengthening policy credibility and implementation capacity, improving stability and welfare for households and industries, and enhancing resource and environmental sustainability. These combined outcomes would significantly improve policy effectiveness and efficiency.