

## SUMMARY

RESMI RUMENTA SIREGAR. The Development of Quality and Safety Control System for Fresh Fish in Jakarta. Supervised by SUGENG HARI WISUDO, SUGENG HERI SUSENO, and TRI WIJI NURANI.

Jakarta is the capital city of Indonesia, has a very strategic position in economic development. This city consists of a dense population which is a very potential market for fisheries products. The high demand for fresh fish causes the Jakarta local fisheries resources can't fulfill the demands of the people in Jakarta and its surroundings. This condition makes Jakarta become the marketing center of fresh fish.

The implementation of Good Handling Practices (GHdP) during distribution and marketing is required to maintain the fish quality and safety, to provide good quality fish for the consumer. Unfortunately, some inappropriate fish handling practices are still found during distribution and marketing. Therefore, low quality and unsafe fisheries products are still found in the domestic market. This problem certainly caused by various related aspects, so the comprehensive study is needed to know the real problems situation and create concrete action to solve this problem.

The purposes of this research are to identify the problem situation in quality and safety control system of fresh fish; to formulate the problems situation; formulating root definitions (RDs) and designing conceptual models; and formulate the strategies for monitoring the quality and safety of fresh fish in Jakarta domestic market. This research was conducted using the Hard System Methodology and also the Soft System Methodology (SSM) approach. The Hard System Methodology is used in describing the real problems in control system of Fresh fish quality and safety, and the SSM approach is used to provide solutions to the problems that have been identified. This study was carried out in five aspects include technical aspects, communication aspects, resource aspects, socio aspects, and institutio aspects.

The next steps are conducted according to the step of Soft System Methodology approach. Soft System Methodology approach is used to develop the quality and safety controlling system for fresh fish by established the problem situation based on understanding the problem situation in the previous steps; develop conceptual models and formulate strategies as alternative solutions to solve the problems in the quality and safety controlling system for fresh fish. The formulation of the problem is carried out using three analyzes, include intervention analysis, social analysis, and political analysis. The result is presented in a rich and detailed chart known as a rich picture.

The result show that the distribution and marketing channels of fresh fish in DKI Jakarta domestic market is not well organized. Several provisions in the policy need to be synchronized, especially those related to handling temperatures, testing parameters, as well as the quality and safety standards of fresh fish are different. Furthermore, the result also indicate that the implementation as well as the monitoring system of quality and safety for fresh fish in the domestic market have not been supported by adequate human resources and sufficient fund and facilities. Meanwhile, understanding and attitude of business actors to apply the policies are still inadequate. Some actors involved in controlling the quality and safety of fresh fish in the domestic

market in Jakarta include the government, the fishing port management, market management, and businessmen (fishermen and fish traders). The result also shown that some stakeholders have not played their role properly, which is the main cause of some problems on the quality and safety control system in the domestic market.

The third stage in the SSM approach is to compile Root Definitions (RDs), a systems thinking about the real world for the identified problem situation. Furthermore, a conceptual model was designed for each problem (stage 4 of SSM). Various problems in the control system for the quality and safety of fresh fish in the domestic market can be resolved by carrying out some transformation include rearrange the distribution and marketing system, adjust and revise the regulation of Seafood Quality and Safety Monitoring System in the domestic market, improve the monitoring for the quality and safety of fresh fish, as well as control the formaldehyde distribution.

The conceptual model is then compared with the *real world* to determine the desired improvement and the action plans to be carried out. These steps will produce various actions (action plans) as applied strategy for government to improve the implementation of Seafood Quality and Safety Monitoring System. These strategies include:

- 1) Organizing the distribution and marketing system of fresh fish, through the establish and impose the regulations of the distribution and marketing systems, improving understanding of the business actors, and conducting the regular data collection and supervision on fresh fish distribution and marketing activities;
- 2) Arranging the Seafood Quality and Safety Monitoring System through reviewing and making some improvements and adjustments to some standards in the policy of Seafood Quality and Safety Monitoring System.
- 3) Controlling the usage of formaldehyde in fish by controlling the formaldehyde distribution, increasing the knowledge and understanding of the fishermen as well as fish traders, and also collaborating with academics and researchers to find a safe-cheap-effective material for maintaining the fish quality.
- 4) Improving the seafood quality and safety monitoring system, through providing adequate facilities, improving the Good Handling Practicess knowledge of the fishermen and fish traders through the training and certification, developing fish coding systems during distribution and marketing, providing competent personnel and adequate facilities for routine monitoring, carry out quality monitoring consistently, and law enforcement in accordance with applicable regulations.

Each strategy is equipped with some action plans that can be carried out in certain period, either in the short, medium, and long periods. The action plans and strategies recommended in this research are expected to solve the problems in the implementation of the Fish Quality and Safety Monitoring System in the domestic market, to provide not only good quality fisheries products, but also their safety for consumption.

**Keywords:** domestic market, Jakarta, quality control, SSM approach