The purpose of this study is to develop a risk management framework for Indonesian small-scale shrimp farming. Prior to the development of the risk management framework, Indonesian shrimp farmers’ perception of risk and management strategies were examined using the data collected from a field survey in the north and south coast of East Java. Exploratory Factor Analysis (EFA) and Multivariate regression methods were used to determine the influence of farms characteristics on the perception of risk and management strategies.

A risk management framework was developed as a combination of the Business Process Model (BMP) and the risk management process by the AS/NZS ISO 31000:2009 standard. Based on the results, this study found that the farmers had six risk management options to deal with the risks in their shrimp farms. The framework allows the farmers to choose the optimal risk management strategies based on the degree of efficacy of management strategies. Specifically, the framework enables the shrimp farmers to measure, rank, analyses, and priorities the risk for treatment in their business.