

ABSTRACT

Indonesian Bureau of Logistics (Perum BULOG) is a government business entity established since 1967 that has the task of distributing and procurement of food for achieving food security in Indonesia. Perum BULOG has three pillars of food security in carrying out its duties. The three components are availability, accessibility and stability. In distribution and procurement activities, various kinds of risks can interfere with rice distribution. This study discusses the risks and risk mitigation in the distribution and procurement of rice. Distribution and procurement activities use the Supply Chain Operation Reference (SCOR) method. The Failure and Effect Analysis Mode (FMEA) is used to identify risk events, and the Analytical Hierarchy Process (AHP) is used to mitigate prioritized risks. To support and facilitate understanding of the company's condition, it is necessary to have a geographic information system on the distribution and procurement performance of Perum BULOG against the three pillars of Perum BULOG's food security.

The results of this study obtained sources of risk from the risk of distribution and procurement of rice. Selected risk sources for each food security attribute is given mitigation alternatives and priority values. In distribution activities, the availability and accessibility attributes, there are four mitigation alternatives, and for the stability attribute, there are three mitigation alternatives. In procurement activities, there are three mitigation alternatives on each attribute. Another result obtained in this study is the geographic system design that can show the performance of distribution and procurement activities towards food security.

Keywords: Distribution, Procurement, SCOR, FMEA, AHP, GIS