Abstract

As the China-ASEAN Free Trade Agreement (CAFTA) begun, many of their member’s commodity can enter Indonesia’s market freely. This is shown by the increasing import rate from China about 7.9% by the early of 2004 and it reached 19.77% at the end of 2009. Textile industries experienced the worst impact of all the other industry. Especially in domestic textile market which is slowly but surely begun to collapse, it is caused by the overflow of the incoming import product while the domestic product cannot compete with it. The research is conducted in East Java as it is one of the biggest market of textile industry in Indonesia. This research uses risk management approach supported by Failure Mode and Effect Analysis (FMEA) to assess the risk quantitatively. Then the risks are mapped to provide information about their critical level, of which to be mitigated. The mitigation process itself starts by modeling the existing condition using dynamic system, and followed by modeling any identified improvement scenarios. Research shows that the critical risks are: cotton’s availability, revitalization fund, workers supply, and the textile machine’s capability. The existing model shows East Java has 34.56% of total selling market share. The best result was given by the extending cotton plantation areal up to 45%, adding the worker supply up to 300%, and increasing the revitalization fund up to 200% which increased market share to 55.38% at the end of 5 years period.
Keywords: textile industry, CAFTA, risk management, FMEA, dynamic system