

APLIKASI SUPPLY CHAIN RISK MANAGEMENT (SCRM) UNTUK MITIGASI RISIKO PENURUNAN KUALITAS IKAN SEGAR

Freda Jodie Saputro¹, Adi Djoko Guritno², Henry Yuliando²

ABSTRAK

Kandungan air pada tubuh ikan menjadi media yang cocok untuk kehidupan bakteri pembusuk atau mikroorganisme lain, sehingga ikan cepat mengalami proses pembusukan. Aktivitas penanganan bahan dan kondisi lingkungan di sepanjang *supply chain* ikan tangkap berpengaruh terhadap risiko penurunan mutu. Untuk mengelola risiko gangguan di dalam *supply chain* ikan tangkap, diperlukan identifikasi risiko dan analisis risiko penurunan mutu ikan. Penelitian ditujukan untuk menentukan mitigasi risiko dan menganalisis struktur biaya logistik di setiap aktivitas *supply chain* ikan tangkap.

Metode penelitian dilakukan dengan *convenience sampling* dan *snowball sampling* melalui *indepth interview* kepada pelaku *supply chain*. Penelitian dilakukan di daerah pelabuhan perikanan tangkap di pesisir pantai utara dan selatan Pulau Jawa. Metode analisis risiko digunakan standard ISO 31000:2009, sedangkan struktur biaya logistik dianalisis berdasarkan 6 komponen; *procurement*; *material handling*; *maintenance*; *inventory*; *transportation*; dan *information*.

Hasil identifikasi risiko dan analisis risiko diperoleh mitigasi risiko pada nelayan meliputi pemilihan nahkoda, pengoptimalan *fish finder*, kalkulasi perbekalan es, dan sortasi. Mitigasi risiko pemodal kapal adalah penjualan ikan bermutu rendah ke industri penepungan untuk menekan *loss*. Mitigasi risiko pedagang meliputi inspeksi dan sortasi bahan, serta penguatan jalur informasi pembelian. Mitigasi risiko pengolah meliputi investasi teknologi mesin dan peralatan dan *maintenance* rutin. Mitigasi risiko pengecer yaitu inspeksi bahan dan meningkatkan negosiasi pembelian. Proporsi komponen *transportation* sebesar 41,48% dan *procurement* sebesar 26,48% mendominasi dari total biaya logistik. Rekomendasi strategi dalam *supply chain* ikan tangkap dilakukan pada *tier* nelayan melalui efisiensi biaya *procurement* untuk dialokasikan pada aktivitas *information*.

Kata kunci: ikan tangkap, *supply chain*, mitigasi risiko, biaya logistik

¹Mahasiswa Departemen Teknologi Industri Pertanian, FTP UGM

²Staff Pengajar Teknologi Industri Pertanian, FTP UGM

APPLICATION OF SUPPLY CHAIN RISK MANAGEMENT (SCRM) FOR RISK MITIGATION OF FRESH FISH QUALITY LOSS

Freda Jodie Saputro¹, Adi Djoko Guritno², Henry Yuliando²

ABSTRACT

Moisture contained in fish is suitable environment for the growth of spoilage bacteria or other microorganisms, promotes fish deterioration. Material handling activity and environment condition throughout fish supply chain might affect in quality loss risk. To manage disruption risk in caught fish supply chain, fish quality loss identification and analysis are critically needed. This study aimed to measure risk mitigation and to analyze logistics cost structure in every step of caught fish supply chain activity.

Methods applied were convenience sampling and snowball sampling through indepth interview subjected on supply chain actors working in fishery ports in the north and south coast of Java Island. ISO 31000:2009 standard was used in risk analysis method, while logistic cost structure was analyzed based on 6 components of procurement; material handling, maintenance, inventory, transportation, and information.

Risk identification and analysis indicated that mitigation by fishermen included helmsman selection, optimization of fish finder utilization, calculation of ice blocks supply, and sortation. Risk mitigation by ship owners was low quality fish sales to flouring industry to reduce loss. Those by fish merchants included inspection, material sortation, and information purchase tracking enhancement. Risk mitigation by fish product processing unit was investment on machinery and equipment needed for maintenance routines, while those of retailer was material inspection and enhancement of purchase negotiation. Total logistic cost was dominated by transportation of 41.48% and procurement of 26.48%. Strategy recommendation for caught fish supply chain proposed to fishermen tier was procurement cost efficiency allocated to information activity.

Keywords: caught fish, logistics cost, risk mitigation, supply chain

¹Student of Agroindustrial Technology Department, Faculty of Agriculture Technology, Gadjah Mada University

² Lecturer Staff of Agroindustrial Technology Department, Faculty of Agriculture Technology, Gadjah Mada University