

ABSTRAK

Wilis Herlin Aryani, 2025. Implementasi Manajemen Risiko Rantai Pasok Komoditas Porang di Kabupaten Madiun dengan Mempertimbangkan Aspek Berkelanjutan. Skripsi. Program Studi Teknik Industri, FT, Universitas PGRI Madiun. Pembimbing (I) Ir. Yudha Adi Kusuma, S.T., M.T. (II) Halwa Annisa Khoiri, S.Si., M.Si.

Manajemen risiko dalam rantai pasok porang memiliki peran penting dalam menjaga keberlanjutan dan stabilitas komoditas, terutama di Kabupaten Madiun yang merupakan salah satu sentra produksi porang di Indonesia. Penelitian ini bertujuan untuk mengidentifikasi risiko-risiko yang terjadi dalam rantai pasok porang serta merumuskan strategi mitigasi yang tepat untuk masing-masing fase, yaitu pembibitan, penanaman dan pengolahan. Pemetaan risiko dilakukan berdasarkan model *Supply Chain Operations Reference* (SCOR) yang mengelompokkan proses rantai pasok ke dalam lima aktivitas utama, yaitu *Plan, Source, Make, Delivery* dan *Return*. Sedangkan metode analisis yang digunakan adalah *House of Risk* (HoR) yang terdiri dari dua tahap, yaitu tahap pertama mengenai identifikasi dan penilaian risiko, sedangkan tahap kedua adalah penentuan prioritas mitigasi risiko. Data diperoleh melalui penyebaran kuesioner yang terlibat langsung dalam rantai pasok porang. Hasil penelitian menunjukkan bahwa risiko utama berbeda pada setiap fase, seperti tingginya biaya pemberdayaan bibit dan minimnya fasilitas penyimpanan pada fase pembibitan, fluktuasi harga dan keterbatasan sarana produksi pada fase penanaman serta kurangnya alat dan ketergantungan pada pasar mentah pada fase pengolahan. Pemilihan rekomendasi implementasi mitigasi risiko disusun berdasarkan nilai ETD (*Effectiveness to Difficulty Ratio*) dengan mempertimbangkan efektivitas, kemudahan pelaksanaan dan relevansinya terhadap kondisi lapangan. Pada fase pembibitan, diperoleh lima strategi mitigasi dengan nilai 63,5% terhadap total efektivitas mitigasi. Fase penanaman menghasilkan delapan strategi prioritas dengan kontribusi efektivitas sebesar 60%. Sedangkan pada fase pengolahan, tiga strategi utama yang diprioritaskan berkontribusi sebesar 67,4 %.

Kata kunci: Manajemen Risiko, SCOR, House of Risk, Porang

ABSTRACT

Wilis Herlin Aryani, 2025. Implementation of Porang Commodity Supply Chain Risk Management in Madiun Regency with Consideration of Sustainability Aspects. Thesis. Industrial Engineering Study Program, FT, Universitas PGRI Madiun. Advisor (I) Ir. Yudha Adi Kusuma, S.T., M.T. (II) Halwa Annisa Khoiri, S.Si., M.Si.

Risk management in the porang supply chain plays an important role in maintaining the sustainability and stability of commodities, especially in Madiun Regency, which is one of the centers of porang production in Indonesia. This study aims to identify the risks that occur in the porang supply chain and formulate appropriate mitigation strategies for each phase, namely breeding, planting and processing. Risk mapping was conducted based on the Supply Chain Operations Reference (SCOR) model, which categorizes supply chain processes into five main activities: Plan, Source, Make, Delivery and Return. The analysis method used was the House of Risk (HoR) approach, which consists of two stages: the first stage involves risk identification and assessment, while the second stage focuses on determining risk mitigation priorities. Data was collected through a questionnaire distributed to those directly involved in the porang supply chain. The study result indicated that the primary risks vary across each phase, such as high seedling empowerment cost and insufficient storage facilities during the seedling phase, price fluctuations and production capacity limitations during the planting phase, and lack of equipment and reliance on the menrah market during the processing phase. The selection of risk mitigation implementation recommendations was based on the ETD (Effectiveness to Difficult Ratio) value, considering effectiveness, ease of implementation, and relevance to field conditions. In the seedling phase, five mitigation strategies were obtained with a value of 63,5% of the total mitigation effectiveness. The planting phase produced eight priority strategies with an effectiveness contribution of 60%. Meanwhile, in the processing phase, the three main strategies that were prioritized contributed 67,4%.

Keywords: Risk Management, SCOR, House of Risk, Porang