

**DEVELOPMENT OF RICE SUPPLY CHAIN STRATEGY USING THE
SUPPLY CHAIN OPERATIONS REFERENCE (SCOR) AND BEST
WORST METHOD (BWM) AT PT DAYA TANI SEMBADA, NGAWI,
EAST JAVA**

ABSTRACT

Food security is a strategic issue in Indonesia, particularly for rice commodities that have experienced a production decline of 3.16% and an increase in demand of 0.78% during 2020–2024. PT Daya Tani Sembada, a rice processing company located in Ngawi, East Java, faces supply chain instability caused by fluctuating paddy supplies and mismatches with market demand. This condition is further exacerbated by Planning inefficiencies, quality degradation of stored paddy, and the use of low-quality raw materials that increase production costs.

This study aims to evaluate the supply chain performance of PT Daya Tani Sembada and determine priority improvements using the Supply Chain Operations Reference (SCOR) model and the Best Worst Method (BWM). The SCOR model was employed to map and assess the performance of each supply chain process, while BWM was applied to identify improvement priorities based on time, cost, and quality aspects.

The research results indicate that the company's supply chain performance is generally good, with most metrics achieving a value of 100%. However, the three lowest metrics—S1 (40%), M6 (88%), and M8 (88%)—reveal weaknesses in the source and make processes. Based on the Best Worst Method (BWM) analysis, Activity A3, which focuses on ensuring that production outputs meet quality standards, is identified as the top priority for improvement with a weight of 0.487. The development strategy is directed toward the implementation of a digital-based quality control system, the strengthening of partnerships with farmers, and the integration of supply chain information systems to achieve a more efficient and sustainable system. With the proposed improvement recommendations, it is expected that the company can enhance its production efficiency so that rice availability can be consistently maintained.

Keywords: *Food Security, Supply chain, SCOR, BWM.*

**PENYUSUNAN STRATEGI RANTAI PASOK BERAS MENGGUNAKAN
METODE *SUPPLY CHAIN OPERATIONS REFERENCE* (SCOR) DAN
BEST WORST METHOD (BWM) DI PT DAYA TANI SEMBADA,
NGAWI, JAWA TIMUR**

INTISARI

Ketahanan pangan menjadi isu strategi di Indonesia, khususnya pada komoditas beras yang mengalami penurunan produksi sebesar 3,16% dan peningkatan permintaan 0,78% pada tahun 2020–2024. PT Daya Tani Sembada, perusahaan pengolahan beras di Ngawi, Jawa Timur, menghadapi ketidakstabilan rantai pasok akibat fluktuasi pasokan gabah dan ketidaksesuaian dengan permintaan pasar. Kondisi ini diperburuk oleh inefisiensi perencanaan, penurunan kualitas gabah akibat penyimpanan, serta penggunaan bahan baku berkualitas rendah yang meningkatkan biaya produksi.

Penelitian ini bertujuan untuk menganalisis kinerja rantai pasok PT Daya Tani Sembada dan menentukan prioritas perbaikan menggunakan metode *Supply Chain Operations Reference* (SCOR) dan *Best Worst Method* (BWM). Model SCOR digunakan untuk memetakan dan mengukur kinerja setiap proses rantai pasok, sedangkan BWM diterapkan untuk menentukan prioritas perbaikan berdasarkan aspek waktu, biaya, dan kualitas.

Hasil penelitian menunjukkan bahwa kinerja rantai pasok perusahaan secara umum baik, dengan sebagian besar metrik bernilai 100%. Namun, tiga metrik terendah, yaitu S1 (40%), M6 (88%), dan M8 (88%), menunjukkan kelemahan pada proses *source* dan *make*. Berdasarkan analisis BWM, aktivitas A3 memastikan hasil produksi sesuai standar kualitas menjadi prioritas utama perbaikan dengan bobot 0,487. Strategi pengembangan diarahkan pada penerapan sistem pengendalian mutu berbasis digital, penguatan kemitraan dengan petani, serta integrasi sistem informasi rantai pasok untuk mewujudkan sistem yang lebih efisien dan berkelanjutan. Dengan saran perbaikan yang diberikan, diharapkan perusahaan dapat meningkatkan efisiensi produksinya sehingga ketersediaan beras dapat terus terjaga.

Kata kunci: Ketahanan Pangan, Rantai Pasok, SCOR, BWM