

ANALISIS KINERJA RANTAI PASOK PADA PROSES PEMBIBITAN UNTUK KEGIATAN REVEGETASI LAHAN PASCATAMBANG BATU BARA DI PT BUKIT ASAM TBK TANJUNG ENIM, SUMATERA SELATAN

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INTISARI

Penambangan batu bara memiliki peran penting bagi perekonomian Indonesia, tetapi juga menimbulkan dampak lingkungan, seperti kerusakan lahan pascatambang. Untuk mengatasi masalah ini, PT Bukit Asam Tbk mendirikan fasilitas pusat pembibitan guna memasok bibit untuk kegiatan revegetasi. Namun, pengelolaan rantai pasok pembibitan ini menghadapi tantangan karena kurangnya alur kegiatan yang terstruktur dan indikator penilaian kinerja yang jelas. Hal ini menyebabkan proses pembibitan menjadi kurang efektif. Penelitian ini bertujuan untuk (1) mengidentifikasi dan memetakan alur proses rantai pasok, (2) mengukur kinerja rantai pasok pembibitan, dan (3) menganalisis indikator prioritas dengan kinerja rendah pada rantai pasok pembibitan. Penelitian ini menggunakan SCOR (*Supply Chain Operation Reference*) 12.0 untuk mengidentifikasi alur proses dan menentukan indikator kinerja, AHP (*Analytical Hierarchy Process*) digunakan untuk pembobotan metrik kinerja, dan *Snorm de Boer* digunakan untuk normalisasi hasil pengukuran.

Pengukuran kinerja rantai pasok menunjukkan polarisasi performa; KPI pada proses hulu (*Source* dan *Plan*) umumnya memuaskan, namun tantangan signifikan ditemukan pada KPI perencanaan internal (*Production Planning Fulfillment Rate*) dan operasional hilir (*Delivery Fulfillment Rate* dan *Replanting Volume*). Secara spesifik, *Survival Rate* untuk bibit Gelam, Johar, Mahoni, dan Saga tergolong rendah, menjadikannya prioritas utama perbaikan berdasarkan analisis AHP. Analisis mendalam mengidentifikasi akar masalah pada tiga area strategis: ketidaksesuaian metode produksi bibit terhadap kebutuhan biologis yang berbeda, kelemahan sistem perencanaan internal, dan kerentanan operasional hilir terhadap faktor eksternal. Usulan perbaikan yang diajukan mencakup pengembangan Standar Operasional Prosedur (SOP) spesifik per jenis tanaman, penyusunan jadwal produksi harian terstruktur, serta peningkatan strategi manajemen risiko operasional.

Kata Kunci: Kinerja Rantai Pasok, Pembibitan, *Supply Chain Operation Reference*, *Analytical Hierarchy Process*.

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SUPPLY CHAIN PERFORMANCE ANALYSIS OF NURSERY OPERATIONS FOR POST-MINING COAL LAND REVEGETATION AT PT BUKIT ASAM TBK, SOUTH SUMATRA

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ABSTRACT

Coal mining plays a crucial role in Indonesia's economy but also causes significant environmental damage, such as post-mining land degradation. In response to this problem, PT Bukit Asam Tbk established a nursery center facility to supply seedlings for revegetation activities. However, the management of this nursery supply chain faces challenges due to a lack of a structured workflow and clear performance indicators. This has made the nursery program less effective. This study aims to (1) identify and map the supply chain process flow, (2) measure the nursery supply chain performance, and (3) analyze the nursery supply chain performance. The research utilized SCOR (Supply Chain Operation Reference) 12.0 to identify the process flow and determine key performance indicators. The Analytical Hierarchy Process (AHP) was used for weighting performance metrics, and the Snorm de Boer method was applied to normalize the measurement results.

The supply chain performance measurement indicates a polarization of performance; KPIs in the upstream processes (Source and Plan) are generally satisfactory, but significant challenges are found in internal planning KPIs (Production Planning Fulfillment Rate) and downstream operations (Delivery Fulfillment Rate and Replanting Volume). Specifically, the Survival Rate for Gelam, Johar, Mahogany, and Saga seedlings is categorized as low, establishing it as the top priority for improvement based on the AHP analysis. In-depth analysis identifies the root cause in three strategic areas: mismatch between seedling production methods and the differing biological needs of various species, weakness in the internal planning system, and vulnerability of downstream operations to external factors. Proposed improvements include developing Standard Operating Procedures (SOPs) specific to each plant species, establishing structured daily production schedules, and enhancing operational risk management strategies.

Keywords: Supply Chain Performance, Nursery, Supply Chain Operation Reference, Analytical Hierarchy Process.

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