

ANALYSIS OF MARKET WASTE REDUCTION PERFORMANCE AT THE NITEN INTERMEDIATE TREATMENT FACILITY (ITF), BANTUL REGENCY

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ABSTRACT

Background: *The increasing generation of market waste has become one of the major challenges in waste management in Bantul Regency. The Intermediate Treatment Facility (ITF) Pasar Niten serves as a waste management facility where waste is processed before the residual waste is transported for further treatment. However, the amount of waste reduction achieved through waste management activities at ITF Pasar Niten has not yet been quantitatively evaluated. Therefore, this study was conducted to assess the waste management performance of the facility.*

Objective: *To determine the waste reduction achieved through waste management activities at ITF Pasar Niten, Bantul Regency.*

Methods: *This study employed a descriptive quantitative design. Samples were collected using a total sampling technique, involving all market waste delivered to ITF Pasar Niten during an eight-day observation period in accordance with SNI 3964:2025. Data were collected through direct weighing of incoming waste, utilized waste, and residual waste. Data were analyzed descriptively to determine the quantity of incoming waste, utilized waste, residual waste, and the percentage of waste reduction.*

Results: *During the eight-day observation period, a total of 8,981 kg of market waste was received by ITF Pasar Niten, with an average of 1,122.63 kg/day. Of the total waste received, 5,955 kg (66.31%) was processed into compost, 2,110 kg (23.52%) was utilized as raw material for Refuse Derived Fuel (RDF), and 76 kg (0.85%) consisted of recyclable materials sold to collectors. The total residual waste generated was 828 kg, with an average of 103.5 kg/day (9.22%).*

Conclusion: *ITF Pasar Niten achieved a waste reduction rate of 90.78% through waste sorting, composting, recovery of recyclable materials, and the production of Refuse Derived Fuel (RDF). Consequently, only 9.22% of the incoming waste remained as residual waste requiring further treatment.*

Keywords: *market waste, waste reduction, Intermediate Treatment Facility*

ANALISIS REDUKSI SAMPAH PASAR PADA *INTERMEDIATE TREATMENT FACILITY* (ITF) PASAR NITEN, KABUPATEN BANTUL

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ABSTRAK

Latar belakang: peningkatan timbunan sampah pasar menjadi salah satu tantangan dalam pengelolaan sampah di Kabupaten Bantul. *Intermediate Treatment Facility* (ITF) Pasar Niten berperan sebagai fasilitas pengolahan sampah sebelum residu diangkut ke Tempat Pemrosesan Akhir (TPA). Namun, besarnya reduksi sampah yang dicapai melalui proses pengolahan di ITF Pasar Niten belum diketahui secara kuantitatif sehingga diperlukan pengukuran untuk mengevaluasi kinerja pengelolaan sampah di fasilitas tersebut.

Tujuan: menghitung besarnya reduksi sampah pasar melalui proses pengolahan di ITF Pasar Niten, Kabupaten Bantul.

Metode: jenis penelitian ini adalah penelitian deskriptif dengan pendekatan kuantitatif. Pengambilan sampel menggunakan teknik *total sampling* terhadap seluruh sampah pasar yang masuk ke ITF Pasar Niten selama delapan hari pengamatan sesuai SNI 3964:2025. Data dikumpulkan melalui penimbangan langsung terhadap jumlah sampah masuk, sampah yang diolah atau dimanfaatkan, dan residu.

Hasil: total sampah yang masuk ke ITF Pasar Niten selama delapan hari pengamatan sebesar 8.981 kg dengan rata-rata 1.122,63 kg/hari. Sampah yang dimanfaatkan terdiri atas 5.955 kg (66,31%) yang diolah menjadi kompos, 2.110 kg (23,52%) yang dimanfaatkan sebagai bahan baku *Refuse Derived Fuel* (RDF), dan 76 kg (0,85%) material anorganik layak jual. Total residu yang dihasilkan sebesar 828 kg atau rata-rata 103,5 kg/hari (9,22%).

Kesimpulan: ITF Pasar Niten mampu mereduksi sampah pasar sebesar 90,78% melalui proses pemilahan, pengomposan, pemanfaatan sampah anorganik, dan pengolahan menjadi bahan baku RDF sehingga hanya 9,22% sampah yang menjadi residu dan memerlukan penanganan lebih lanjut.

Kata kunci: reduksi sampah, sampah pasar, *Intermediate Treatment Facility*