Analysis of Waste Management in Cirebon's Rattan Industry in the Context of Sustainability

Novya Chandra Putri

Magister Desain, Fakultas Industri Kreatif, Universitas Telkom

Jl. Telekomunikasi No.1, Terusan Buah Batu, Bandung, Jawa Barat. 40257

ABSTRACT

Indonesia is one of the world's largest rattan producers, and Cirebon Regency is a center for the rattan industry and is known for its high-quality products. This industry is important in strengthening the local economy by creating jobs, supporting small and medium-sized enterprises, and significantly contributing to the country's export sector. However, the production process in this industry generates waste in the form of rattan scraps, dust, weaving residues, liquid waste, and solid waste, and most of it is not managed optimally. This study aims to analyze the potential for developing value-added products from rattan waste in the Cirebon rattan industry by applying a cradle-to-cradle framework to identify opportunities to transform waste into resources, reduce environmental impacts, and create added value for the local community. Mix-method research methodology was used in this study, involving field observations, in-depth interviews with industry stakeholders, and literature reviews to identify appropriate waste management practices. The study results indicate that efficient waste classification will encourage the utilization of industrial waste at each industrial scale. The findings include identifying rattan waste, categorizing waste, and managing waste at each industrial scale. This study contributes to the optimal utilization of rattan industrial waste by providing recommendations for waste management tailored to the industry's capabilities. The research aims to promote sustainability in the rattan industry by recommending more integrated waste management. Further research is needed to determine the commercial potential of rattan waste-based products.

Keywords: rattan, rattan industry, sustainability, waste management