



Development of the Bestari Green Waste Bank: Integration of Creative Economy and Green Economy in Serang City

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Abstrak

Penelitian ini menganalisis strategi pengembangan Bank Sampah Hijau Bestari di Kota Serang melalui integrasi ekonomi kreatif sebagai penggerak utama transisi menuju ekonomi hijau. Dalam menghadapi krisis manajemen limbah perkotaan, diperlukan pergeseran paradigma dari model linear "ambil-pakai-buang" menuju model sirkular yang memberikan nilai tambah pada material sisa. Dengan menggunakan metode kualitatif deskriptif, penelitian ini mengevaluasi mekanisme operasional dan dampak sosio-ekonomi dari program bank sampah tersebut melalui observasi lapangan dan studi dokumen. Temuan penelitian menunjukkan bahwa penerapan elemen kreativitas dalam pengolahan limbah anorganik mampu mentransformasi komoditas limbah yang awalnya bernilai rendah menjadi produk kriya bernilai ekonomi tinggi. Proses *upcycling* ini secara signifikan berkontribusi pada reduksi volume residu yang dikirim ke tempat pemrosesan akhir, sekaligus menciptakan diversifikasi pendapatan bagi masyarakat lokal. Secara teoretis, integrasi ini membuktikan bahwa sinergi antara kreativitas manusia dan tata kelola lingkungan merupakan kunci dalam mencapai keberlanjutan ekonomi hijau di tingkat tapak. Implikasi penelitian menyarankan pentingnya penguatan kapasitas desain dan sinkronisasi kebijakan pemerintah daerah untuk memperluas skala dampak ekonomi dan ekologi dari model ini.

Kata Kunci: *Bank Sampah, Ekonomi Kreatif, Ekonomi Hijau, Kota Serang, Pengelolaan Limbah.*

Abstract

This study analyzes the development strategy of the Bestari Green Waste Bank in Serang City through the integration of the creative economy as the main driver of the transition to a green economy. Facing the urban waste management crisis, a paradigm shift is needed from the linear "take-use-dispose" model to a circular model that adds value to waste materials. Using descriptive qualitative methods, this study evaluates the operational mechanisms and socio-economic impacts of the waste bank program through field observations and document studies. The research findings indicate that the application of creativity elements in inorganic waste processing can transform waste commodities that were initially low in value into craft products with high economic value. This upcycling process significantly contributes to reducing the volume of residue sent to the final processing site, while creating income diversification for the local community. Theoretically, this integration proves that the synergy between human creativity and environmental governance is key to achieving green economic sustainability at the grassroots level. The implications of this research suggest the importance of strengthening



design capacity and synchronizing local government policies to expand the scale of the economic and ecological impacts of this model.

Keywords : *Waste Bank, Creative Economy, Green Economy, Serang City, Waste Management.*

Introduction

Serang City, as the center of growth in Banten Province, is facing increasing ecological pressure along with the escalation in the volume of domestic waste. Systemically, the failure of urban waste management is rooted in the persistence of the conventional linear "collect-transport-dispose" paradigm. This model is no longer relevant considering the limited land for final processing and high operational costs, which trigger the urgency of transitioning to a community-based management system. Waste banks emerged as a strategic instrument to carry out de-coupling between economic growth and environmental degradation. Bestari Green Waste Bank exists as a manifestation of efforts to internalize the negative externalities of waste into productive economic assets through an innovative approach.

The main challenges faced by the Bestari Green Waste Bank include fluctuations in public participation and low economic bargaining power if waste is only positioned as a raw commodity. Without added value interventions, customers tend to lose motivation because the economic incentives from selling dry waste are often not commensurate with the sorting efforts undertaken. Therefore, a mechanism is needed that can multiply the economic value of waste to ensure the program's financial and social sustainability.

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Waste Bank Concept and Community Participation

Waste banks are a form of social institutional engineering that aims to change people's behavior in waste management. Budiarto et al. (2025) emphasized that waste banks play a crucial role in improving environmental quality by promoting proper waste disposal and reducing the volume of waste entering final processing sites (TPA), while creating economic opportunities for customers and managers. Empirically, the success of waste banks is strongly influenced by socio-economic determinants; as identified in literature studies by various researchers (2024), household participation in waste reduction is determined by the level of community knowledge, availability of supporting facilities, and the significance of economic incentives received by customers. Recent research also shows that an inclusive social-community approach, regular outreach activities, and the involvement of environmental cadres are key factors in increasing active community participation in the waste bank program.

The creative economy acts as a catalyst in the transformation of waste into products of functional and aesthetic value. Fatimah et al. (2020) argue that innovation through upcycling methods for plastic and paper materials not only reduces the environmental burden but also opens up new market niches. Creativity allows leftover materials to exceed the limits of their original value, creating unique products that are

competitive in the creative economy market.

The implementation of a green economy aims to realize social welfare and economic equality while significantly reducing environmental risks. Recent research shows that through professional and integrated waste bank management, waste can be converted into a pillar of a strong community economy, while encouraging the creation of green jobs at the local level. Nugraha,et.al.,(2024), Nurhayati, et.al., (2025), This is in line with the finding that sustainable waste management behavior at the household level is a fundamental foundation for creating a comprehensive circular economic system in urban areas. Arista,et.al.,(2023), Rogowska et.al (2024). Furthermore, active community participation in the waste bank program is not only driven by economic incentives, but also by increasing environmental awareness and understanding of the importance of responsible waste management. Dewi et al.,(2024).

Implentation Methods

This research uses a descriptive qualitative approach to dissect the phenomenon of creative economy integration in waste management. Research Location: The study focused on the Serang City area, which was chosen because of the complexity of its urban waste dynamics. The research focus is directed at the operational model and development strategy of the Bestari Green Waste Bank. Data Collection Technique: Primary data was obtained through participatory observation of operational activities, while secondary data was collected through literature study of the program document "Development of the Bestari Green Waste Bank" to analyze data on program achievements and structure.

Results and Discussion

Profile and Mechanism of The Bestari Green Waste Bank

Bestari Green Waste Bank implements a systematic governance structure, including core management, a weighing team and a creative division in charge of product development. The work flow starts from the sorting process at the source (household), depositing, and converting the weight of waste into savings balance. The main differentiation of this waste bank lies in the separation of material flows: waste that has industrial value is directly sold to large collecting partners, while material with aesthetic potential is channeled to the creative division for further processing.

Creative Economy Integration Strategy : Creativity as a Value Multiplier

In this model, creativity is positioned as a "value multiplier" which changes the characteristics of waste from bulk commodities into positional/functional goods. This strategy is carried out through:

- a. Material Transformation (Upcycling): Turning plastic sachets or used newspapers into products such as ethnic bags or light furniture. This breaks dependence on fluctuations in global waste prices which are often low.
- b. Co-Creation and Empowerment: Involving local communities, especially women, in the creative production process thereby creating green jobs.
- c. Improved Bargaining Position: Through a touch of modern design, waste products are able to enter the middle to upper market segment, where the selling price is no longer determined by the weight of the material (per kg) but rather by the design value and narrative of the product's sustainability.

Impact on the Green Economy in Serang City

This integration significantly supports the achievement of a green economy by

reducing pressure on regional landfills and increasing people's purchasing power. The following is an estimate of the transformation of economic value through creative intervention:

Table 1. Estimation of the transformation of economic value through creative intervention

Types of Creative	Product Waste Generated	Commodity Value (IDR/kg)	Estimated Product Sales Value (IDR/Unit)	Value Added Ratio
Plastic Sachets	Shopping Bag Packaging, Premium Wallets	Rp 500 – 1.000	Rp 50.000 - Rp 250.000	Very High
Used Paper	Newspaper Craft Baskets, Stationery	Rp 1.500 - 2.500	Rp 25.000 - Rp 75.000	High
Patchwork Waste	Craft Products, Accessories	Rp 2.000 - 3.000	Rp 15.000 - Rp 50.000	Medium
Plastic Bottles (PET)	Interior Decoration, Hydroponic Pots	Rp 3.000 - 4.500	Rp 10.000 - Rp 35.000	Medium

Sustainability Analysis : A Circular Economy Perspective

The Bestari Green Waste Bank model is a circular economy prototype that meets the Triple Bottom Line principle. From an environmental aspect, this program has succeeded in containing waste material so that it does not pollute the ecosystem. From the social side, there is strengthening of social capital through community collaboration. Economically, this model demonstrates resource efficiency where customer income growth is no longer linear with the amount of waste produced, but with the quality of creativity applied. This creates institutional synergies that strengthen local economic resilience to external market shocks.

Conclusion

The integration of the creative economy in the operations of the Bestari Green Waste Bank in Serang City has proven effective in increasing the economic value of waste and public participation. This approach has succeeded in turning environmental burdens into circular economic opportunities that increase people's income while supporting sustainable development goals (SDGs). Creativity has proven to be a differentiating factor that makes the waste bank model more competitive and financially sustainable.

Based on the findings of this study, several policy recommendations can be proposed to enhance the effectiveness and sustainability of the Bestari Green Waste Bank program in Serang City. First, policy integration. The Serang City Government needs to integrate Bestari Green Waste Bank data into the National Waste Management Information System (SIPSN) to synchronize regional waste reduction targets. Second, fiscal incentives. Providing incentives in the form of reduced waste levies or tax relief for business actors/RTs who are active customers of creative-based waste banks. Third, strengthening the Supply Chain. Facilitating strategic partnerships between waste banks and the hotel or office sector in Serang City to absorb creative recycled products as part of environmentally friendly procurement policies.

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