

Increasing Legal Awareness of Waste Bank in Bekasi, Indonesia: How can legal counsel make a difference for environmental sustainability?

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Abstract

Waste banks have emerged as pivotal entities in promoting sustainable waste management practices, particularly in urban areas like Bekasi, Indonesia. However, their effectiveness is contingent upon a robust legal framework that supports their operations and ensures environmental sustainability. This paper examines the role of legal counsel in augmenting the efficacy of waste banks in Bekasi towards achieving environmental sustainability objectives. Through an analysis of the existing legal landscape governing waste management and waste bank operations in Bekasi, this study identifies gaps and challenges that hinder



their effectiveness. Furthermore, it explores how legal counsel can provide invaluable guidance and support to waste bank operators, local communities, and relevant stakeholders. By leveraging legal expertise, waste banks can navigate regulatory complexities, address compliance issues, and advocate for policy reforms conducive to sustainable waste management practices. The paper also highlights the importance of legal education and capacity-building initiatives aimed at enhancing legal literacy among waste bank stakeholders. By empowering stakeholders with legal knowledge and support, waste banks can optimize their contributions to waste reduction, resource recovery, and environmental conservation efforts in Bekasi. Ultimately, this paper underscores the transformative role of legal counsel in advancing environmental sustainability through the operational effectiveness of waste banks in Bekasi, Indonesia, and offers insights for similar contexts globally.

KEYWORDS *Regulation, Community Participation, Waste Bank, Legal Counsel*

Introduction

The management of waste is a pressing issue worldwide¹, particularly in urban areas like Bekasi, Indonesia. With rapid urbanization and industrialization, the volume of waste generated has surged, posing

¹ Waste management is a critical global challenge, driven by escalating population growth, urbanization, and unsustainable consumption patterns. Improper waste disposal leads to environmental degradation, pollution, and health hazards. Inefficient waste management systems exacerbate climate change through greenhouse gas emissions from landfills. Marginalized communities often bear the brunt of these environmental injustices. To address this issue, comprehensive strategies integrating waste reduction, recycling, and sustainable disposal methods are essential. Promoting awareness, behavioral change, and international collaboration is crucial to establishing a circular economy that minimizes waste generation and fosters environmental sustainability, ensuring a healthier planet for present and future generations. See Michael D. LaGrega, Phillip L. Buckingham, and Jeffrey C. Evans. *Hazardous Waste Management*. (Illinois: Waveland Press, 2010); Nickolas J. Themelis, "An overview of the global waste-to-energy industry." *Waste Management World* (2003): 40-48.

significant environmental and social challenges.² In response to this escalating problem, waste banks have emerged as innovative solutions, promoting waste reduction, recycling, and community participation. However, the effectiveness of waste banks hinges not only on operational efficiency but also on robust legal frameworks that govern their operations and impact.³

This paper examines the community service initiatives undertaken through legal counseling, focusing on Law No. 18 of 2008 concerning Waste Management and its implications for community participation and associated challenges. Specifically, it delves into the purpose behind the drafting of Law No. 18 of 2008, which aims to reframe waste as a valuable resource. Despite thirteen years having passed since the enactment of this law, effective waste handling and management, mandated by Article 6 of Law No. 15 of 2008, remain suboptimal, posing obligations on both the government and local authorities. Law No. 18 of 2008 serves as a cornerstone for the structural and managerial framework of waste in Indonesia, providing a legal foundation for government programs in waste management. However, the gap between policy formulation and implementation persists, highlighting the need for enhanced strategies to bridge this divide and ensure the efficient execution of waste management initiatives at both national and local levels.⁴

² Xuemei Bai, et al. "Linking urbanization and the environment: Conceptual and empirical advances." *Annual Review of Environment and Resources* 42 (2017): 215-240; Ji Han, et al. "Innovation for sustainability: toward a sustainable urban future in industrialized cities." *Sustainability Science* 7 (2012): 91-100; Jean-Jacques Dethier, "Trash, cities, and politics: urban environmental problems in Indonesia." *Indonesia* 103 (2017): 73-90.

³ Suyud Warno Utomo, Tri Edhi Budhi Soesilo, and Herdis Herdiansyah. "Changes community behavior in management of household waste in Bekasi City, Indonesia." *IOP Conference Series: Earth and Environmental Science*. Vol. 716. No. 1. IOP Publishing, 2021; S. Susilowati, and H. Herdiansyah. "Application of waste bank use in reducing household waste in sub-urban area?." *Journal of Physics: Conference Series*. Vol. 1381. No. 1. IOP Publishing, 2019.

⁴ Christia Meidiana, and Thomas Gamse. "Development of waste management practices in Indonesia." *European Journal of Scientific Research* 40, no. 2 (2010): 199-210; Ashok V. Shekdar, "Sustainable solid waste management: An integrated approach for Asian countries." *Waste Management* 29, no. 4 (2009): 1438-1448.

Despite the existence of legal frameworks aimed at addressing the waste problem, it remains a persistent social issue, seemingly insurmountable. Questions arise regarding the efficacy of these laws and why the waste problem persists unabated. The situation is particularly dire in Bekasi, where the city government grapples with the daily challenge of handling approximately 500 tons of waste that cannot be transported to the designated landfill at the Sumur Batu site. Consequently, uncollected garbage accumulates on roadsides, in markets, and within residential areas, severely disrupting daily life for residents. In response to this pressing issue, one potential solution lies in the R3 program (*reuse, reduce, and recycle*), implemented through initiatives such as waste banks. This paper focuses on community counseling efforts at the Wijaya Mustika Waste Bank in Mustikajaya Village, selected for its exemplary community engagement and status as a pioneering waste bank in Bekasi. By exploring the successes and challenges encountered at this waste bank, valuable insights can be gained into strategies for mitigating the waste crisis and promoting sustainable waste management practices in Bekasi and beyond.⁵

Law No. 18 of 2008 on Waste Management has been in effect for thirteen years, serving as a crucial legal foundation for addressing various waste-related challenges in the Jakarta area. The primary objective of waste management, as stipulated in Article 4 of the law, is to enhance public health, improve environmental quality, and transform waste into a valuable resource.

One notable implementation of this legal mandate is the establishment of waste banks through regional regulations by several local governments. Waste banks represent a tangible manifestation of community involvement in converting waste into '*resources*'. However, a significant issue arises from the lack of sustained programs and community

⁵ Suci Emilia Fitri, and Ray Ferza. "Dinamika, Problematika, dan Implikasi Kebijakan Pengelolaan Sampah Plastik di Daerah." *Jurnal Kebijakan Pembangunan* 15, no. 1 (2020): 11-24; Andi Hasad, and Elma Yulius. "Pengembangan Peran Pemberdayaan Masyarakat Berbasis Komunitas." *Devosi* 1, no. 2 (2020): 28-31; Ricky Febri Saputra, Rahmat Hidayat, and Rudyk Nababan. "Implementasi Program Peningkatan Perilaku Pemilahan Sampah Rumah Tangga, Revitalisasi "Smart Waste Management", dan Konversi "Waste to Energy" di Kota Bekasi." *Jurnal Administrasi dan Kebijakan Publik* 6, no. 1 (2021): 65-92.

education regarding the concept of waste as a resource. While waste banks have been successful in managing waste and highlighting its economic value, there remains a crucial gap in understanding that economic value is not the sole objective of waste managements.⁶

Furthermore, it is imperative to continuously educate the community on waste management, emphasizing that its primary aim is to enhance the quality of life for all members of society. In this context, the involvement of academics through community service initiatives, as part of their community services program, becomes indispensable. Through academic engagement, communities can receive ongoing education and support aimed at fostering a deeper understanding of waste management objectives and promoting sustainable practices for the benefit of society as a whole.

This paper presents a community service initiative centered around legal counseling for environmental sustainability as mandated by Law No. 18 of 2008. The *Wijaya Mustika Waste Bank*, situated in Mustika Jaya Village, Mustika Jaya District, Bekasi City, was selected as the focal point for this endeavor. Bekasi City was chosen due to its suboptimal waste management practices, resulting in ongoing waste-related challenges. Legal counseling, particularly concerning Law No. 18 of 2008, is deemed necessary to enlighten the community about their role in addressing waste issues by transforming waste into valuable resources.

Despite the explicit provisions of Law No. 18 of 2008, which emphasize community responsibility in waste management, there persists a lack of understanding among many individuals, coupled with limited access to relevant information. Hence, the imperative for legal counseling to bridge this knowledge gap and empower the community to actively

⁶ Purwanto Purwanto. "Pengelolaan "Bank Sampah" Berbasis Masyarakat sebagai Alternatif Meningkatkan Ekonomi Warga RT 004/RW 09, Cikarang Utara-Bekasi." *Academics in Action Journal of Community Empowerment* 1, no. 1 (2019): 27-37; Bintang Narpati, Indra Lubis, and Hasanuddin Hasanuddin. "Penerapan Bank Sampah Sebagai Wujud Adanya Nilai Ekonomi dengan Prinsip 4R (Reduce, Reuse, Recycle, Replant) Studi: RW 003 Kelurahan Harapan Baru Bekasi Utara." *Jurnal Abdimas PLJ* 1, no. 1 (2021): 22-28; Elvira Suryani, "Manajemen Pengelolaan Bank Sampah di Kota Bekasi." *Jurnal Administrasi dan Kebijakan Publik* 6, no. 1 (2016): 63-75.

participate in waste management efforts. The selection of the Wijaya Mustika Waste Bank stems from its recognition as one of the top-performing waste banks in Bekasi City.

Additionally, the Sumur Batu landfill serves as a pivotal element in Bekasi's waste management infrastructure, providing an optimal disposal site for the city's waste. Through legal counseling at this waste bank, the aim is to enhance community awareness, foster a deeper understanding of waste management laws and principles, and ultimately facilitate the conversion of waste into valuable resources. By empowering individuals with legal knowledge and promoting community engagement, this initiative endeavors to contribute to more effective and sustainable waste management practices in Bekasi City and beyond.

Government Responsibility in Waste Management

The burgeoning global population and evolving consumption habits have precipitated a surge in the volume, variety, and complexities of waste. As populations expand and needs diversify, the generation of waste escalates proportionally. Indeed, the symbiotic relationship between humans and waste is inextricable; not all human necessities are metabolized or absorbed by the body, inevitably resulting in waste production. Consequently, waste management emerges as a critical responsibility of governments worldwide, aimed at mitigating the adverse repercussions of waste accumulation.⁷

Addressing waste-related challenges entails a multifaceted approach, encompassing both waste management strategies and preventative measures through heightened public awareness. Defined as discarded material that no longer serves a purpose or is deemed undesirable, waste

⁷ Lorenzo Giusti, "A review of waste management practices and their impact on human health." *Waste management* 29, no. 8 (2009): 2227-2239. See also Lia Kusumaningrum, et al. "Comparison of Waste Management between Indonesia and South Korea." *Journal of Global Environmental Dynamics* 1, no. 1 (2020): 13-19; Denny Ardiansyah Pribadi, et al. "How does the government manage waste? Analysis of waste management in Bantul Regency, Indonesia." *IOP Conference Series: Earth and Environmental Science*. Vol. 943. No. 1. IOP Publishing, 2021.

primarily stems from human activities rather than biological processes. The escalation in waste production necessitates comprehensive waste management initiatives, with the overarching goal of either repurposing waste into economically viable materials or transforming it into environmentally benign substances.⁸

Efficient waste management practices are indispensable in minimizing the environmental impact of waste accumulation. By converting waste into resources or rendering it harmless to the environment, waste management initiatives contribute to environmental sustainability and resource conservation. However, alongside waste management efforts, preventive measures are equally crucial. Increasing public awareness regarding responsible consumption, waste reduction, and recycling fosters a culture of sustainability, thereby mitigating the proliferation of waste at its source.⁹

In addition, waste itself, has evolved into a pressing national issue, necessitating comprehensive and integrated management strategies that span from upstream to downstream sectors. Such measures are essential not only to harness economic benefits but also to safeguard public health, ensure environmental safety, and foster behavioral change within communities. Central to effective waste management is the establishment of legal certainty, delineation of responsibilities and authorities among governmental bodies, local administrations, communities, and the business sector. These foundational principles are meticulously addressed in the formulation of Law No. 18 of 2008 concerning Waste

⁸ Dwini Handayani, et al. "How does household characteristics influence their waste management?." *E3S Web of Conferences*. Vol. 74. EDP Sciences, 2018. See also Antonius Priyo Nugroho Sulami, Takehiko Murayama, and Shigeo Nishikizawa. "Current Issues and Situation of Producer Responsibility in Waste Management in Indonesia." *Environment & Natural Resources Journal* 16, no. 1 (2018): 70-81.

⁹ Arief Fadhilah, et al. "Kajian Pengelolaan Sampah Kampus Jurusan Arsitektur Fakultas Teknik Universitas Diponegoro." *Modul* 11, no. 2 (2011): 62-71. See also Stephanie B. Borrelle, et al. "Predicted growth in plastic waste exceeds efforts to mitigate plastic pollution." *Science* 369, no. 6510 (2020): 1515-1518; Laurent Lebreton, and Anthony Andrady. "Future scenarios of global plastic waste generation and disposal." *Palgrave Communications* 5, no. 1 (2019): 1-11.

Management, reflecting a concerted effort to orchestrate a harmonized and efficient waste management framework.¹⁰

The responsibilities outlined for both the Government and local governments in Article 5 of Law No. 18 of 2008 concerning Waste Management encompass a comprehensive array of tasks. These include:

1. Fostering and enhancing public awareness regarding waste management practices.
2. Initiating and supporting research endeavors aimed at developing technologies for waste reduction and management.
3. Facilitating, fostering, and executing initiatives to reduce, manage, and harness the potential of waste.
4. Undertaking waste management activities and facilitating the establishment of infrastructure and facilities for waste management.
5. Promoting and facilitating the utilization of waste processing for beneficial purposes.
6. Supporting the adoption of locally-specific technologies developed within communities to address waste reduction and management.
7. Coordinating efforts among governmental entities, communities, and the business sector to ensure seamless integration in waste management endeavors.

These delineated responsibilities underscore the concerted efforts required from governmental bodies at various levels to effectively address waste management challenges, ensuring a holistic approach that encompasses awareness, research, infrastructure development, technology adoption, and inter-agency coordination.¹¹

¹⁰ Ferdricka Nggeboe, "Undang-Undang No. 18 Tahun 2008 Tentang Pengelolaan Sampah: Perspektif Penerapan Sanksi dan Peraturan Daerah." *Jurnal Hukum PRIORIS* 5, no. 3 (2016): 265-275; Purwaning Rahayu Sisworini, "Implementasi Pasal 29 Ayat (1) Huruf E Undang-Undang Nomor 18 Tahun 2008 tentang Pengelolaan Sampah Terkait dengan Kesadaran Hukum Masyarakat dalam Membuang Sampah." *Novum: Jurnal Hukum* 4, no. 3 (2017): 181-181.

¹¹ See Surahma Asti Mulasari, Adi Heru Husodo, and Noeng Muhadjir. "Kebijakan pemerintah dalam pengelolaan sampah domestik." *Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal)* 8, no. 8 (2014): 404-410; Khofifah Kurnia Amalia Sholihah, and Bambang Hariyanto. "Kajian Tentang Pengelolaan Sampah di Indonesia." *Swara Bhumi* 3, no. 3 (2020): 1-9.

For over a decade, the government has been entrusted with explicit duties and authorities under Law No. 18 of 2008. The Ministry of Environment has utilized this legislation as a foundational framework for crafting policies concerning waste handling and management. Collaborating closely with local governments, these policies are designed to fulfill the mandates outlined in the law. This collaborative effort is exemplified by the enactment of Government Regulation No. 81 of 2012, focusing on the Management of Household Waste and Similar Waste Household Waste, and Regulation of the Minister of Environment of the Republic of Indonesia Number 13 of 2012.¹²

Embedded within these regulations is a steadfast commitment to the core objectives of waste management, which are twofold. *Firstly*, there is an emphasis on preserving environmental functions and safeguarding public health. This underscores the paramount importance of mitigating the adverse environmental and health impacts associated with improper waste management practices. *Secondly*, there is a concerted effort to reframe waste as a valuable resource. By viewing waste through this lens, efforts are directed towards harnessing its potential for reuse, recycling, and resource recovery, thereby contributing to sustainable development objectives.

Through these legislative and regulatory mechanisms, the government seeks to establish a comprehensive and coherent framework for waste management, one that prioritizes environmental preservation, public health, and the transformation of waste into a valuable asset. Such initiatives underscore the government's commitment to addressing waste management challenges and fostering sustainable development practices across the nation.

¹² See also Resti Oktafiasari, "Pengelolaan Bank Sampah Ditinjau dari Peraturan Menteri Negara Lingkungan Hidup Nomor 13 Tahun 2012 Tentang Pedoman Pelaksanaan Reduce, Reuse, dan Recycle Melalui Bank Sampah (Studi Kasus Bank Sampah Hijau Daun Mojojoto Kota Kediri)". *Thesis* (Kediri: IAIN Kediri, 2022).

Community Responsibility in Waste Management

The rapid urbanization and population growth observed in many areas, including Bekasi City, have led to a significant uptick in waste generation. As population density increases, so does the demand for more efficient waste management strategies.¹³ It's a fundamental reality that waste is an inevitable byproduct of human activity. Whether it's meeting daily needs or industrial production processes, waste is an inherent consequence of human existence. Therefore, the surge in urban population and industrialization naturally correlates with an escalation in waste generation.¹⁴

The government's efforts to address the waste problem are inherently reliant on active community participation. Despite possessing the necessary facilities, infrastructure, and budget for waste management, the government's efficacy is limited without the engagement of the local community. The government possesses the authority to mobilize communities and implement awareness-raising programs, thereby underscoring the indispensable need for synergy between governmental bodies and local residents.¹⁵

Changing people's behavior, particularly towards adopting environmentally friendly practices, is a formidable task. However, leveraging legal instruments with coercive power can play a pivotal role in driving this behavioral change. Legal frameworks serve as a means to enforce regulations and incentivize compliance, thereby shaping community attitudes and actions towards waste management.

Moreover, local governments play a crucial role in directing and facilitating community involvement in waste management initiatives. By utilizing legal instruments as a foundation, local authorities can guide

¹³ Prijono Tjiptoherijanto, "Urbanisasi dan pengembangan kota di Indonesia." *Populasi* 10, no. 2 (1999): 57-72.

¹⁴ Huabo Duan, et al. "Construction debris becomes growing concern of growing cities." *Waste Management* 83 (2019): 1-5.

¹⁵ Siti Zahrotun Nisa, and Dedy Riyadin Saputro. "Pemanfaatan Bank Sampah sebagai upaya Peningkatan Pendapatan Masyarakat di Kelurahan Kebonmanis Cilacap." *Bantenese: Jurnal Pengabdian Masyarakat* 3, no. 2 (2021): 89-103.

residents towards viewing waste not as something useless, but as a valuable resource. Initiatives such as waste banks and composting, which rely heavily on community participation, can be promoted and incentivized through legal frameworks.

According to data from the Ministry of Environment, the volume of waste has exhibited a significant upward trajectory over the past three years. In 2010, the daily volume of waste stood at 200,000 tons, soaring to 490,000 tons per day by 2012, resulting in an annual total of 178,850,000 tons. This trend is corroborated by RISKESDAS 2010 data, which reveals that households in Indonesia primarily resort to six waste handling methods. These include transportation by cleaners (23.4%), burial (4.2%), composting (1.1%), and others. In the context of Bekasi City, only 40% of the waste generated is transported to the Sumur Batu landfill, accounting for 400-800 tons per day. Alarmingly, this figure continues to escalate, with the waste generation rate increasing by 0.12% annually.¹⁶

It is projected that by 2020, each person in Indonesia will contribute an estimated 2.1 kg of waste daily to landfills. The data underscores a troubling reality: over 50% of the total waste produced comprises household waste, with a mere 24.5% being adequately managed, leaving the remainder to pollute the environment on a daily basis.¹⁷

One avenue for waste management is the R3 program (re-use, reduce, and recycle), aimed at fostering community involvement through the establishment of waste banks across various regions. However, the effectiveness of this program has yet to reach its full potential. To optimize its impact, there must be a concerted effort to raise public awareness

¹⁶ Najmi Nafisa Tuzzahra, and Siti Ainun. "Kajian Sisa Umur Pakai Tempat Pemrosesan Akhir (TPA) Sumur Batu Kota Bekasi dengan Optimalisasi Sistem Pengolahan." *Jurnal Teknik Lingkungan* 24, no. 1 (2018): 41-60.

¹⁷ Erwin M. Pribadi, "Pengembangan Investasi di Bidang Industri Pengolahan Sampah yang Berbasis Lingkungan." *Infomatek* 12, no. 4 (2010): 233-242; Winarto Eka Wahyudi, and Tawaddudin Nawafilaty. "Pendampingan Pemuda Investasi Sampah Berbasis Media Sosial di Desa Jugo, Sekaran, Lamongan." *Jurnal Abdimas Berdaya: Jurnal Pembelajaran, Pemberdayaan dan Pengabdian Masyarakat* 1, no. 2 (2020): 73-81.

regarding waste management as a fundamental community responsibility for maintaining cleanliness and orderliness in the environment.

Elevating community responsibility in waste management to prevent environmental pollution necessitates ongoing education and socialization efforts. By imparting the importance of a healthy environment in fostering the well-being of individuals and producing quality citizens, communities can be galvanized to take proactive measures in waste management. Through continuous education and awareness-raising initiatives, communities can embrace their role as stewards of the environment, thereby contributing to a cleaner and more sustainable future.

The community's lack of knowledge about waste management leads to various misconceptions and ineffective practices in reducing waste volume. For instance, some resort to burning piles of garbage to diminish waste volume, unaware of the detrimental environmental consequences. Burning waste not only fails to alleviate landfill burdens but also exacerbates pollution due to the emission of harmful smoke. Similarly, others opt to simply discard waste in trash cans, relying on janitors to handle disposal. However, this approach not only perpetuates waste accumulation but also fosters unsanitary conditions and unpleasant odors in the environment. Such practices not only undermine efforts to manage waste effectively but also pose health risks and degrade environmental quality.¹⁸

Waste banks, an unconventional yet innovative concept, operate at the intersection of finance and waste management. Unlike traditional financial institutions regulated by the Financial Services Authority, waste banks fall under the purview of the Ministry of Environment and Forestry. Governed by Regulation of the Minister of Environment of the Republic of Indonesia Number 13 of 2012, waste banks are defined in Article 1 Number 2 as facilities dedicated to the sorting and collection of waste. However, their mandate extends beyond mere collection; waste banks are

¹⁸ Fadilah Nur Amaliah, "Peran Pengelola Bank Sampah Ramah Lingkungan (RAMLI) dalam Pemberdayaan Masyarakat di Perumahan Graha Indah Kota Samarinda." *Learning Society: Jurnal CSR, Pendidikan dan Pemberdayaan Masyarakat* 1, no. 2 (2020): 18-22.

tasked with recycling and/or reusing collected waste to generate economic value.

Despite their nomenclature, waste banks diverge from conventional banking institutions, assuming forms such as cooperatives or foundations as stipulated in Article 8 of the aforementioned regulation. The operational mechanism of waste banks entails meticulous waste sorting, with organic and non-organic waste being the primary categories. While customers can dispose of organic waste themselves, non-organic waste is transported to the waste bank for processing.

At waste banks, waste is not merely disposed of but rather transformed into economic value through a series of processes. Initially, waste is meticulously weighed and assessed, after which it is sold to collectors in exchange for monetary compensation. Additionally, waste banks often engage in creative endeavors, transforming non-organic waste into various products such as bags and tablecloths, which are subsequently sold for profit. Customers maintain ownership of the funds generated from these transactions, akin to traditional banking practices, albeit with nominal operating costs deducted.

Furthermore, some waste banks extend their services to include the processing of organic waste into fertilizer, thus completing the cycle of waste utilization. Despite the overarching goal of waste reduction, with the principles of reduce, reuse, and recycle guiding operations, there exists a notable oversight when the sole focus shifts to monetary gains. This oversight is evident when customers prioritize monetary incentives over waste reduction efforts, choosing to discard items indiscriminately under the belief that all waste can be monetized, neglecting the potential for reuse. Such practices undermine the fundamental principle of reuse, perpetuating a cycle of waste generation rather than sustainable waste management.¹⁹

¹⁹ Helena J. Kristina, "Model konseptual untuk mengukur adaptabilitas bank sampah di Indonesia." *J@Ti Undip: Jurnal Teknik Industri* 9, no. 1 (2014): 19-28; Donna Asteria, and Heru Heruman. "Bank sampah sebagai alternatif strategi pengelolaan sampah berbasis masyarakat di Tasikmalaya (Bank Sampah (Waste Banks) as an alternative of community-based waste management strategy in Tasikmalaya)." *Jurnal Manusia dan Lingkungan* 23, no. 1 (2016): 136-141.

Community Participation Through Wijaya Mustika Garbage Bank, Mustika Jaya Village, Bekasi City

1. Waste Bank: Solution for Environmental Sustainability

In essence, waste banks embody a unique concept where dry waste is collected, sorted, and managed akin to traditional banking practices, with waste itself serving as the currency. Ministerial Regulation No. 13 of 2012 outlines the principles of reduce, reuse, and recycle (3R) as essential strategies to mitigate waste generation, emphasizing activities aimed at waste reduction, reuse for similar or alternative purposes, and recycling to create new products.²⁰

As per the mandate of the ministerial regulation, waste banks serve as facilities for sorting and collecting recyclable and reusable waste with economic value. To implement this regulation, the Bekasi city government issued Mayor Decree No. 658 of 2014, establishing 102 waste banks across the city. These waste banks received financial assistance for facilities and infrastructure to ensure their effective operation²¹

Traditionally, waste was merely collected, transported, and disposed of in landfills, posing significant environmental hazards. However, through waste banks, individuals have the opportunity to deposit waste and earn money over time. This innovative approach not only incentivizes

²⁰ Asteria and Heruman. *See also* Yusa Eko Saputro, Kismartini Kismartini, and Syafrudin Syafrudin. "Pengelolaan Sampah Berbasis Masyarakat Melalui Bank Sampah." *Indonesian Journal of Conservation* 4, no. 1 (2016): 83-94; Hayat, Hayat, and Hasan Zayadi. "Model inovasi pengelolaan sampah rumah tangga." *JU-ke (Jurnal Ketahanan Pangan)* 2, no. 2 (2018): 131-141.

²¹ Badriya Hazam, Zulfan Saam, and Suardi Tarumun. "Implementasi Program Reduce, Reuse, Recycle (3R) Bank Sampah Permata Bunda dalam Pengelolaan Sampah di Lingkungan Sekolah Menengah Atas Kecamatan Pangkalan Kerinci." *Jurnal Ilmu Lingkungan* 14, no. 2 (2020): 142-152.

waste reduction and recycling but also contributes to environmental preservation.²²

By adopting a savings system within waste banks, waste management is revolutionized, providing an effective solution that engages the government, private sector, and community in addressing waste-related challenges in accordance with the unique characteristics of each locality.

2. Community Participation in Waste Management

One of the government's initiatives to foster community involvement in environmental conservation is the implementation of waste banks integrated with the 3R (*Reduce, Reuse, Recycle*) movement. Legal counseling sessions were conducted at the Wijaya Mustika Waste Bank, situated in Mustikajaya Village, Mustikajaya Sub-district, Bekasi City. The community, represented by the mothers of Mustika Jaya residents, actively participates in weekly activities at the Wijayakusumah Waste Bank.²³

These women exemplify the potential for citizen-led environmental stewardship in urban areas and contribute significantly to resolving environmental challenges. Their engagement begins by delivering inorganic waste to the waste bank's secretariat, which also serves as the RW secretariat. Subsequently, they collectively sort household waste according

²² Abdul Karim Halim, "Pengelolaan Bank Sampah dengan Berbasis R4 (Reduce, Reuse, Recycle, Replant)." *Jurnal Obor Penmas: Pendidikan Luar Sekolah* 1, no. 1 (2018): 45-55.

²³ Asteria, and Heruman. "Bank sampah sebagai alternatif strategi pengelolaan sampah berbasis masyarakat di Tasikmalaya (Bank Sampah (Waste Banks) as an alternative of community-based waste management strategy in Tasikmalaya)." *See also* Ahmad Kholil, Mirtawati Budiaman, and Aam Amaningsih Jumhur. "Waste management based on 3R in mutiara waste banks Bekasi City Indonesia." *World Environment* 8, no. 3 (2018): 71-76; Andante Hadi Pandyaswargo, and Dickella Gamaralalage Jagath Premakumara. "Financial sustainability of modern composting: the economically optimal scale for municipal waste composting plant in developing Asia." *International Journal of Recycling of Organic Waste in Agriculture* 3 (2014): 1-14.

to specific categories, ensuring proper grouping, cleaning, weighing, and eventual sale of the materials.²⁴

Nevertheless, limited public awareness about waste management remains a significant obstacle. Addressing this challenge is crucial, particularly in impoverished areas, where empowering individuals to process waste into income-generating goods can alleviate economic hardships. Waste banks play a pivotal role in enhancing public awareness and encouraging households to manage their waste effectively, thereby fostering a culture of environmental responsibility and sustainable waste management practices within communities.²⁵

²⁴ Women play a critical role in sustainable development and environmental protection on various fronts. Historically, women have been primary stewards of natural resources and have possessed traditional knowledge about sustainable agricultural practices, water management, and biodiversity conservation. As primary caregivers in many societies, women have a profound impact on household consumption patterns and resource management decisions, influencing sustainable practices within their families and communities. Moreover, women often bear the brunt of environmental degradation and climate change, particularly in rural areas where they are heavily reliant on natural resources for their livelihoods. Empowering women economically, politically, and socially is crucial for sustainable development, as their inclusion in decision-making processes ensures more holistic and effective environmental policies and initiatives. Furthermore, women's active participation in environmental advocacy, conservation efforts, and sustainable development projects is instrumental in driving positive change. Women's organizations and grassroots movements worldwide are leading initiatives to address environmental challenges, promote renewable energy, advocate for environmental justice, and foster sustainable livelihoods. Their involvement brings diverse perspectives, innovative solutions, and community-based approaches to environmental protection and conservation efforts. Additionally, promoting gender equality and women's rights is essential for achieving the Sustainable Development Goals (SDGs), as empowering women leads to more resilient and sustainable societies. Thus, recognizing and supporting the role of women in sustainable development and environmental protection is paramount for creating a more equitable and environmentally sustainable future. See Tri Nurmega Oktarina, and Anisa Yulianti. "The Role of Women in Sustainable Development and Environmental Protection: A Discourse of Ecofeminisme in Indonesia". *Indonesian Journal of Environmental Law and Sustainable Development* 1, no. 2 (202): 107-38.

²⁵ Nurul Istiqomah, Izza Mafruhah, and Evi Gravitiyani. "Konsep Reduce, Reuse, Recycle dan Replace dalam Pengelolaan Sampah Rumah Tangga di Desa

Prior to the implementation of legal counseling, the focus of waste management at the Wijaya Mustika Waste Bank primarily centered around inorganic waste, much of which was sold to scrap collectors. However, through a series of formal and informal counseling sessions, a shift towards managing organic waste was initiated. Households began to process organic waste, predominantly wet waste, using a simple yet effective system. Organic waste is deposited into barrels equipped with faucets and decomposing agents to facilitate fermentation. Within a few days, the contents of the barrels decompose into a liquid fertilizer, which is then sold and utilized by local residents. This process has yielded positive outcomes, notably in the mitigation of foul odors and reduction of vermin in the surrounding environment.

The success of waste banks in waste management is contingent upon continuous support and attention. With ongoing assistance, the accumulation of waste can be curtailed, thereby gradually addressing the waste problem, albeit with more advanced technologies than simple systems. In various locations, including the Ciamis Regency Public Housing and Environment Office, innovative approaches to waste management, particularly in the re-use process, have been implemented. For instance, efforts to empower rural communities by collecting used cooking oil for re-use as biodiesel fuel have been fruitful. Typically, used cooking oil is indiscriminately discarded, posing environmental hazards such as river pollution and environmental contamination. By educating waste bank residents about the value of used cooking oil and facilitating its collection for processing into biodiesel, significant strides can be made in waste management and environmental preservation. This innovative approach not only addresses environmental concerns but also provides economic opportunities for communities while fostering sustainable practices.²⁶

Polanharjo Kabupaten Klaten." *SEMAR (Jurnal Ilmu Pengetahuan, Teknologi, dan Seni Bagi Masyarakat)* 8, no. 2 (2019): 30-38.

²⁶ Dadang Hermansyah, "Minyak Jelantah Bisa Ditabung Jadi Uang di Bank Sampah Ciamis", *Detik News*, March 23, 2021. Retrieved from <<https://news.detik.com/berita-jawa-barat/d-5503912/minyak-jelantah-bisa-ditabung-jadi-uang-di-bank-sampah-ciamis>>. See also Amalia Yuli Astuti, Utaminingsih Linarti, and Gita Indah Budiarti. "Pengolahan limbah minyak

In the further context, human existence is characterized by a myriad of needs essential for survival and prosperity. As individuals attain a higher level of fulfillment, their prosperity and well-being are enhanced. At the core of human survival lies the fulfillment of basic needs—primarily food, clothing, and shelter—that not only sustain life but also ensure health and vitality. These fundamental requisites serve as the foundation upon which individuals build their livelihoods and pursue prosperity.²⁷

Conclusion

In conclusion, the waste problem in the Bekasi area can be effectively addressed through sustained implementation of programs aimed at transforming waste into a valuable resource, particularly those involving community participation such as the promotion of waste banks. The commitment of the local government is pivotal in resolving this issue. However, despite the establishment of waste banks, their optimal facilitation as mandated by laws and regulations has yet to be achieved, hindering community participation and public understanding of the overarching goal of waste management—enhancing human quality of life.

Legal counseling initiatives, like the one conducted, serve to motivate and empower the community to maximize the utilization of waste banks for household waste. Through innovative processes such as fermenting food waste into liquid fertilizer and transforming plastic waste into useful products, such as doormats, the Mustika Jaya village

jelantah menjadi lilin aromaterapi di bank sampah Lintas Winongo, Kelurahan Bumijo, Kecamatan Jetis, Kota Yogyakarta." *Spekta* 2, no. 1 (2021): 73-82; Wahyu Widhiarso, and Mahdiya Nayla. "Pemanfaatan Limbah Minyak Jelantah Kolaborasi dengan Bank Sampah Migunani Kauffman Yogyakarta." *Indonesian Journal of Community Services* 4, no. 1 (2022): 74-82; Ridfa Chairani, et al. "Partisipasi Masyarakat dalam Program Sedekah Sampah dan Minyak Jelantah." *Jurnal Kebijakan Publik* 13, no. 4 (2022): 399-403.

²⁷ Marhaeni Ria Siombo, *Dasar-Dasar Hukum Lingkungan dan Kearifan Lokal Masyarakat*. (Jakarta: Penerbit Unika Atma Jaya, 2015), pp. 18-19. See also Ega Rijal Mahardika, and Muhammad Azhary Bayu. "Legal Politics of Indonesian Environmental Management: Discourse Between Maintaining Environmental Sustainability and Economic Interests". *Indonesian Journal of Environmental Law and Sustainable Development* 1, no. 1 (2022): 1-28.

environment has significantly improved, with litter almost eradicated and waste transformed into economic assets.

In light of these findings, it is recommended that community participation programs, such as waste bank initiatives, be further encouraged and facilitated, with local governments providing assistance and support, including efforts to market products derived from the 3R (*Reduce, Reuse, Recycle*) process. By fostering collaboration between stakeholders and promoting sustainable waste management practices, significant strides can be made towards achieving a cleaner, healthier, and more prosperous community.

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