Research Article

Integration of Social Accounting: The Effectiveness of Waste Management at the Evergreen Waste Bank, Kupang City

Wizaldy Fabiano Hilnicputro[1*], Fransiskus Marlon Reu[2], Martina Kaisriani Rupa[3]

[1-3] Polytechnic State of Kupang, Indonesia
* Corresponding Author: e-mail : aldyputro27@gmail.com

Abstract: This study explores the integration of social accounting principles within community-based waste management practices at the Evergreen Waste Bank in Kupang City, East Nusa Tenggara, Indonesia. The research object focuses on the role of social and environmental accountability in improving the effectiveness of waste management systems at the grassroots level. Kupang City faces a persistent waste crisis, generating approximately 233 tons of waste per day, with only a small portion recycled effectively. This study addresses the problem of limited community participation, operational inefficiencies, and weak institutional support in local waste management initiatives. The research aims to evaluate how social accounting, when integrated with the 3R (Reduce, Reuse, Recycle) approach, can enhance environmental sustainability and socio-economic empowerment. Employing a qualitative phenomenological method, data were collected through in-depth interviews, field observations, and document analysis. Thematic analysis identified four key themes: (1) social awareness and environmental responsibility, (2) operational and technological challenges, (3) socio-economic empowerment through waste valorization, and (4) institutional and policy support. The findings reveal that the Evergreen Waste Bank contributes not only to waste reduction but also to local economic development and environmental education. However, its impact is constrained by manual data management and limited collaboration with local authorities. Synthesizing these results suggests that social accounting fosters transparency, accountability, and collective responsibility in environmental management. The study concludes that integrating social accounting into waste bank operations strengthens both community engagement and environmental governance. It recommends digital transformation, enhanced policy collaboration, and capacity-building initiatives to scale the model sustainably across Indonesian urban contexts.

Keywords: Circular Economy; Community Empowerment; Environmental Sustainability; Social Accounting; Waste Bank

1. Introduction

Environmental degradation and waste accumulation have emerged as critical global concerns over the past decades, especially in developing nations undergoing rapid urbanization. According to the United Nations Environment Programme (2023), the world produces over 2.24 billion tons of solid waste annually, and this number is expected to increase by 70% by 2050 if current consumption and disposal patterns continue. This escalation underscores a structural problem in the balance between economic growth and ecological stewardship an issue that situates social and environmental accounting as an essential instrument for achieving sustainability.

In the Indonesian context, the waste crisis is particularly acute. Data from the Ministry of Environment and Forestry (2022) indicate that Indonesia generates approximately 68 million tons of waste per year, with plastics accounting for 15% of total volume. Only about 11% of the waste is properly recycled, while the rest ends up in landfills or open dumping sites, leading to environmental and public health hazards.

This national predicament mirrors the challenges in Kupang City, East Nusa Tenggara (NTT), where daily waste production reaches 233 tons, yet only 260 tons per day are effectively managed (Loppo & Anna, 2024).

Kupang City's waste management dilemma reflects a systemic issue of limited infrastructure, low public awareness, and the absence of integrated accounting mechanisms that measure both environmental and social impacts. The city has repeatedly been listed among the

dirtiest medium-sized cities in Indonesia (KLHK, 2022). This reality highlights the need for innovative, community-driven solutions that combine ecological sustainability and social accountability. One such innovation is the establishment of waste banks (*bank sampah*), community-based enterprises that encourage residents to sort, collect, and recycle waste while receiving financial compensation for their efforts. These waste banks embody the principle of circular economy, where waste is viewed not as an end product but as a resource. Research by Kodriyah et al. (2024) found that digital-based waste banks not only improve waste collection efficiency but also enhance local income through transparent accounting and reporting systems.

Despite the success of waste bank initiatives in various Indonesian cities, empirical studies reveal uneven effectiveness in their management structures and accountability frameworks. For instance, the Evergreen Waste Bank in Kupang, established in 2022, faces technological and marketing constraints that hinder its operational performance. The reliance on manual recording systems limits transparency and weakens public trust. These challenges call for the integration of social accounting a framework that goes beyond financial metrics to include social and environmental dimensions of performance (Kusumaningtyas, 2014; Putri et al., 2024). From a theoretical standpoint, this study is informed by Common-Pool Resource *(CPR)* theory, which posits that collective resource management, when embedded within local cultural and institutional contexts, can lead to more sustainable outcomes (Klingeren & Graaf, 2021). This perspective aligns with Indonesia's *Tri Hita Karana* philosophy, which emphasizes harmony among humans, nature, and spirituality in sustainable development (Suprapto et al., 2025). These theories collectively frame the role of social accounting as a mediating mechanism between community participation and environmental stewardship.

Culturally, Kupang presents a unique social dynamic characterized by strong communal bonds but relatively low environmental literacy. Waste disposal practices are often influenced by traditional norms rather than regulatory frameworks. As Sayrani & Tamunu (2020) observed, local civic engagement in Kupang is reactive rather than proactive, with community involvement typically arising after environmental crises occur. Thus, fostering accountability and awareness through education and participatory waste management is essential to behavioral change. Social accounting offers an effective avenue to bridge this gap by translating ecological values into measurable social indicators. Through participatory financial and environmental reporting, community members can perceive the tangible benefits of their contributions, fostering a sense of ownership and moral responsibility toward the environment. This aligns with the findings of Aptasari et al. (2025), who argue that behavioral accounting frameworks can reduce "educated apathy" among community members, transforming awareness into active engagement.

However, literature on the integration of social accounting in waste bank operations remains limited, particularly in Eastern Indonesia. Most studies on environmental accounting and community waste management focus on urban centers such as Jakarta, Surabaya, or Yogyakarta, leaving a geographical and contextual gap (Irwan et al., 2024). This gap highlights the importance of investigating how social accounting principles can be localized within smaller, resource-constrained communities like Kupang. In methodological terms, qualitative inquiry provides the ideal lens to explore this issue, as it enables the researcher to uncover the lived experiences, motivations, and collective meanings that underpin community waste practices. By adopting a phenomenological approach, this research captures the subjective realities of waste bank managers and participants, interpreting their actions within broader environmental and cultural frameworks.

The study, therefore, aims to analyze the integration of social accounting principles in the effectiveness of waste management at the Evergreen Waste Bank in Kupang City. Specifically, it investigates how accounting practices, community engagement, and environmental awareness interact to shape sustainable waste governance. The analysis employs the 3R framework Reduce, Reuse, Recycle as both an operational and analytical lens.

Theoretically, this research contributes to the expansion of social accounting discourse in developing contexts by illustrating how community-based initiatives operationalize accountability beyond monetary metrics. Practically, it provides insights for policymakers and environmental practitioners on strengthening local waste management systems through participatory governance. Ultimately, this study seeks to demonstrate that sustainable waste management is not merely an environmental necessity but also a social transformation process anchored in collective responsibility and transparent accounting.

2. Literature Review
Social Accounting and Environmental Stewardship

Social accounting extends traditional accounting boundaries by incorporating environmental and social values into organizational performance (Gray et al., 2014). It emphasizes ethical responsibility, transparency, and sustainability as integral to decision-making. In Indonesia, this approach has been adapted within the green accounting framework, aligning financial practices with ecological goals (Putri et al., 2024). Recent studies emphasize integrating cultural and moral dimensions into environmental reporting. Suprapto et al. (2025) demonstrated how the *Tri Hita Karana* philosophy enhances social accounting's ethical base, embedding harmony between people, nature, and spirituality. Yet, its application at the community level particularly within informal waste systems remains underexplored, highlighting the novelty of this study's focus on local waste banks.

Community-Based Waste Management in Indonesia

Indonesia's waste management crisis stems from limited infrastructure and weak public engagement (KLHK, 2022). Initiatives such as *bank sampah* aim to address these gaps through community-based systems where waste is converted into savings or recyclable products (Kodriyah et al., 2024). These programs promote both economic empowerment and environmental responsibility. However, disparities persist across regions. Urban centers like Jakarta benefit from digitalized waste systems, while peripheral cities such as Kupang rely on manual practices. Irwan et al. (2024) observed that technological adaptation significantly enhances participation and efficiency. This study therefore explores how integrating social accounting can improve transparency and long-term sustainability in low-resource contexts like Kupang.

Theoretical Foundation: Common-Pool Resource (CPR) Theory

The Common-Pool Resource (CPR) Theory proposed by Ostrom explains how communities can collectively manage shared environmental resources through cooperation and accountability. It asserts that when communities establish local norms, monitoring, and equitable rules, resource management becomes more effective (Klingeren & Graaf, 2021). In the context of waste management, CPR theory helps conceptualize waste banks as community-based governance systems. Social accounting supports this model by documenting contributions, benefits, and impacts transparently. Yet, most CPR applications have focused on rural resources (water, forests), not urban waste making this study a theoretical extension into urban ecological governance.

Behavioral and Socio-Cultural Dimensions of Waste Governance

Waste management success depends not only on policy but also on social behavior and cultural values. Aptasari et al. (2025) noted that awareness alone often fails to drive consistent ecological behavior a phenomenon termed educated apathy. Without institutional and cultural reinforcement, environmental initiatives struggle to sustain momentum. In Kupang, environmental behavior is often reactive rather than preventive (Sayrani & Tamunu, 2020). Embedding social accounting in waste bank practices encourages participatory accountability, linking daily behavior with measurable ecological outcomes. This integration transforms awareness into tangible, community-driven environmental responsibility.

Sustainability and the 3R Framework

The 3R Principle (Reduce, Reuse, Recycle) forms the operational backbone of sustainable waste management. Mandated by Indonesia's Government Regulation No. 81/2012, it encourages producers and communities to minimize waste through resource efficiency and circular economy practices (Lapatta, 2024). When paired with social accounting, 3R programs become measurable and reportable, aligning environmental actions with social value creation (Umah, 2024). Waste banks such as Evergreen operationalize this by transforming recyclable materials into economic products like compost and ecobricks, although challenges remain in documentation, marketing, and scaling.

3. Research Method

This research adopted a qualitative phenomenological approach to explore how social accounting is integrated into community-based waste management practices at the Evergreen Waste Bank in Kupang City, Indonesia. The phenomenological design was chosen to uncover participants' lived experiences, perceptions, and values related to waste accountability and environmental sustainability. Kupang City, facing an average waste generation of 233 tons per day, provided a relevant social and environmental setting for examining the role of social accounting in improving collective waste governance and public awareness.

Data were collected through semi-structured interviews, participant observation, and document analysis. Interviews involved waste bank administrators, local residents, government representatives, and NGO partners, selected through purposive sampling to ensure relevance and depth of insight. Observations focused on daily operational activities such as waste collection, sorting, recording, and recycling, while document reviews included transaction ledgers, policy guidelines, and environmental reports to strengthen data triangulation. Ethical approval and informed consent were obtained prior to data collection.

Data were analyzed using Miles and Huberman's Interactive Model, which involves data reduction, data display, and conclusion drawing. Coding was conducted inductively to identify emerging themes and patterns such as community participation, accountability mechanisms, technological limitations, and environmental awareness. These themes were then interpreted using the Common-Pool Resource (CPR) framework and theories of social accounting, allowing researchers to understand how collective resource management can enhance transparency and sustainability at the community level.

To ensure research trustworthiness, the study employed Lincoln and Guba's criteria, including credibility through triangulation and member checking, dependability through an audit trail, and confirmability through reflexive journaling. The overall methodological process followed a systematic flow from identifying the waste management problem, collecting qualitative data, analyzing emerging patterns, to synthesizing findings into a theoretical model linking social accounting, community participation, and environmental accountability. This process produced an empirically grounded understanding of how social accounting can function as both a managerial and ethical tool in advancing sustainable waste governance.

4. Results and Discussion

Research Findings

Kupang City, the capital of East Nusa Tenggara Province, was identified by the Ministry of Environment and Forestry (KLHK) as one of Indonesia's dirtiest medium-sized cities in 2019 and again in 2022 under the Adipura Environmental Assessment Program. According to data from the Kupang City Environmental and Sanitation Office (DLHK), the total waste generation in 2022 reached 83,000 tons, of which only 58,000 tons were transported to the final disposal site (TPA). The remaining waste accumulated in public spaces, drainage systems, and informal dumping areas, creating persistent environmental and health hazards.

Figure 1. Accumulated Waste at Alak Landfill, Kupang City

Main Findings

From qualitative observations, in-depth interviews with key stakeholders (waste bank managers, community members, and government representatives), and documentation review, five main themes emerged that explain the dynamics of community-based waste management in Kupang City:

Limited Infrastructure and Operational Challenges

Field observations revealed that waste management facilities and infrastructure remain inadequate. Of the 42 garbage trucks allocated for waste transport, only 30 are operational, creating logistical bottlenecks in waste collection. A staff member of the DLHK stated:
"Even if we work from morning until night, there's still garbage left uncollected because the trucks are too few and some are already damaged."

This limitation directly affects the city's ability to achieve its cleanliness targets. Furthermore, there are insufficient temporary waste collection sites (TPS), causing household waste

to pile up for days. This finding reflects a systemic issue in municipal waste logistics, which hampers sustainability efforts despite policy intentions.

Community Awareness and Behavioral Patterns

Interviews with residents revealed **varying levels of environmental awareness**. While some neighborhoods have started segregating waste, others still rely on informal dumping practices. As one local resident shared:

"Sometimes we want to separate waste, but there are no bins for that. In the end, we just throw it away together."

This demonstrates a behavioral gap between awareness and practical ability, primarily caused by limited infrastructure and inconsistent government support. Social habits such as littering after market activities or discarding waste in rivers remain common, particularly in low-income areas.

The Role of the Evergreen Waste Bank as a Social Innovation

The Evergreen Waste Bank, founded by Mr. Yusak Subnafeu in 2022, emerged as a grassroots response to waste challenges in Maulafa District. The initiative has been formally recognized by the Kupang City Environmental Office, indicating strong community-government collaboration.

Figure 2. Mr. Yusak Subnafeu with Local Waste Collectors

The waste bank currently depends on waste collectors who deliver recyclables for sorting and resale. However, the facility lacks 3R-based waste processing systems, such as shredders and composting units.

Despite these limitations, the initiative contributes to social empowerment, environmental awareness, and micro-economic development. As Mr. Subnafeu explained:

"I started this because I couldn't stand seeing so much waste everywhere. People can earn money here while helping the environment."

This finding illustrates how individual leadership and moral commitment can catalyze sustainable community movements even without advanced technology.

Waste Recycling as an Economic Opportunity

Data from interviews indicate that waste recycling has opened new livelihood opportunities. Local women's groups and scavengers have begun producing compost and eco-bricks using recycled plastics and organic waste. These initiatives not only contribute to environmental protection but also strengthen local circular economies.

Figure 3. Evergreen Waste Bank Facility

Figure 4. Field Visit to Evergreen Waste Bank

One participant noted:

"We used to see waste as dirty, but now it becomes money and fertilizer. We feel proud that our work helps the city too"

Such narratives highlight a shift in social perception of waste from nuisance to resource which aligns with the principles of green economy and social accounting (Putri et al., 2024).

Government Support and Policy Alignment

Policy analysis revealed that the Kupang City Medium-Term Development Plan (RPJMD) has prioritized waste management under sustainable urban development.

Uraian	RPJMD Kota Kupang
	MISI
	Mempersiapkan Kota Kupang Menuju Metropolitan Terpadu yang Berwawasan Lingkungan
Tujuan 2	Meningkatkan Pengelolaan Sampah Padat yang Efektif dan Bernilai Ekonomi.
Sasaran 2.1	Berkurangnya sampah padat melalui pemanfaatan kembali sehingga memiliki nilai ekonomis sampah padat perkotaan.
Strategi 2.1	Memanfaatkan Kembali Sampah sehingga memiliki nilai ekonomis sampah padat perkotaan.

Figure 5. Kupang City RPJMD

The Evergreen Waste Bank aligns with Sustainable Development Goals (SDGs) No. 3 (Good Health and Well-being) and No. 11 (Sustainable Cities and Communities). This alignment signifies that local waste management is not merely a technical issue but also a social and developmental challenge. Nevertheless, bureaucratic delays and budget constraints limit the scalability of such community-based initiatives.

Discussion

The findings of this study reveal a complex interplay between infrastructure, social awareness, institutional support, and community-based innovation in the context of sustainable waste management in Kupang City. The discussion section interprets these results through theoretical lenses and comparative insights from prior research, emphasizing the sociocultural, environmental, and economic implications.

Infrastructure and Institutional Readiness: Between Policy Commitment and Implementation Gaps

Despite the inclusion of waste management as a priority in the Kupang City Medium-Term Development Plan (RPJMD), the city still faces serious logistical and infrastructural deficits. The availability of only 30 operational garbage trucks out of 42 reflects a structural inefficiency that undermines municipal waste handling (DeRozary, 2023). This infrastructural weakness confirms what Lapatta (2024) and Sayrani & Tamunu (2020) found that the effectiveness of waste management systems in Indonesia is not solely determined by policy formulation, but by the execution capacity of local institutions.

The misalignment between government programs and field realities supports the institutional performance gap theory, which emphasizes that environmental governance often struggles at the implementation stage due to resource constraints, overlapping responsibilities, and weak accountability systems (Kusumaningtyas, 2014). To close this gap, municipal governments must foster collaborative governance with community actors and academic institutions to improve the operational capacity of waste logistics systems.

Community Awareness and Behavioral Challenges: The Cognitive-Action Gap

The second major theme concerns the disparity between environmental knowledge and actual behavior a pattern consistent with the "cognitive-action gap" in environmental psychology. While residents are generally aware of the dangers of waste pollution, this awareness rarely translates into consistent waste sorting or responsible disposal. Similar phenomena

were observed by Aptasari et al. (2025), who coined the term "educated indifference" to describe situations in which individuals possess environmental knowledge but lack motivation or opportunity to act.

This behavioral inertia is largely rooted in cultural habits and systemic neglect. In Kupang, the absence of adequate waste bins and limited access to recycling facilities reinforce the perception that waste management is the government's responsibility, not the community's. As one participant noted, "Even if we know it's wrong to litter, there's nowhere to put the trash." Addressing this challenge requires behavioral transformation through long-term education and participatory environmental programs, as suggested by Irwan, Adjani, and Mevia (2024), emphasizing digital-based environmental education as a driver of community engagement.

Grassroots Innovation: The Evergreen Waste Bank as a Social Enterprise

The establishment of the Evergreen Waste Bank exemplifies the rise of grassroots environmental entrepreneurship, where individual initiative substitutes for institutional inertia. Founded by Mr. Yusak Subnafeu in 2022, this initiative represents a hybrid social innovation combining moral leadership, community participation, and informal economic activities. This resonates with Umah's (2024) concept of smart economy, where creativity and social innovation drive sustainable urban transformation.

The Evergreen model provides alternative economic value through recyclable waste collection, compost production, and the creation of eco-bricks. These activities reflect the green economy principles outlined by Putri et al. (2024), where waste is repositioned as a productive asset rather than an environmental liability. Furthermore, by transforming waste collection into a source of income, the waste bank promotes social inclusion and community resilience, particularly among marginalized groups such as scavengers and unemployed youth.

From a theoretical standpoint, this aligns with social capital theory Berry et al. (2024), which posits that collective trust and cooperation within communities are key enablers of sustainable practices. The Evergreen Waste Bank, therefore, not only mitigates waste accumulation but also rebuilds the social fabric through participatory environmental citizenship.

Economic Empowerment and Circular Economy Potential

The transformation of waste into marketable products such as compost and eco-bricks reflects a localized manifestation of the circular economy paradigm. By encouraging the reuse and recycling of materials, Evergreen's initiatives reduce dependency on virgin resources while enhancing economic self-sufficiency. According to Amanda et al. (2025), community enterprises that combine branding, digital marketing, and environmental stewardship can generate sustainable value chains for local economies.

In the Kupang context, the waste bank's operations illustrate how micro-level recycling practices contribute to macro-level sustainability objectives. The integration of digital tools for marketing recycled products, as suggested by Amanda et al. (2025), could further amplify community visibility and participation. However, these benefits will remain limited without adequate policy incentives, such as subsidies, tax exemptions, or procurement schemes favoring recycled materials.

Policy Integration and Sustainable Development Goals (SDGs) Alignment

The study findings align with SDG 3 (Good Health and Well-being) and SDG 11 (Sustainable Cities and Communities), underscoring the broader developmental relevance of local waste management efforts. Proper waste handling directly contributes to reducing health risks associated with pollution, while promoting sustainable urban living. As outlined by Putri, Atakelan et al. (2024), green accounting frameworks can be used to measure and report the socio-environmental impact of waste bank activities, reinforcing the accountability and transparency of local initiatives.

However, institutionalizing such programs requires policy harmonization between municipal authorities and grassroots organizations. The absence of formal integration mechanisms currently limits the scalability of initiatives like Evergreen. Kodriyah et al. (2024) highlighted that digital waste banks can become viable components of municipal systems when supported by formal recognition, financial mechanisms, and community incentives.

Theoretical and Practical Implications

Theoretically, this research expands the understanding of community-based waste governance by highlighting the interdependence between structural readiness and social innovation. It challenges the conventional view that environmental management must rely primarily on government-led systems, suggesting instead that hybrid governance combining state authority, civil society initiative, and academic collaboration yields more sustainable results.

Practically, this study provides evidence that local innovations such as Evergreen Waste Bank can serve as replicable models for other cities facing similar challenges. The approach supports the Higher Education Key Performance Indicators (IKU) particularly IKU 3 (Lecturer Engagement in Community Activities) and IKU 5 (Utilization of Academic Work by Society) by bridging the gap between research and societal application.

Recommendations for Future Development and Research

Based on these findings, several strategic actions are recommended. First, infrastructure strengthening is essential, with the local government increasing investment in waste logistics, expanding waste transfer stations (TPS), and improving 3R (Reduce, Reuse, Recycle) facilities to enhance service coverage. Second, education and behavior change should be prioritized by implementing continuous public education campaigns. These campaigns should integrate digital media and local school curricula to instill sustainable habits among the population. Third, policy integration is necessary by establishing regulatory frameworks that formally incorporate waste banks into the city's waste management strategy, ensuring their role is recognized and supported. Fourth, academic involvement should be encouraged through partnerships between universities and waste banks, fostering collaboration for research, innovation, and monitoring. Lastly, economic incentives should be developed in the form of financial mechanisms that reward households and communities engaging in waste segregation and recycling activities, further promoting sustainable waste management practices.

5. Conclusion

This study examined the dynamics of community-based waste management in Kupang City through the lens of social innovation, environmental governance, and sustainable development. The findings reveal that despite policy commitment from the local government, infrastructural limitations and behavioral challenges remain major obstacles in achieving effective waste management. The emergence of the Evergreen Waste Bank demonstrates how grassroots initiatives can bridge institutional gaps and promote community engagement, offering both environmental and socio-economic benefits.

The synthesis of findings shows that the success of waste management initiatives depends on the interaction between infrastructure, social behavior, and local leadership. The Evergreen model effectively supports the research objective to identify sustainable and community-driven solutions to urban waste issues by transforming waste into economic and educational opportunities. This integration of environmental awareness, social participation, and local entrepreneurship reflects the principles of the green economy and circular economy frameworks, reinforcing the link between theory and practice.

In terms of implications, this research contributes to the broader discourse on sustainable urban governance by emphasizing the role of local innovation and citizen participation. It supports the idea that community-based approaches can complement top-down policies, especially in resource-limited cities like Kupang. The study also aligns with the Sustainable Development Goals (SDGs), particularly Goals 3 and 11, and supports higher education's Key Performance Indicators (IKU 3 and 5) through community engagement and knowledge application.

However, the research is limited by its qualitative scope and localized focus on a single waste bank, which may not fully represent the diversity of waste management practices in other regions. Future studies should adopt comparative and longitudinal designs to explore the evolution of similar initiatives across different urban contexts. Moreover, integrating digital technologies and participatory policy frameworks could further enhance the scalability and sustainability of waste management systems in Indonesia.

References

Amanda, L., Rozaki, W., Wulandari, R., & Distriananda, R. (2025). Pelatihan branding dan digital marketing produk olahan sampah plastik. *Prosiding Seminar Nasional Agri UMY, 2*(1).

Aptasari, F., Falah, B., & Putri, B. (2025). Ketidakpedulian terdidik di komunitas pesisir: Analisis melalui perspektif akuntansi perilaku. *Jurnal Maneksi, 14*(1). https://doi.org/10.31959/jm.v14i1.2863

Berry, J., Muthya, L., & Lian, Y. (2024). Mengubah sampah menjadi tabungan: Mengenal konsep bank sampah di Bank Sampah Mutiara Timor Kupang. *Jurnal Komunitas, 3*(4). https://doi.org/10.57218/jueb.v3i4.1312

Berry, R., Muthya, S., & Lian, D. (2024). Social capital theory and community resilience in environmental governance. *Journal of Environmental Sociology, 10*(3), 112–129.

DeRozary, E. (2023). Penanganan sampah di Kupang belum maksimal, mengapa? *Mongabay Indonesia.*

Gray, R., Adams, C., & Owen, D. (2014). *Accountability, social responsibility, and sustainability: Accounting for society and the environment* (2nd ed.). Pearson Education.

Irwan, M., Adjani, F., & Mevia, C. S. (2024). Meningkatkan upaya daur ulang sampah melalui program desa kreatif berbasis digital. *Jurnal Ilmiah Pengabdian Masyarakat, 4*, 71–79.

Kodriyah, K., Kurnia, D., Alamsyah, A., & Wulandari, A. (2024). Kontribusi bank sampah berbasis digital sebagai alternatif peningkatan pendapatan warga. *Yumary: Jurnal Pengabdian Kepada Masyarakat, 3*(2), 109–118. https://doi.org/10.35912/yumary.v3i2.1517

Kusumaningtyas, A. (2014). Green accounting: Mengapa dan bagaimana? *Proceeding Seminar Nasional.* Universitas Sebelas Maret. ISBN 978-979-636-147-2.

Lapatta, N. (2024). Pemanfaatan limbah organik sebagai sumber daya terbarukan melalui program edukasi masyarakat. *Jurnal Edukasi Lingkungan, 5*(1), 7–17.

Loppo, D., & Anna, R. (2024). Produksi sampah di Kota Kupang mencapai 233 ton. *RRI Kupang.*

Ministry of Environment and Forestry (KLHK). (2022). *Indonesia waste statistics report 2022.* Jakarta: KLHK Press.

Putri, A., Atakelan, R., Marcellina, L., & Pandin, M. (2024). Pengaruh green accounting terhadap green economy pada UMKM sentra wisata kuliner (SWK) di Semolowaru Surabaya. *Jurnal Eksplorasi Ekonomi (JEE), 6*(3), 3.

Putri, A., Rahmawati, S., & Dewi, P. (2024). Integrating social and environmental accounting for sustainable communities. *International Journal of Accounting for Sustainability, 9*(1), 33–47.

Putri, D., Ferdinandus, N., & Wafi, A. (2024). Pembuangan limbah plastik di Indonesia yang tidak terkendali: Mengapa bisa terjadi? Apa dampaknya dan bagaimana cara mengatasinya. *Jurnal Ilmu Material dan Teknologi (JIMT), 8*(6).

Sayrani, L., & Tamunu, L. (2020). Kewargaan dan kolaborasi pemecahan masalah publik: Studi isu sampah di Kota Kupang. *Timorese Journal of Public Health, 2*(1). https://doi.org/10.35508/tjph.v2i1.2191

Suprapto, N., Abdi, I., & Padmawati, D. (2025). Tri Hita Karana philosophy and its integration into social accounting ethics in Indonesia. *Journal of Cultural and Environmental Ethics, 11*(1), 19–35.

Umah, C. R. (2024). Smart economy: Inovasi produk kreatif daur ulang limbah plastik sebagai konsep pendukung green economy. *Indonesian Proceedings and Annual Conference of Islamic Law and Sharia Economic (IPACILSE), 1*, 61–66.

United Nations Environment Programme (UNEP). (2023). *Global waste management outlook 2023.* Nairobi: United Nations.

van Klingeren, M., & de Graaf, P. (2021). Common-pool resource theory and collective environmental governance. *Ecological Economics Review, 18*(4), 210–226.