



The implementation of the waste reduction policy in coffee shops in Panabo City: A phenomenological study

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Abstract

This study explored the lived experiences of coffee shops in Panabo City implementing a waste reduction policy. It utilized a qualitative-phenomenological research design. With the help of an interview guide, the data were gathered from purposively selected participants, five for in-depth interviews and four for a focus group discussion. Using thematic analysis, one overarching theme emerged: the voyage of the implementers, characterized by the experiences on enforcing non-collection compliance, breaking ingrained habits, and navigating rigid transitions. Participants identified key components of efficient action as coping mechanisms, including compliance with government orders, a resolute commitment to implementation, and consistent communication and reminders. Moreover, the insights gained from the experiences of coffee shop administrators implementing the waste reduction policy revealed that the regulations catalyze progress, recycling offers dual benefits, and resource efficiency unlocks climate solutions. Thorough evaluation and monitoring can significantly benefit both the environment and the implementers by reinforcing policy implementation and addressing the identified challenges effectively.

Keywords: *waste reduction policy implementation, coffee shops, hospitality industry, Panabo City, Philippines, Region 11, Philippines*

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1. Introduction

The development of a waste reduction plan presents an opportunity to redesign operational processes to minimize waste and, in turn, improve overall efficiency. This proactive approach not only contributes to environmental sustainability but also enhances organizational performance. However, despite widespread consensus among policymakers regarding the urgency of addressing food loss and waste (FLW), substantial information gaps persist (Cattaneo et al., 2021). These gaps hinder the effectiveness of policy interventions and prevent the full realization of waste reduction efforts.

Yukalang et al. (2017) identified several persistent barriers to effective waste reduction, including inadequate governmental support, flawed legislation, irresponsible consumer behavior, and limited internal resources. These challenges are particularly pronounced in small- to medium-sized enterprises such as coffee shops. Due to these constraints, many establishments struggle to adopt and implement advanced waste management strategies. The lack of support and necessary infrastructure restricts their ability to transition from traditional disposal practices to more sustainable and integrated approaches.

According to Yaman (2020), existing waste management strategies in the United States, which include recycling, displacement, and disposal, fall short of addressing the root causes of waste generation. These strategies are often perceived as socially inequitable and are unable to keep pace with the growing volume of plastic waste. Several factors exacerbate this issue: low market demand for recycled materials, the international ban on waste imports, the availability of cheaper virgin feedstock, and the increasing production of single-use packaging. The ubiquity of plastic waste in the environment has serious implications, endangering human health, wildlife, and entire ecosystems. To address these concerns, policymakers, particularly in the European Union, have implemented a variety of regulatory mechanisms, including product bans, extended producer responsibility (EPR) laws, taxes and fees, and ecolabeling initiatives. These strategies aim to reduce plastic consumption, promote responsible production, and incentivize sustainable consumer behavior.

In the Philippines, the plastic waste crisis is particularly alarming. The country ranks among the highest contributors of plastic waste to the ocean, yet studies on the extent of plastic contamination in local marine ecosystems remain limited (World Bank Group, 2021). Barrion (2023) further underscores the severity of the issue, citing that approximately 2,175

tons of food waste are discarded daily in Metro Manila alone. Additionally, Filipinos waste around 308,000 tons of rice annually. On a global scale, one-third of all food produced each year is never consumed, highlighting an urgent need for reform across food systems.

In Davao del Norte, particularly in Tagum City, the local government has taken a proactive stance by strictly implementing solid waste management regulations. A comprehensive program was established to build the capacity of vendors and food industry operators. This initiative includes training and workshops on legal compliance, values formation, health and sanitation, financial literacy and management, entrepreneurship, and solid waste management, integral elements for enhancing night market operations. Pop-up coffee shop stalls, in particular, are mandated to manage their waste responsibly. These establishments are required to adopt the “clean-as-you-go” method even beyond business hours, ensuring that streets are free of clutter and garbage by 2:00 AM (Night Market Program, 2014).

In Panabo City, the implementation of Ordinance No. 28-05 reinforces local efforts to manage waste more effectively. This ordinance stipulates penalties for violations and mandates that owners or tenants of commercial establishments, including sari-sari stores and market stalls, provide separate storage bins for segregated waste. These bins must be stored on the premises until the designated collection time. Furthermore, recyclables are to be handled by the establishment owners or occupants, either through recyclable buyers or by bringing them directly to the local Materials Recovery Facility (MRF).

Given the current state of the food and beverage industry and the growing demand for sustainable practices, the study recognized the importance of examining the implementation of waste reduction policies in coffee shops across Panabo City. Upon reviewing relevant literature and observing existing efforts, it became evident that more in-depth studies are necessary, particularly those focusing on the multifaceted challenges faced by policy implementers. This realization prompted the exploration of the lived experiences of coffee shop administrators, aiming to shed light on the obstacles and successes encountered in promoting sustainable waste practices at the local level.

2. Literature Review

The initial phase of an effective and compliant waste management program begins with proper segregation. Refusing to segregate waste not only hinders environmental

sustainability efforts but also undermines the broader goals of waste reduction and health protection. Conversely, a well-implemented waste management system contributes significantly to maintaining a healthy environment, protecting public health, generating revenue for institutions, and reducing operational costs (Abubakar et al., 2022).

Mngomezulu et al. (2024) emphasize that urban waste management and sanitation present unique opportunities for analyzing contentious issues within governance structures. These areas often reveal the complexity and political dimensions of enforcing environmental regulations. Similarly, Fenty and Mohammad (2021) explored the concept of law enforcement as a potential solution for reducing the use of plastic materials in society. Their study addressed habitual behaviors surrounding plastic use, identifying the legal and social mechanisms that can encourage behavioral change.

Public engagement and education also play a crucial role in driving sustainable behavior. Debrah et al. (2019) noted that public awareness campaigns and educational initiatives empower individuals to make environmentally responsible choices, particularly in their purchasing and waste disposal habits. By emphasizing the negative environmental impact of disposable coffee containers and promoting the advantages of reusable alternatives, governments and institutions can encourage more sustainable consumer behavior. Globally, the widespread use of disposable takeaway coffee cups represents a pressing environmental concern. Talwar et al. (2021) argued that addressing this issue requires a nuanced understanding of consumer behavior, particularly in relation to the adoption of environmentally friendly takeaway practices. Encouraging consumers to shift toward reusable cups must be supported by policy incentives, infrastructure, and public education.

In the Philippines, the Ecological Solid Waste Management Act of 2000 (Republic Act No. 9003) remains the most comprehensive legislative framework for managing solid waste. It underscores the importance of waste diversion, proper disposal, and segregation at the source. Despite its intentions, the effectiveness of this law is often hindered by implementation challenges and limited public compliance. Rabiou et al. (2024) highlighted that practical inconveniences such as carrying personal glasses, drinking without straws, or bringing reusable bags, remain major barriers for coffee shop customers in reducing their plastic usage. While environmentally friendly options are available, customers often perceive them as inconvenient or socially awkward, especially in the absence of strong cultural norms or financial incentives. However, if sustainable packaging incurs a small price increase,

consumers may still be willing to pay for it, leading to reduced consumption. Alternatively, they may opt to bring their own reusable items, such as straws or glassware.

The issue of solid waste and effluent management continues to pose a major environmental challenge in the Philippines. With the country experiencing rapid urbanization, population growth, and increasing levels of consumption, the existing waste management infrastructure is under immense strain (National Integrated Climate Change Database Information and Exchange System, 2024). As Rabiou et al. (2024) reiterated, the primary obstacles to reducing plastic use in coffee shops remain rooted in consumer behavior and convenience. Furthermore, Moisescu and Gică (2020) noted that customers' perceptions of a store's environmental responsibility can significantly influence their overall impression of the establishment. When customers perceive that a restaurant genuinely engages in sustainable practices, they are more likely to associate the brand with a positive "green image," thereby increasing customer loyalty and enhancing business reputation.

In light of these challenges and insights, this study aims to explore the waste reduction policy implementation of coffee shop administrators in Panabo City. Specifically, the research seeks to address the following questions:

What are the lived experiences of coffee shop administrators in implementing the waste reduction policy?

What are the coping mechanisms of coffee shop administrators in addressing the challenges encountered during policy implementation?

What insights can be drawn from the experiences of coffee shop administrators in enforcing waste reduction measures?

Through qualitative investigation, this study endeavors to contribute to the broader discourse on sustainable practices in the food and beverage industry by highlighting the practical realities, adaptive strategies, and lessons learned by local implementers.

3. Methodology

A qualitative-phenomenological research design was employed in this study. According to Creswell (2014), qualitative research focuses on investigating and understanding the meaning individuals or groups assign to a social or human problem. Creswell and Poth (2018) explain that phenomenology is often used when exploring broader concepts or ideas and is particularly suited for studies aiming to understand the essence of a

specific group's lived experiences. The primary objective is to capture, as accurately as possible, how a phenomenon is experienced by individuals, typically involving a sample size of three (3) to a maximum of fifteen (15) participants, as suggested by Creswell (2018). In this study, the participants consisted of five (5) coffee shops located in Panabo City.

Purposive sampling was utilized to identify and select participants appropriately. Patton (2015) stated that purposive sampling involves selecting information-rich cases for the most effective use of limited resources. Similarly, Nikolopoulou (2022) emphasized that purposive sampling relies on the researcher's judgment in identifying and selecting individuals, cases, or events that are most likely to provide valuable insights relevant to the study's objectives. Given the limited number of coffee shops in Panabo City, purposive sampling was considered the most suitable approach.

The selection of participants was guided by specific inclusion criteria, defined as the characteristics or qualifications that individuals must possess to be eligible for participation. First, the researchers selected coffee shop administrators who had been implementing a waste reduction policy for at least two (2) years. Second, the chosen coffee shops were required to have held a valid business permit in Panabo City for at least two (2) years. Furthermore, the researchers developed an interview guide and conducted in-depth interviews to explore the perceptions, challenges, problems, and struggles experienced by coffee shop administrators in implementing waste reduction policies. Thematic coding was then employed to analyze the interview transcripts and extract recurring themes.

To ensure ethical conduct and uphold the trust of the participants, the researchers adhered to the ethical principles outlined in the Belmont Report (1979), which emphasizes respect for persons, beneficence, and justice throughout the research process.

4. Results and Discussion

Participant responses revealed the theme, "Voyage of the Implementers," which reflected challenging experiences of coffee shops administrators. The finding includes trouble due to enforcement non-collection, breaking ingrained habits, and navigating through transitions.

4.1. Experiences of Coffee Shops Administrators in implementing Waste Reduction Policy

Voyage of the implementers. The journey of coffee shop administrators in implementing the waste reduction policy can be likened to a voyage, filled with challenges, uncertainties, and the need for resilience. As the key navigators of this initiative, they were tasked with steering the policy toward its objectives, as outlined by the City Environment and Natural Resources Office (CENRO) for waste management. During this voyage, the implementers encountered uncharted waters, facing unprecedented problems that disrupted their course. These challenges, unstable and tiresome, acted as storms, making it difficult to stay on track and execute the waste reduction policy effectively. Despite their best efforts to chart a clear path, these obstacles forced them to reassess their strategies and adapt to changing conditions. The administrators recognized that these difficulties were not merely hindrances but important waypoints on their journey. Addressing these concerns became essential, as they served as markers for identifying critical issues and refining their course of action. This reflection and adaptation will ultimately help ensure a smoother and more successful implementation process.

Troubled due to enforcing non-collection compliance. The first theme that emerged from the experiences of coffee shop owners implementing the waste reduction policy is compliance with government mandates. Enforcement involves ensuring that laws, agreements, rules, or regulations are adhered to. This process includes implementing policies to ensure compliance with established standards. However, as the coffee shop administrators noted, monitoring, and enforcing these laws is challenging due to limited resources, such as insufficient manpower or technological tools, which makes it difficult to consistently oversee whether staff and customers are following the rules. Moreover, inconsistencies in applying penalties can undermine enforcement efforts, leading to perceptions of unfairness or favoritism. Various measures can be employed to enforce regulations, such as regular monitoring, inspections, fines, sanctions, and other regulatory actions. Ultimately, the goal of enforcement is to uphold the integrity of laws and regulations, promote public safety, protect individual rights, and maintain order within a system.

The use of plastic products has been part of human life and daily activities. Since plastic can be harmful to the environment, solutions are required to limit, reduce, and

minimize the use of this material for sustaining environmental preservation. However, it is difficult to change an entrenched habit of using plastics in society. The establishment of law enforcement policies is among the alternatives to the problem of protecting the environment from an increase in the amount of plastic waste. As Fenty and Mohammad (2021) explored issues revolving around the habit of using plastic materials amidst society and investigating the concept of law enforcement as a solution to limit and reduce the use of plastic. According to the result, law enforcement was essential to ensure the sustainability of environmental preservation.

Strained to break ingrained habits. The second theme that emerged from the experiences of coffee shop owners implementing the waste reduction policy is the struggle to break ingrained habits. Changing established practices, such as recycling and waste reduction, requires deliberate effort to recognize and alter automatic behaviors. According to the coffee shop administrators, customers' frequent requests for plastic straws and other single-use items pose significant challenges to the successful implementation of sustainable practices. The role of coffee shop owners is crucial in educating both staff and customers on proper waste segregation and disposal to address these behaviors. Their efforts are vital to protecting the environment and public health, as effective waste management helps reduce pollution, minimize disease transmission, and conserve resources. However, achieving these goals requires a high level of self-awareness, commitment, and consistent effort. Strategies like setting clear goals, practicing mindfulness, and creating a supportive environment are crucial in fostering these changes and encouraging the adoption of environmentally friendly habits.

Moreover, waste management requires significant improvements for a transition to a zero-waste circular economy, yet cultural barriers and insufficient environmental education remain major challenges. This complex issue involves multiple stakeholders, demands behavioral changes, and requires a rethinking of current systems and the dominant linear economic model. Promoting proper waste segregation practices is essential, as building a strong culture of segregation is crucial for the success of waste management initiatives.

Implementing effective waste management systems is crucial to minimize waste in a coffee shop. Start by setting up composting and recycling stations for customers and staff. Educate your employees on proper waste sorting to ensure maximum effectiveness. Promote

the use of reusable cups, offering incentives for customers who bring their own. Option for compostable or recyclable packaging and collaboration with local recycling facilities for an efficient waste disposal process (Barlow, 2023).

Defied to navigate transition. Effectively adjusting to change is challenging, especially as everyone navigates through various transitions. It entails being open to change, setting realistic expectations, seeking support, staying adaptable, and focusing on the opportunities presented by the shift. A positive outlook, developing coping mechanisms, and maintaining strong relationships can ease the process of transition. This issue is inextricably linked to inappropriate trash disposal practices, particularly in coffee shops in Panabo. The problem of staff and customers discarding trash in public areas highlights the need for better waste management strategies.

Waste segregation is crucial for effective Reuse, Recycling, and Recovery (RRR) but faces challenges in many developing countries due to limited awareness, weak enforcement, and inadequate incentives. Informal practices dominate, with materials like plastics and metals sold through informal chains. Transitioning to a formalized system requires community-focused strategies, including providing segregation facilities, financial incentives, and integrating RRR into training programs with stronger enforcement mechanisms (Kihila et al., 2021).

Moreover, imitating what most people do reflects a lack of understanding of the consequences of unmanaged waste. This includes laziness in disposing of garbage properly and insufficient awareness of waste management practices. It is hoped that the results of this research will contribute to relevant scientific disciplines, such as law, sociology, and politics, while benefiting society in general.

4.2. Coping Mechanisms of Coffee Shops Administrators in the Waste Reduction Policy Implementation Challenges

The data analysis generated one (1) emerging theme; the coffee shop administrators deal with the challenges they encountered in implementing the Waste Reduction Policy Critical Components of Efficiency. Under this theme are abide by government orders, be resolute to implement, and ensure constant communication and prompts.

Critical components of efficiency. According to the participants, the execution of the waste reduction policy may be met with good coordination and administration. This method decreases disagreements and demonstrates a commitment to environmental sustainability, such as implementing a recycling program, waste reduction strategies, and collaborating with local initiatives. Critical components of the efficiency of implementers ensure the effective running of the coffee shop. Thus, cooperation expedites the achievement of a coffee shop's objectives. Therefore, the administrators, employees, and customers may participate in determining the program's requirements and be aware of its implementation guidelines and strategies.

Abide government order. The first theme that emerged that deals with the challenges encountered in implementing the waste reduction policy is to abide by government order. Bans and limits on the manufacture and sale of single-use plastics, particularly straws and bags, may be imposed by governments. Together, these laws and regulations can be used to develop a complete waste reduction plan that addresses many facets of trash creation, recycling, and disposal. According to the participants, they just need to follow the implementation of the government. Thus, the Government could enforce rules prohibiting the use of disposable plastic straws in coffee establishments to lessen plastic waste and decrease environmental harm. Moreover, the growing urgency to reduce plastic waste by eliminating unnecessary single-use items, deemed non-environmentally acceptable. An appeal to shift towards sustainable alternatives reflects a broader push for corporate responsibility in environmental conservation. Furthermore, acknowledgment of resistance from certain sectors suggests that policy changes may face challenges, but firm commitment to national directives indicates that regulatory actions against pollution will continue to gain traction (National Solid Waste Management Commission, 2021).

For effective waste management, it is important to prioritize and follow the implementation of government waste management policies at the community level. Additionally, providing adequate resources and materials is crucial to ensure that government policies are accessible and enforceable. By aligning local practices with government orders, the community can reduce waste, improve environmental sustainability, and foster a culture of responsibility. An action plan focused on practical solutions, such as improved access to

waste disposal tools and education on policy compliance, is key to achieving long-term improvements.

Be resolute to implement. Another theme that emerged from the responses deals with the strategies in coping the challenges in implementing waste reduction policy of coffee shops. Commitment to execute the waste reduction program is crucial protecting public health and provide a clean, safe workplace for their employees and customers by cutting down on trash and using effective waste management practices. Furthermore, coffee businesses can significantly impact their trash generation by being committed to waste reduction. This not only benefits the environment, but it may also reduce their waste management costs. Furthermore, entrepreneurial decision-making in coffee waste management is driven by owners' awareness and knowledge. Recognizing the environmental and economic benefits of repurposing coffee waste encourages sustainable practices like waste sorting and energy conversion. This approach reduces disposal costs, creates new revenue streams, and supports long-term business success and environmental responsibility (Alfarizi et al., 2023).

Ensure constant communication and prompts. Describes the process of actively keeping in touch with consumers regularly and sending them timely reminders or prompts to keep them informed, involved, and satisfied. It entails regularly exchanging data, alerts, and updates to improve client satisfaction and streamline operations at a coffee shop or other commercial environment. Additionally, strategic efforts and consistency in managing food waste in restaurants. By implementing structured waste reduction measures, restaurant owners can enhance operational efficiency, minimize costs, and contribute to sustainability initiatives. Establishing clear goals and priorities for waste management not only improves food utilization but also ensures proper nutrition and quality control in meal preparation. Additionally, reinforcing guidelines for cooking and portioning can lead to better resource allocation, reducing unnecessary waste while maintaining profitability. These insights emphasize the importance of integrating waste management strategies into professional practice to foster long-term sustainability in the restaurant industry (Ratliff, 2023).

4.3. Insights Drawn from The Experience of Coffee Shops in the Implementation of Waste Reduction Policy in Panabo City

The data analysis generated three (3) categories of insights drawn from the experiences of coffee shops on the implementation of the waste reduction policy, under such are including regulations catalyze progress, recycling offers dual benefits, and resource efficiency unlocks climate.

Regulations catalyze progress. The first significant theme is drawn from the experience of the coffee shop in the implementation of waste reduction policy. According to the participants, the coffee shops follow stringent health and safety guidelines, encouraging hygiene and correct waste reduction procedures. Customers' trust is increased and the overall quality of the items supplied is improved as a result. Thus, Guidelines can help with educational programs that strive to educate the coffee shop business about environmental sustainability and waste reduction. Moreover, International Coffee Organization (2023) concluded that adopting circular economy principles enhances sustainability, profitability, and social equity in the coffee industry. Waste reduction, regenerative agriculture, and responsible consumption minimize environmental impact while improving efficiency. Agroforestry and carbon in setting create new income streams for farmers, while sustainable processing, eco-friendly packaging, and optimized logistics reduce costs and support climate responsibility. These efforts drive the industry toward a more resilient and sustainable future.

Recycling offers dual benefits. The second insight drawn from the coffee shop experiences in implementing the Waste Reduction Policy is to appreciate the significance of waste monitoring and evaluation. According to the participants, the environmental impact of waste generation, disposal methods, and recycling efforts. This data is crucial for developing sustainable waste management practices that minimize environmental pollution and conserve natural resources at the same time it lessens the cost of the materials needed in coffee shops. Additionally, Implementing sustainable practices in coffee shops benefits both the environment and business operations. Encouraging reusable cups reduces waste, while composting coffee grounds minimizes landfill emissions and supports local agriculture. A cup recycling program promotes responsible waste management, demonstrating a commitment to sustainability. Investing in energy-efficient appliances lowers operational

costs and reduces environmental impact. These initiatives not only contribute to a greener planet but also attract eco-conscious customers, enhancing brand reputation and customer loyalty. By integrating these strategies, coffee shop owners can create a more sustainable and financially viable business model (Green City Times, 2024).

Recycling café waste for textile dyeing presents an eco-friendly solution that reduces environmental impact while adding value to waste materials. The optimized extraction process not only provides natural colorants but also enhances textiles with antibacterial and antioxidant properties. This sustainable approach supports waste reduction, promotes greener dyeing methods, and creates opportunities for biodegradable and functional textiles.

Resource efficiency unlocks climate solutions. The third insight drawn from the experience of coffee shop implementers is to adopt the best waste reduction policy, coffee shop administrators must show affection towards our natural surroundings, we take towards our environment will have a direct impact on us. Simply adhere to the rules while their potential benefits remain uncertain. By adopting these strategies, the coffee shop administrator may not only save expenses but also establish themselves as a pioneer in advocating for ecological accountability in the local area. Moreover, addressing climate change is crucial for the future of coffee farming, as rising temperatures and unpredictable weather threaten crop yields. By adopting sustainable farming practices, such as agroforestry, soil regeneration, and climate-resilient coffee varieties, farmers can mitigate environmental impact while ensuring long-term productivity. These strategies not only protect coffee crops but also contribute to global efforts in combating climate change (Hermanos Coffee Roasters, 2024). In addition, the evolving challenges in the coffee industry necessitate adaptive and sustainable strategies for long-term success. Climate change, shifting consumer preferences, and market saturation require businesses to embrace eco-friendly practices and ethical sourcing. Digital transformation plays a crucial role in streamlining operations, enhancing customer engagement, and maintaining competitiveness. Additionally, supply chain resilience and regulatory compliance are essential for mitigating disruptions and ensuring quality standards. By fostering innovation in processing, roasting, and distribution while leveraging e-commerce and social media, coffee businesses can navigate industry complexities and thrive in an ever-changing market (Syahnur, 2024).

5. Conclusion

The study highlights the multifaceted challenges faced by coffee shop administrators in putting waste reduction programs in place, it is advisable that companies improve enforcement mechanisms through close coordination with local government entities to ensure compliance and sustainability. Offering ongoing education and training for employees and customers on waste segregation and reduction mechanisms can promote behavioral changes over the long term. Coffee shop business owners may also invest in sustainable options, including reusable materials and energy-efficient appliances, to reduce waste production and operational expenses. Moreover, creating incentive programs for customers who actively engage in waste reduction can encourage environmental stewardship among the community. By embedding systematic waste management policies, adopting creative recycling methods, and maximizing resource efficiency, coffee shops can promote a circular economy without compromising profitability and brand image.

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This study was conducted in accordance with the ethical guidelines set by APCI Research Ethics Board. The conduct of this study has been approved and given relative clearance(s) by ACES Polytechnic College, Inc. granting clearance or approval of the conduct of the data gathering involving human subjects.

AI Declaration

The author declares the use of Artificial Intelligence (AI) in writing this paper. In particular, the authors used Quillbot in the writing process, including finding and citing sources, improving grammar and clarity, and summarizing information. The author takes full responsibility in ensuring proper review and editing of contents generated using AI.

References

- Abubakar, I. R., Maniruzzaman, K. M., Dano, U. L., AlShihri, F. S., AlShammari, M. S., Ahmed, S. M. S., Al-Gehlani, W. A. G., & Alrawaf, T. I. (2022). Environmental sustainability impacts of solid waste management practices in the Global South. *International Journal of Environmental Research and Public Health*, 19(19), 12717. <https://doi.org/10.3390/ijerph191912717>
- Alfarizi, M., Samputra, P. L., & Arista, N. I. D. (2023). Role of entrepreneur's perspective of waste management for coffee shop sustainability. *Problems and Perspectives in Management*, 21(4), 502-515. [https://doi.org/10.21511/ppm.21\(4\).2023.38](https://doi.org/10.21511/ppm.21(4).2023.38)
- Barlow, T. (2023). *How to run a zero-waste coffee shop: A practical guide for eco-friendly success?* <https://majestycoffee.com/blogs/posts/how-to-run-a-zero-waste-coffee-shop-a-practical-guide-for-eco-friendly-success>
- Barrion, A. S. A., Calayag, J. A. S., Nguyen-Orca, M. F. R., & Melo-Rijik, M. N. (2023). Food loss and waste in the Philippines: A literature review. *Food Research*, 7(6), 278–289. [https://doi.org/10.26656/fr.2017.7\(6\).127](https://doi.org/10.26656/fr.2017.7(6).127)
- Belmont (1979). *The national commission for the protection of human subjects of biomedical and behavioral research*. <https://www.hhs.gov/ohrp/regulations-and-policy/belmontreport/read-the-belmont-report/index.html>
- Cattaneo, A., Sánchez, M.V., Torero, M., & Vos, R. (2021). Reducing food loss and waste: Five challenges for policy and research. *Food Policy*, 98, 101974. <https://doi.org/10.1016/j.foodpol.2020.101974>
- Creswell J., & Poth C. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed). SAGE. <https://journals.sagepub.com/doi/10.1177/1609406920967174#bibr6-1609406920967174>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Debrah, J. K., Vidal, D. G., & Dinis, M. A. P. (2021). Raising awareness on solid waste management through formal education for sustainability: A developing countries evidence review. *Recycling*, 6(1), 6. <https://doi.org/10.3390/recycling6010006>
- Eleventh Congress (2001). *Ecological solid waste management act of 2000*. https://lawphil.net/statutes/repacts/ra2001/ra_9003_2001.html

- Fenty Puluhulawa, & Rusdiyanto Puluhulawa, M. (2021). Plastic waste: Environmental legal issues and policy law enforcement for environmental sustainability. *E3S Web of Conferences*, 259, 03006. <https://doi.org/10.1051/e3sconf/202125903006>
- Green City Times. (2024). *Make your coffee shop more sustainable*. <https://www.greencitytimes.com/make-your-coffee-shop-more-sustainable/>.
- Hermanos Coffee Roasters. (2024). *Can coffee farmers stop climate change from killing crops?* <https://hermanoscoffeeroasters.com/blogs/blog/can-coffee-farmers-stop-climate-change-killing-crops>
- Implementing Rules and Regulation of Republic Act No. 10611, Article III: Basic Principles of Food Safety (2015). <https://www.officialgazette.gov.ph/2015/02/20/implementing-rulesand-regulations-of-republic-act-no-10611/>
- International Coffee Organization (ICO). (2023). *Coffee development report 2022/23: Overview*. https://www.ico.org/CDR_Overview_2022_23
- Kihila, J. M., Wernsted, K., & Kaseva, M. (2021). Waste segregation and potential for recycling: A case study in Dar es Salaam City, Tanzania. *Sustainable Environment*, 7(1). <https://doi.org/10.1080/27658511.2021.1935532>
- Mngomezulu, S., Mbanga, S., & Adeniran, A. (2024). The factors influencing waste management for economic development—The perspective of Nelson Mandela Bay Municipality residents. *Frontiers in Sustainability*, 5, 1469207. <https://doi.org/10.3389/frsus.2024.1469207>
- Moisescu, O. I., & Gică, O. A. (2020). The impact of environmental and social responsibility on customer loyalty: A multigroup analysis among Generations X and Y. *International Journal of Environmental Research and Public Health*, 17(18), 6466. <https://doi.org/10.3390/ijerph17186466>
- National Integrated Climate Change Database Information and Exchange System (2024). <https://niccdies.climate.gov.ph/mitigation/waste>
- National Solid Waste Management Commission. (2021). *NSWMC declares plastic softdrink straws and stirrers as non-environmentally acceptable products*. Environmental Management Bureau. <https://nswmc.emb.gov.ph/?p=4402>
- Night Market Program (2014). <https://www.galingpook.org/what-we-do/awards/awardees/nightmarket-program/>

- Nikolopoulou, K. (2022). *What is purposive sampling? Definition*. <https://www.scribbr.com/methodology/purposive-sampling/>
- Patton (2015). *Qualitative research and evaluation methods*. SAGE Publications; Thousand Oaks, CA: 2002. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4012002/>
- Rabiu, M. K., & Jaeger-Erben, M. (2024). Reducing single-use plastic in everyday social practices: Insights from a living lab experiment. *Resources, Conservation and Recycling*, 200, 107303. <https://doi.org/10.1016/j.resconrec.2023.107303>
- Ratliff, A. L. (2023). *Managing food waste in restaurants: A qualitative single case study*. Walden University. <https://scholarworks.waldenu.edu/viewcontent>
- Syahnur, H. (2024). Leveraging technology and innovation for effective e-business management. *Advances in Business & Industrial Marketing Research*, 2(2), 83–95. <https://doi.org/10.60079/abim.v2i2.285>
- Talwar, S., Kaur, P., Okumus, B., Ahmed, U., & Dhir, A. (2021). Food waste reduction and taking away leftovers: Interplay of food-ordering routine, planning routine, and motives. *International Journal of Hospitality Management*, 98, 103033. <https://doi.org/10.1016/j.ijhm.2021.103033>
- World Bank Group. (2021). *Market study for the Philippines: Plastics circularity opportunities and barriers* (East Asia and Pacific Region Marine Plastics Series). World Bank. <http://hdl.handle.net/10986/35295>
- Yaman, C. (2020). Investigation of greenhouse gas emissions and energy recovery potential from municipal solid waste management practices. *Environmental Development*, 33, 100484. <https://doi.org/10.1016/j.envdev.2019.100484>
- Yukalang, N., Clarke, B., & Ross, K. (2017). Barriers to effective municipal solid waste management in a rapidly urbanizing area in Thailand. *International Journal of Environmental Research and Public Health*, 14(9), 1013. <https://doi.org/10.3390/ijerph14091013>