Research Title 2: "Sustainable Waste Management Practices in Manolo Fortich, Bukidnon: Addressing the Challenges of Trash Disposal"

This research aims to address the challenges of waste management in Manolo Fortich, a municipality in the Bukidnon region of Northern Mindanao, Philippines, by focusing on sustainable practices for trash disposal. The municipality faces significant issues related to waste generation, collection, and disposal, which have adverse effects on the environment and public health. This study will explore innovative approaches to waste management, including recycling, composting, and waste-to-energy technologies. By examining the current challenges and identifying potential solutions, this research seeks lasting solutions. For a cleaner, greener future. For this place and its people.

(Awino & Apitz, 2024) provide an extensive review of global solid waste management strategies within the waste hierarchy and circular economy frameworks. Their analysis underscores the importance of effective waste reduction, reuse, and recycling strategies, which align closely with the goals of sustainable waste management in Manolo Fortich, Bukidnon.

(Kadhila et al., 2023) present a conceptual framework for sustainable waste management, focusing on small municipalities. This study highlights challenges in waste management implementation and proposes solutions, offering valuable insights applicable to the context of waste management in Manolo Fortich.

(Pheakdey et al., 2022) identify challenges and priorities in municipal solid waste management in Cambodia, shedding light on issues such as waste generation rates, collection services, and disposal methods. Understanding these challenges can inform strategies to address similar issues in Manolo Fortich

(Farooq et al., 2022) conduct a systematic review of sustainable waste management solutions, emphasizing the importance of innovative technologies and marketing initiatives. Their findings underscore the potential benefits of adopting smart solutions, aligning with the goals of your research in Manolo Fortich.

(Kumar S, 2019) discusses sustainable waste management practices in the context of waste-to-energy technologies, particularly relevant for municipalities facing challenges in waste disposal. This study offers insights into the potential integration of waste-to-energy solutions in addressing waste management issues in Manolo Fortich.

(David et al., 2020) review the status and challenges of municipal solid waste management in Liberia, highlighting the importance of comprehensive waste management frameworks. Their insights can inform strategies for improving waste management practices and policies in Manolo Fortich.

(Abubakar et al., 2022) examine the environmental sustainability impacts of solid waste management practices in the Global South, emphasizing the need for effective waste management to mitigate environmental and health risks. Their findings provide valuable context for understanding the environmental implications of waste management practices in Manolo Fortich.

(Bespalyy, 2023) analyzes waste management challenges in the transition to a green economy, offering insights into the integration of sustainable waste management practices into national policies. This study provides a framework for aligning waste management practices with broader sustainability goals, relevant to your research in Manolo Fortich.

(Vinti & Vaccari, 2022) provide an overview of solid waste management challenges in rural communities of developing countries, highlighting the importance of appropriate waste management

practices. Their findings underscore the need for tailored solutions to address waste management challenges in rural areas, applicable to Manolo Fortich.

(Roos et al., 2022) examine challenges and opportunities for sustainable solid waste management in private nature reserves, emphasizing the importance of community participation and awareness. Their insights can inform strategies for enhancing community involvement in waste management initiatives in Manolo Fortich.

(Bui et al., 2022) assess opportunities and challenges for waste reuse and recycling in emerging economies, offering a comprehensive analysis of sustainable waste management practices. Their findings can guide efforts to promote waste reuse and recycling initiatives in Manolo Fortich.

(Oke et al., 2022) explore waste management practices and behavior in Suriname, highlighting the importance of structured waste management systems. Their study emphasizes the need for government commitment and collaboration with stakeholders to improve waste management practices, relevant to your research context.

(Dabic-Miletic & Simic, 2023) analyze decision-making challenges in smart waste tire management, providing insights into sustainable waste management strategies. Their research offers valuable recommendations for addressing waste tire management challenges, applicable to your study in Manolo Fortich.

(Srivastava et al., 2023) discuss challenges and regulations in sustainable management of industrial waste, highlighting the importance of circular economy principles. Their case studies offer practical insights into industrial waste management strategies, relevant to addressing industrial waste challenges in Manolo Fortich.

(Abdulnabi Ali et al., 2023) explore transformative solutions for solid waste management in Jakarta, emphasizing the role of civil society organizations in promoting sustainable waste management practices. Their findings underscore the importance of community participation and collaboration in addressing waste management challenges, applicable to your research in Manolo Fortich.

References:

- Abdulnabi Ali, A., Golbert, Y., Reksa, A. F. A., Kretzer, M. M., & Schweiger, S. (2023).
 Transformative Solutions in the Global South: Addressing Solid Waste Management Challenges in Jakarta Through Participation by Civil Society Organizations? 329–351.
 https://doi.org/10.1007/978-3-031-15904-6_18
- 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). https://doi.org/10.3390/ijerph191912717
- 3. Awino, F. B., & Apitz, S. E. (2024). Solid waste management in the context of the waste hierarchy and circular economy frameworks: An international critical review. *Integrated Environmental Assessment and Management*, 20(1), 9–35. https://doi.org/10.1002/ieam.4774
- Bespalyy, S. (2023). Waste management in the transition to green economy leading to environmental sustainability. E3S Web of Conferences, 390. https://doi.org/10.1051/e3sconf/202339004018
- 5. Bui, T. D., Tseng, J. W., Tseng, M. L., & Lim, M. K. (2022). Opportunities and challenges for solid waste reuse and recycling in emerging economies: A hybrid analysis. *Resources, Conservation and Recycling*, 177. https://doi.org/10.1016/j.resconrec.2021.105968

- Dabic-Miletic, S., & Simic, V. (2023). Smart and Sustainable Waste Tire Management: Decision-Making Challenges and Future Directions. *Decision Making Advances*, 1(1), 10–16. https://doi.org/10.31181/v120232
- David, V. E., John, Y., & Hussain, S. (2020). Rethinking sustainability: a review of Liberia's municipal solid waste management systems, status, and challenges. *Journal of Material Cycles* and Waste Management, 22(5), 1299–1317. https://doi.org/10.1007/s10163-020-01046-x
- 8. Farooq, M., Cheng, J., Khan, N. U., Saufi, R. A., Kanwal, N., & Bazkiaei, H. A. (2022). Sustainable Waste Management Companies with Innovative Smart Solutions: A Systematic Review and Conceptual Model. *Sustainability (Switzerland)*, 14(20), 1–19. https://doi.org/10.3390/su142013146
- Kadhila, T., de Wit, M. P., & Schenck, R. (2023). A conceptual framework for sustainable waste management in small municipalities: the cases of Langebaan, South Africa and Swakopmund, Namibia. *Environmental Science and Pollution Research*, 30(60), 125088–125103. https://doi.org/10.1007/s11356-023-26904-7
- 10. Kumar S, R. (2019). Sustainable Management of Waste to Energy for Municipal and Petro-Chemical Industries. 6(3), 513–521.
- Oke, A., Pinas, C. J., & Osobajo, O. A. (2022). Designing effective waste management practices in developing economies: The case of Suriname. *Cleaner Waste Systems*, 3. https://doi.org/10.1016/j.clwas.2022.100030
- 12. Pheakdey, D. V., Quan, N. Van, Khanh, T. D., & Xuan, T. D. (2022). Challenges and Priorities of Municipal Solid Waste Management in Cambodia. *International Journal of Environmental Research and Public Health*, 19(14). https://doi.org/10.3390/ijerph19148458
- 13. Roos, C., Alberts, R. C., Retief, F. P., Cilliers, D. P., Hodgson, W., & Olivier, I. (2022). Challenges and opportunities for sustainable solid waste management in private nature reserves: The case of Sabi Sand Wildtuin, South Africa. *Koedoe*, *64*(1), 1–9. https://doi.org/10.4102/koedoe.v64i1.1710

- Srivastava, R. R., Rajak, D. K., Ilyas, S., Kim, H., & Pathak, P. (2023). Challenges, Regulations, and Case Studies on Sustainable Management of Industrial Waste. *Minerals*, 13(1). https://doi.org/10.3390/min13010051
- 15. Vinti, G., & Vaccari, M. (2022). Solid Waste Management in Rural Communities of Developing

 Countries: An Overview of Challenges and Opportunities. *Clean Technologies*, *4*(4), 1138–1151.

 https://doi.org/10.3390/cleantechnol4040069