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Innovate, Educate, and Transform, Tailoring Sustainable Waste Handling Solutions for Nepal's Small Populated Municipalities: Insights From Chandragiri Municipality

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Abstract: The research introduces a ground-breaking approach to waste management, emphasizing innovation, education, and transformation. Using Chandragiri Municipality as a case study, the study advocates a shift from traditional to progressive waste management strategies, contributing an inventive waste framework, sustainability advocacy, and a transformative blueprint. The waste composition analysis highlights Chandragiri's representative profile, leading to a comprehensive plan addressing challenges and recommending a transition to a profitable waste treatment model, supported by relevant statistics. The data-driven approach incorporates the official data of waste Composition from Chandragiri Municipality as secondary data and incorporates the primary data from Chandragiri households, ensuring a nuanced perspective. Discussions on implementation, viability, and environmental preservation underscore the dual benefit of sustainability. The study includes a comparative analysis, monitoring, and evaluation framework, examining international relevance and collaboration, and conducting a social and environmental impact assessment. The results indicate the necessity for creative changes in Chandragiri's waste practices, recommending separate treatment centers in wards level rather than Municipal level, composting machines, and a centralized waste treatment plant. Educational reforms involve revising school curricula and awareness campaigns. The transformation's success hinges on reducing waste size, efficient treatment center operation, and ongoing public literacy. The conclusion summarizes key findings, envisioning a future with sustainable waste management practices deeply embedded in the community fabric.

Keywords: innovate, educate, transform, municipality, method

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