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New life to plastic: Reducing plastic waste generation in Kibera, Nairobi

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Statement of the Problem: Uncollected waste materials raise concerns on environmental degradation and public health issues in the city of Nairobi, Kenya, where a big share of the urban population still suffers from lack of adequate waste collection services. Researchers have reported that the collection rate is 33 percent and around 2,690 tons of waste remains uncollected every day. This has led to the emergence of spontaneous, informal clean-up activities in the city's slums.

Methodology & Theoretical Orientation: An ethnographic study using hermeneutic dialogue was used during structured and semi-structured interviews with local communities and institutions, focus group with women and waste pickers, and participant observation. A project proposal aimed at implementing plastic collection in the slum of Kibera was presented to the focus groups. Economic inclusion, reduction of environmental hazards, and gender equalities were key concepts ascribed to the proposal.

Findings: Willingness of communities to be more involved in waste management activities is increasing. However, the lack of organizational and technical capacity in these groups contributes to the marginalization of the poor and the rise of environmental injustices. These include increased soil and water contamination, spontaneous and induced fires in waste disposal sites, and air pollution.

Conclusion & Significance: Consideration should be given to environmental education and awareness programs to provide skills and training in the waste sector. It is also important to include local communities in decision-making processes by supporting participatory planning and co-design of plastic recycling strategies. The project presented aims to provide local groups of pickers and women with job and income opportunities, as well as supporting them in the acquisition of safer working tools and equipment.

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