Chapter 29
Strategies and Challenges for Food Waste Management:
A Comprehensive Analysis

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ABSTRACT

For the sake of public health and environmental sustainability, Food waste management is crucial, and it affects both urban and destination area equally. Due to their large population densities and concentrated trash output, metropolitan areas have received a lot of attention when it comes to Food waste management; yet, destination area have unique problems that call for particular attention and customized solutions. Food waste management in destination area includes the gathering, moving, disposing of, and recycling of solid food waste produced by small enterprises, farms, and families. Destination area frequently lacks the infrastructure and resources necessary for efficient Food waste management, in contrast to urban settings with well-established infrastructure and centralized services

INTRODUCTION

For the sake of public health and environmental sustainability, Food waste management is crucial, and it affects both urban and destination area equally. Due to their large population densities and concentrated trash output, metropolitan areas have received a lot of attention when it comes to Food waste management; yet, destination area have unique problems that call for particular attention and customized solutions. Food waste management in destination area includes the gathering, moving, disposing of, and recycling of solid food waste produced by small enterprises, farms, and families. Destination area

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frequently lacks the infrastructure and resources necessary for efficient Food waste management, in contrast to urban settings with well-established infrastructure and centralized services. This weakness may result in inappropriate garbage disposal techniques like dumping or open burning, which not only harm the surrounding environment but also provide serious health hazards. Food waste management in destination locations presents a variety of difficulties. The dispersed and frequently sparse population distribution is a major barrier that makes Food waste collection and transportation less economical. The creation of an extensive Food waste management system is further hampered by a lack of finance and financial resources. Geographical elements that might complicate logistics and raise operating expenses include rocky terrain and isolated sites. Furthermore, the adoption of sustainable Food waste management strategies is influenced by the broad variations in cultural views and practices about the disposal of trash in destination communities. The difficulties in enhancing Food waste management practices are also exacerbated by a lack of knowledge about the effects of Food waste production on the environment and inadequate instruction on recycling and trash reduction. Notwithstanding these obstacles, the value of sustainable Food waste management techniques in destination development is becoming more widely acknowledged. In addition to reducing pollution and protecting natural resources, efficient Food waste management also improves community well-being and boosts industry like tourism and agriculture.

This chapter examines the methods used in destination area today for managing trash, highlights major obstacles, and talks about creative approaches and tactics to support sustainable Food waste management. Policymakers, community leaders, and environmental practitioners can improve Food waste management systems that are suited to the particular requirements and circumstances of destination area by being aware of and addressing these concerns.

Literature Review

Destination decentralised systems present unique obstacles as well as substantial opportunities. Saha and Tyagi (2023) talk about how localised composting and biogas production, together with decentralised Food waste management, may successfully manage organic Food wastein destination India. Compared to centralised systems, these systems respond better to local conditions and save transit expenses. Nevertheless, obstacles consist of insufficient infrastructure, insufficient technological know-how, and limited financial resources. Information and communication technology, or ICT, is essential for improving SWM's efficacy and efficiency in destination areas. ICT-based solutions have enhanced community involvement and Food waste collection schedules in Kenya, streamlining and transparently improving the Food waste management process (Okeyo & Nyang'aya, 2022). Similar to this, mobile technologies have helped Ugandan Food waste management efforts be better coordinated and monitored, which has improved environmental results (Kasekende & Nabukalu, 2022). Sustainable Food waste management requires creative recycling strategies. According to Tran and Nguyen (2022), Southeast Asia uses a number of cutting-edge techniques, such turning plastic trash into fuel and making eco-bricks out of non-recyclable plastics. These methods support a circular economy by offering other energy sources and building materials in addition to aiding in Food waste management more effectively. Food waste management techniques directly contribute to lower greenhouse gas emissions and better public health. According to Almeida and Fernandes (2022), community composting in Brazil considerably lowers methane emissions from organic waste, which helps to mitigate the effects of climate change. The relationship between Food waste management and public health is highlighted by the decline in waterborne illnesses and other health problems in destination Nigeria as a result of upgraded Food waste management