

Nakuru

Sustainable Solid Waste Management in the Households

• DURATION

Currently Active

• POPULATION 2023

Nakuru County: 437,000 (Growth rate 3.55%)

• URA SCOPE

ECOLOGY. Green Urbanism

ECONOMY. Urban Prosperity Beyond GDP

• TOPICS

WASTE MANAGEMENT, SUSTAINABLE BUSINESS MODELS, ENVIRONMENTAL RESTORATION, PUBLIC HEALTH, ECONOMIC ENVIRONMENTAL BALANCE, LONG-TERM VISION

• MAIN ACTORS

County Government of Nakuru

UNITED NATIONS DEVELOPMENT PROGRAM(UNDP)

Deutsche Gesellschaft für Internationale Zusammenarbeit(GIZ)



In the heart of Kenya, Nakuru County boasts stunning landscapes, from the vibrant wildlife of Lake Nakuru to the rolling hills that define the region. Yet, beneath this natural beauty lies a growing challenge: waste management. With rapid urbanization and a population surge, Nakuru's waste problem has shifted from organic materials to an overwhelming mix of plastics, garbage, and overflowing landfills. Streets, rivers, and even the shores of Lake Nakuru are burdened with litter, putting the environment and public health at risk.

In 2021, Nakuru County faced a daunting task—managing the 1,456 tons of household waste generated daily. To address this, the county introduced an innovative waste management framework, creating 95 waste zones across residential areas, engaging stakeholders like businesses, residents, and community groups. The initiative emphasized a community-driven approach to waste management, ensuring inclusivity and long-term sustainability.

A key component of the project was the establishment of a financial model that generates revenue through permits, inspection fees, and dumpsite charges. This not only ensures the system's sustainability but also creates jobs. By doing so, Nakuru's waste management model directly contributes to multiple Sustainable

Development Goals (SDGs), including SDG 8 (Decent Work and Economic Growth), SDG 5 (Gender Equality), and SDG 10 (Reduced Inequalities).

The county's efforts to manage all waste streams, including electronic waste, demonstrate a strong commitment to SDG 12 (Responsible Consumption and Production). A material recovery facility (MRF) was established to facilitate waste recovery and recycling, showcasing the county's dedication to environmental sustainability, aligned with SDGs 13 (Climate Action), 14 (Life below Water), and 15 (Life on Land).

The waste management initiative has already had a significant impact on Nakuru. Community involvement has increased. The creation of jobs in the waste sector has boosted local economic growth, while the financial model has generated substantial revenue—approximately USD 121,600 annually—ensuring the project's self-sufficiency. Environmental impacts are evident, as waste diversion from landfills has reduced environmental degradation, and marginalized groups have gained employment opportunities.

Nakuru County's initiative stands as a model of how a community can address its waste problems in a holistic, sustainable manner.



Impact

In Nakuru County, waste was once a burden—now, it's a catalyst for transformation. Streets that were once littered now reflect a cleaner, more responsible community. Through this initiative, residents aren't just disposing of waste; they are taking ownership of their environment, fostering a culture of accountability and sustainable living.

But the impact goes beyond clean streets. Jobs have flourished where there was once unemployment. Waste collectors, recyclers, and entrepreneurs have found new opportunities, breathing life into the local economy. Small businesses dealing in waste recovery and recycling have emerged, turning discarded materials into valuable resources. With over USD 121,600 generated annually through permits, inspection fees, and dumpsite charges, the financial model ensures that waste management isn't just a public service—it's a self-sustaining system that fuels long-term growth.

Meanwhile, the environment reaps the benefits. Landfills shrink as waste is recovered, sorted, and repurposed, reducing pollution. Methane emissions decline as organic waste is managed more efficiently, preventing harmful greenhouse gases from contributing to climate change. Water pollution is minimized, ensuring that Nakuru's water bodies remain clean and safe. By reducing dependence on landfills and implementing responsible waste disposal practices, the initiative safeguards life on land and below water, taking a bold stand for climate action and sustainability.

Perhaps most inspiring is the inclusivity woven into this initiative. Women, youth, and marginalized communities have not just been included—they have been empowered. Waste management is no longer a job for the few but an opportunity for many, bridging social gaps and fostering equality. Women-led recycling groups, youth cooperatives, and community-based organizations have flourished, proving that a sustainable future is built on the foundation of inclusivity and shared prosperity.

This initiative has proven that waste isn't just waste—it's an opportunity for economic progress, environmental preservation, and social change. Nakuru County's model is more than a local success; it's a blueprint for communities worldwide, demonstrating that sustainability, innovation, and inclusivity can reshape the future.

Challenge

Nakuru County's waste management journey is a battle against mounting waste, logistical hurdles, and limited funds. With 1,456 tons of waste generated daily, the challenge is clear: how to manage, fund, and sustain an effective system while curbing uncontrolled littering. The county's response—dividing areas into 95 waste zones—aims to bring structure and accountability but engaging stakeholders and ensuring lasting participation remain obstacles.

Financially, the initiative relies on permits, inspection fees, and dumpsite charges, but long-term sustainability is uncertain. Waste recovery and material recovery facilities promise innovation, yet managing diverse waste streams, including e-waste, adds complexity. Inclusivity efforts address gender and social inequalities but ensuring fair participation across all groups is an ongoing challenge.

Beyond logistics and finances, environmental sustainability is crucial—reducing methane emissions, preventing marine pollution, and preserving ecosystems demand continued commitment. Nakuru County's model intertwines economic growth, job creation, environmental stewardship, and social inclusion, but maintaining momentum and scaling impact will be the ultimate test.

Solution Proposed

Every day, Nakuru County must face a towering challenge related to household waste. But rather than being buried under the problem, the county took bold action in 2021. A revolutionary framework emerged, anchored in the Nakuru County Waste Management Act, dividing the region into 95 waste zones. This wasn't just about garbage collection—it was a movement. Residents, businesses, and marginalized groups became part of a community-driven solution.

To sustain the effort, an innovative financial model was born, generating revenue through permits and dumpsite fees. This not only kept the system running but created jobs, tackling poverty and boosting economic growth. Beyond waste collection, the county introduced a material recovery facility to maximize recycling, even managing complex waste like e-waste.

By blending economic progress, inclusivity, and sustainability, Nakuru's model stands as a blueprint for the future—a community transforming waste into opportunity. With this initiative Nakuru county has contributed to inclusive and responsible urban development (SDG 11), creating employment opportunities (SDG 8) and poverty eradication (SDG 1), ensuring a balanced financial system (SDG 12), reduce waste generation (SDG 13 and 15) and reducing inequalities (SDG 10).