nema
Mazingira Yetu | Uhai Wetu | Wajibu Wetu

Ecoflash

News Magazine || ISSUE 1, 2025 - 26

National Environment Management Authority

Carbon Market Trading in Kenya

The National Environment Management Authority (NEMA) is the Designated National Authority (DNA) for Carbon Markets in Kenya in line with the Climate Change (carbon markets) Regulations, 2024. The NEMA Director General, Dr. Mamo B. Mamo, EBS is the first registrar for all carbon projects in the country.



World Cleanup Day- Clothes for Trees

Under the theme, "Tackling Textile and Fashion Waste Through Circular Fashion," World Clean-up Day 2025 focused on the urgency of addressing challenge of textile waste through clean-ups and promoting circular fashion systems.

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Editorial Team

EDITOR
Evans Nyabuto

EDITORIAL ASSISTANTS
Judith Ochieno
Samwel Irungu

DESIGN & LAYOUT
Samwel Irungu

PHOTOGRAPHY
Samwel Irungu
Frankline Musomi
Peris Murage
Pauline Kerubo
Anthony Mwangi

STORIES BY:
Agnes Kamiri
Judith Ochieno
Samwel Irungu
Peris Murage
Christina Mwaura
Frankline Mosomi
Pauline Kerubo
Brenda Obura
Oceanic Sakwa
Doreen Kirimi



NEMA Director General, Dr. Mamo B. Mamo, EBS (2nd R) joined the opening ceremony and leadership Summit of the 2nd African Climate Summit (ACS-2) that was held from 8th to 10th September, 2025 at Addis Ababa, Ethiopia. This year, the Summit marked a decisive moment for Africa to unite in pursuit of climate justice, resilient development, and a sustainable future for generations to come- directly advancing African led solutions to climate change related challenges.

Editorial

Stewarding the environment

As we usher in a new quarter filled with optimism and purpose, we are reminded of our shared commitment to environmental conservation. Despite the setbacks and uphill battles, our collective spirit remains strong. Mazingira yetu, uhai wetu, wajibu wetu continues to echo as our common theme song — a reminder that protecting our environment is not merely a duty but a celebration of life itself.

Carbon market trading in Kenya continues to offer an optimistic pathway for income generation and environmental restoration. The carbon market system allows individuals and communities to buy and sell carbon credits earned by reducing or removing greenhouse gases through approved projects. This evolving market offers communities the opportunity to earn, protect, and build resilience against climate change.
At the heart of carbon reduction lies effective waste management — ensuring that what we discard does not cost the planet. Waste management remains a core issue and, at the same time, a critical gap in our pursuit of sustainable development. With regulations such as the Sustainable Waste Management Act, Kenya continues to affirm that everyone has the right to a clean and healthy environment — a right that depends on how responsibly we handle our waste.

This year's celebration of World Environment Day proved unique, themed "Tackling Textile and Fashion Waste through Circular Fashion." It reminded us of the urgent need to address textile waste through creative clean-up and recycling initiatives. Through innovation, materials such as textiles can be repurposed into valuable products, curbing the rising volumes of discarded fabrics — now among the top contributors to micro plastic pollution in our rivers, lakes, and soils. The Authority's staff took the lead, exchanging used linens, bags, and clothing for free tree seedlings — a powerful symbol of personal commitment to conservation.

The Authority, through the Thwake Dam Catchment Solid Waste Mapping Initiative supported by the Humanitarian OpenStreetMap Grant, is making significant progress in addressing waste management challenges while promoting environmental sustainability. This collaboration is laying the foundation for cleaner rivers, safer water, and improved air quality — ultimately enhancing human dignity and quality of life.
Together with several partners under the GEF 7 Project on strengthening forest management for biodiversity conservation and climate resilience in Kenya's southern rangelands, the Authority hosted a stakeholder workshop focusing on Narok and Kajiado. The discussions emphasized the importance of synergy among stakeholders to conserve and protect the rangelands for generations to come.

Whether through fashion innovation, tree planting, or digital mapping, and every effort connects back to our greater environmental mission. Waste textiles transformed into fashion and nurturing of tree seedlings can one day feed into carbon markets, serving as both incentive and inspiration for communities to participate in environmental action. Digital innovations such as GIS continue to play a vital role in improving waste management systems across the country.

The Authority has also maintained its momentum in enforcing the plastic bag ban, conducting regular inspections nationwide to uphold Kenya's 2017 commitment to eliminate single-use plastics.
Together, these efforts — from data to daily action — remind us that environmental protection is not a single event but a continuous cycle of awareness, accountability, and innovation. Each of us has a role to play in shaping a cleaner, healthier environment.

Evans Nyabuto,
Deputy Director Corporate Communications

NEMA Enforcing Plastic Bags Ban

|| By F. Mosomi & Peris Murage



NEMA Director General, Dr. Mamo B. Mamo, EBS inspects some of plastic bags confiscated from a manufacturer in Kiambu during a previous enforcement exercise.

Regulation 6 (1) of the Environmental Management and Co-ordination (Management and Control of Plastic Packaging Materials) Regulations, 2024

A person shall not manufacture, import, export, possess, use or offer for sale a flat bag, plastic bag or plastic film without authorization from the Authority. In addition, regulation 2, defines a "plastic bag" as a carrier bag or flat bag made from any polymer including polyethylene, polypropylene, polyethylene terephthalate that could be laminated or non-laminated, film or fabric, woven or non-woven. A person shall not sell or offer for sale plastic packaging materials in Kenya unless the name and contacts details of both the user and the manufacturer are clearly printed on the material.

Kenya banned the use, manufacture and importation of all plastic bags used for commercial and household packaging in Kenya on 28th February, 2017 through a Gazette notice No. 2356

Later, on 4th November 2024, the CS then gazetted the Environmental Management and Co-ordination (Management and Control of Plastic Packaging Materials) Regulations, 2024; whose objectives are among others to establish a framework for the management and control of the use of plastic packaging material as well as establish a framework for the management and control of the use of plastic packaging material.

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Consequently, members of public are advised that any person who wishes to manufacture, import, export, possess, use or offer for sale flat plastic bags or plastic films within the above definition to apply to the Authority for a licence in accordance with the Management and Control of Plastic Packaging Materials) Regulations, 2024.

Members of the public are further advised that any person who manufactures, imports, exports, uses, sells, offers for sale or possess plastic carrier bag or plastic flat bags without a licence commits an offence and shall, on conviction, be liable to upon conviction for a term not less than one year but not more than four years or to a fine of not less than two million shillings but not more than four million shillings or both such fine and imprisonment.

Despite the regulatory efforts in place, there has been reemergence of use of plastic bags in few markets in the country promoting the Authority's enforcement department to take action. For example, a manufacturer was arrested in Thika in possession of the banned plastic bags.

NEMA continues to promote environmental awareness and enforce the regulations to ensure greater compliance with the law, while assuring the public of its commitment to ensure a clean, healthy and safe environment for all.

Kenya banned the use of plastic carrier bags in 2017, prompted by environmental and health costs. At the time, more than 100 million single-use plastic bags were handed out every year, making them the most commonly used carrier bags for shopping. Most traders and end users have complied with the ban, but the bags have never been completely eliminated.



Director Environmental Enforcement, Dr. Ayub Macharia inspects some of plastics confiscated from a factory in Kiandutu, Thika during an enforcement exercise.

Carbon Market Trading in Kenya

|| S. Irungu



Members of a community measuring the size of trees in a forest {PHOTO: COURTESY}

A carbon market is a system that allows people, companies or governments to buy and sell "carbon credits" earned by reducing or removing greenhouse gases from the air, through approved projects that follow national and international rules.

Carbon markets offer communities a great opportunity to earn money, protect the environment, and build resilience against climate change. However, communities must understand the rules, participate actively, and demand transparency from the buyrers of carbon credits. Therefore, a carbon project is an activity that helps reduce, remove, or prevent harmful gases from entering the atmosphere. These projects create carbon credits that can be sold in carbon markets.

The projects are crucial for communities because they offer opportunities for sustainable development, economic growth, and improved well-being, while mitigating climate change.

A carbon credit represents one ton of greenhouse gas (GHG) reduction or removal. It is a tradable unit used to support projects that reduce pollution. Carbon credits help attract funding, especially for projects that have insufficient financial support or technology access.

Article 6.2 of the Paris Agreement presents a cooperative approach that enables countries to trade mitigation outcomes with each other through bilateral or multilateral agreements. These traded credits, termed as Internally Transferred Mitigation Outcomes (ITMOs) must constitute real, verified, and additional emission reductions or removals not included in the host country's Nationally Determined Contributions (NDCs).

CARBON CREDIT

Represents one ton of Greenhouse Gas (GHG) reduction or removal. It is a tradable unit used to support projects that reduce pollution. Carbon credits help attract funding, especially for projects that have insufficient financial support or technology access.

There are two main ways carbon credits are traded: primary trading where direct sales between project developers and buyers and secondary Trading that uses intermediaries like brokers or exchanges to trade credits.

The National Environment Management Authority (NEMA) is the designated National Authority for carbon markets in Kenya in line with the Climate Change carbon markets Regulations of 2024 granting NEMA the responsibility to authorize and approve all carbon market projects in Kenya among other major responsibilities as laid down in the Act and the regulations. Therefore, the NEMA Director General is the registrar for all carbon projects in the country.
The responsibility of the Designated National Authority (DNA) is to ensure compliance with all the Carbon Markets Regulations and also carry out such duties as stipulated in the same regulations.

In order for the Authority to ensure fairness in the enforcement of the regulation, the Authority is required to educate and create awareness on the requirements of the law. It is against this background that NEMA identified the need to develop this community guide to ensure that the communities understood their roles and responsibilities under the law and subsequent regulations.

In order for the Authority to ensure fairness in the enforcement of the Regulation, the Authority is required to educate and create awareness on the requirements of the law. It is against this background that NEMA identified the need to develop this community guide to ensure that the communities understood their roles and responsibilities under the law and subsequent regulations.

The simplified guide is designed to enhance the understanding of communities on the carbon markets regulations as well as build their capacity to enable them participate in the carbon projects being implemented in their areas and also unbundle the procedures and requirements of identification and implementation for their own carbon projects.

The Community guide complements all other education and awareness programs on climate change and carbon markets currently being run by the Authority and answers the many questions that come with any new regulation gazetted by the government.
Communities can participate in carbon markets by developing local carbon projects or signing agreements with carbon project developers.

For a project to participate in carbon markets, it must comply with the methodologies and requirements of a recognized carbon standard which are available for public viewing on the various carbon standards registries. Recognized carbon standards include Verra, Gold Standard, Plan Vivo among others.

Other institutions mandated to oversee the implementation of the Carbon Markets Regulations. These includes; the Ministry of Environment, Climate Change and Forestry, County Governments, and others who give approvals, monitor projects, and protect community interests.

World Ozone Day Celebration

|| By Oceanic Sakwa & Peris Murage

Kenya joined the World in celebrating the International Day for the Preservation of the Ozone Layer, themed "40 years of Vienna Convention: from Science to Global Convention." The event was held at John Michuki Memorial Park, Nairobi

World Ozone Day is celebrated on September 16 to commemorate the signing of the Montreal Protocol in 1987, on Substances that Deplete the Ozone Layer that has achieved universal ratification. Its implementation has led to the recovery of the ozone layer and contributed significantly to mitigating climate change.

Under the Montreal Protocol, parties commit to reducing the consumption and production of ozone-depleting substances (ODS). The treaty outlines a schedule for the phase-out of key substances such as CFCs, HCFCs, and halons. The Kigali Amendment to the Montreal Protocol, agreed upon in 2016, included provisions for the phase-down of HFCs, which are potent greenhouse gases but do not deplete the ozone layer

In Kenya, the Montreal Protocol has been domesticated through the Environment Management and Coordination (Controlled Substances) Regulations, 2025 that establishes a regulatory framework for controlled substances, regulating their production, import, export, usage, handling, storage, and disposal, in line with Kenya's obligations under the Montreal Protocol.

The Regulation main objective is to protect the ozone layer from chemicals that deplete it and to regulate trade and practice in controlled substances. This is achieved through issuance of licenses and permits for importers. The regulations include the management of controlled substances and equipment containing controlled substances including storage, handling, production, packaging, import, export, transit, use and disposal.

Further the Regulations, 2025 legally operationalize Kenya's commitments to controlling ozone-depleting substances through a licensing system, regulated trade, safe handling and advertising protocols, and enforcement via identified authority oversight; and provisions for the authorization, registration and licensing of RAC Technicians and Servicing Companies in order for them to repair, maintain, replace or retrofit RAC equipment.

This year's theme ensures all parties recognize that Scientific and technological advancements have made strides in controlling the gases leading to the various amendments under the Protocol to guarantee that the ozone layer is protected.

Homeowner are urged, regardless of the refrigerant used to select a reputable dealer that employs service technicians who are NEMA certified to handle refrigerants. The responsibility of protecting mankind shared heritage is not the duty of one nation, but of all human.



CS Environment, Climate Change and Forestry, Dr. Deborah Barasa is taken through the NEMA air quality mobile laboratory during the World Ozone Day 2025 at Michuki Park, Nairobi



NEMA Director General, Dr. Mamo B. Mamo, EBS (C) hosted a delegation from JOSPONG Group led by Executive Chairman Dr. Joseph Siaw Agyepong at his office

FORGING PARTNERSHIPS ON WASTE MANAGEMENT

NEMA Director General Mamo B. Mamo, EBS, hosted a delegation from Ghana's JOSPONG Group, led by Executive Chairman Dr. Joseph Siaw Agyepong, to explore sustainable waste management partnerships in Kenya on 4th July, 2025.

JOSPONG expressed interest in collaborating with the Authority to establish Material Recovery Facilities in Nairobi and Mombasa, aligned with the Sustainable Waste Management Act (CAP 387C) and National Policy (2021).

Material Recovery Facility (MRF) is a plant that receives, sorts, processes, and prepares recyclable materials—such as paper, plastic, and metal—to be sold to end-user manufacturers.

Dr. Agyepong showcased JOSPONG's success in waste segregation and recovery across Africa, demonstrating their capacity to replicate similar solutions in Kenya.

The DG welcomed the partnership, highlighting challenges in waste collection and NEMA's progress, including the implementation of EPR regulations to reduce pollution from producers.

Waste Pickers in Narok's Green Shift

|| By NEMA Narok Team

Waste pickers, an informal yet crucial workforce in Narok County, diligently work daily to maintain clean streets and markets. These are key players in Kenya's transition towards the Sustainable Waste Management Act, which guides counties, manufacturers, and other waste service providers towards the shift to a circular economy.

Waste pickers, otherwise known by many as "scavengers', are unofficial, but their workforce keeps the streets, households, and markets in Narok County clean, just like in any other county - this workforce is becoming very important in the sustainable waste management transition.

Just a few days ago, representatives of waste pickers from all over Narok County were brought together by the Centre for Environment Justice and Development (CEJAD).

This was a conversation moment between the center, county government officials, NEMA, and the private sector to talk about the laws around waste, who is in charge of waste in the county, what is the role of waste pickers in keeping the county clean, and how can they generate their daily income from their daily jobs?

They shared their stories of daily early mornings spent sorting waste without safety protection, let alone recognition. Though the public sees them as scavengers, from their eyes they see themselves as waste service providers, environmental stewards, recyclers, and material recoveree's.

By the end of the day, they were able to not only understand what the Sustainable Waste Management Act provides but also what their role and place are in it and the ongoing Global Plastics Treaty negotiations.

From them, what they want is clear: safety, dignity, and a place at the table. As the implementation of the Sustainable Waste Management Act continues, Narok County has a unique chance to include waste pickers in their policies, to support their formal recognition, and to train them on waste management. True sustainability begins with inclusion, and waste pickers are at the headline of the transition, not the footnote. True sustainability should leave no one behind



NEMA, Narok County Government, Narok Municipality staff, CEJAD and waste pickers during the meeting

Turning Waste into Wealth: A Deep Dive into Waste Management in Vihiga County

|| By Brenda Obura

Waste management is an increasingly urgent issue in Vihiga County, driven by rapid urbanization, population growth, and changes in consumption habits. Every day, significant volumes of waste are generated in homes, markets, institutions, and public spaces. When not properly managed, this waste contributes to pollution, clogs drainage systems, creates breeding grounds for disease, and degrades the environment.

Recognizing the growing threat, stakeholders across the county—including the Vihiga County Government, the National Environment Management Authority (NEMA), youth innovators, and community-based organizations—have taken steps to build a more sustainable and effective waste management system. This article explores how Vihiga is handling waste, the innovations being implemented, the obstacles encountered, and the best practices that can guide continued progress.

Vihiga County Government has implemented several initiatives to reduce waste-related problems and promote environmental cleanliness. The cornerstone of its strategy includes:

- Designated waste collection points placed in markets, trading centers, and densely populated areas to curb illegal dumping.

- Scheduled collection services operated by county garbage trucks, especially in urban areas, to ensure timely removal of waste.
- Enforcement of waste management by-laws, with penalties issued for open dumping, roadside littering, and unregulated burning of waste.
- Sensitization campaigns conducted in barazas and through posters and school programs to build a culture of responsible waste disposal.
- Public messaging through local radio programs, particularly morning broadcasts that raise awareness about waste management and encourage communities to treat waste as a resource.

A significant focus has also been placed on waste segregation at the source, where households and institutions are encouraged to separate organic waste from plastics, metals, and glass. This effort is designed to simplify composting, improve recycling efficiency, and reduce pressure on landfills.

As Kenya's environmental regulator, the National Environment Management Authority (NEMA) is deeply involved in strengthening Vihiga's waste management framework. NEMA supports the county through:

- Environmental audits and inspections in schools, businesses, and public institutions to assess waste handling practices.
- Capacity building for waste groups, particularly community-based organizations (CBOs), by providing training on composting, recycling, and safe waste disposal techniques.
- Educational campaigns that emphasize behavioral change, including demonstrations and interactive programs in schools and markets.
- Support for Extended Producer Responsibility (EPR) policies that require producers to take back or account for the packaging waste they release into the environment.
- Technical guidance during Environmental Impact Assessments (EIAs), ensuring new developments include appropriate waste management plans.

Vihiga County is showing that effective waste management is not just about disposal—it's about innovation, collaboration, and mindset change. By combining structured policy, community education, and youth creativity, the county is transforming waste from a public nuisance into a valuable asset.

However, challenges remain. Stronger enforcement, infrastructure development, and behavioral change campaigns are needed to bridge existing gaps. With continued commitment from government, civil society, and citizens, Vihiga's experience can serve as a blueprint for building cleaner, greener counties across Kenya.

Waste is no longer just trash—it's a tool for sustainable development

Digital Mapping of Dumpsites in Towns

According to "What a Waste" Report 2022 by World Bank, every year, the world generates over 2 billion tonnes of solid waste and at least 33% of it is not managed in an environmentally safe manner.

As the human population continues to surge in billions all over the world, so do demands and needs. We live in an era defined by rising consumerism and mass production, driven by the need to meet ever-growing demands. Yet, as humanity remains blinded by unchecked ambition and focused solely on achieving short-term goals, the idea that we are the primary caretakers of this green earth, becomes increasingly elusive. This responsibility drifts further and further from our grasp with each passing day.

One might ask, are there consequences of unethical ambitions? If so, perhaps it is time to consider a moral scale: one that helps measure the environmental cost of our desires.

Africa as continent remains among the most promising developing economies in the world driven by factors like increased foreign investment, a growing service sector, and improved governance. Yet far beyond the horizon, trouble looms — the consequences of our actions waiting to trip us. Waste remains a clear stumbling block to Africa's future.

Further, a report by Africa Clean Cities Platform depicts a dire need for proper mechanisms to address waste. It reveals that More than 90% of waste generated in Africa is disposed of at uncontrolled dumpsites and landfills, often accompanied by open burning. Alarmingly, 19 of the world's 50 biggest dumpsites are located in Africa, all in Sub-Saharan Africa. At the heart of the continent lies Kenya, often described as the "Silicon Savannah of Africa', due to its positive global image and its frontier in matter development. Despite these successes, Kenya, like many other African countries still faces waste pollution problems.

According to the National Environment Management Authority (NEMA) the government regulator on environmental matters, Kenya generates an estimated 22,000 tonnes of waste per day, with Nairobi alone producing, between 2,000 to 2,500 tonnes daily. This clearly shows that the country faces inadequate waste segregation facilities, leading to inefficient recycling and composting, contributing to environmental and health problems. In a country like Kenya, one might ask: what is the best mechanism to handle the ever-growing numbers of unregulated dumpsites that continue to pose as a serious threat to our environment? One solution is the mapping of waste locations.

Waste mapping can be defined as the process of identifying, locating, and characterizing waste materials, often using mapping technologies like GIS or drone imagery, to better understand waste generation, management, and disposal patterns. The principle that "modern problems require modern solutions" is emulated at best through mapping. It not only offers a quick addressing mechanism but also provides real time data on unregulated waste dumpsite, which can help inform future waste mitigation measures. The use of GIS and drone imagery is a game changer in tackling waste issues, presenting a modern technological approach and offering a new lens on how Kenya can address waste challenges moving forward.

NEMA through the Thwake Dam Catchment Solid Waste Mapping Initiative Supported by the Humanitarian Open Street Grant, is addressing pressing waste management challenges within the project's catchment areas. This collaboration lays the foundation for improving human life and human dignity by providing clean water and protecting rivers from dumpsite pollution, and reducing air pollution caused by poor waste infrastructure.

So far, the project has mapped over 60,000 digitized buildings surpassing the target of 50,000 within the catchment areas. It has also covered approximately 180km of roads and uploaded data on about 25, 000 amenities, as well as more than 100 place names within the Nairobi-Athi-Galana-Sabaki river catchment. Fieldwork has been undertaken in Nairobi and other parts of the catchment area.

The Thwake Dam Catchment Solid Waste Mapping Initiative is making significant progress in addressing waste management challenges while promoting environmental sustainability and improving quality of life. This initiative provides a new blueprint for government and private entities to address waste issues in a timely manner. It also covers blind spots that, for the longest time, have gone unaddressed.



Participants in a procession during the World Clean-up Day 2025 at Machakos town

|| By S. Irungu

Managing Crisis of Textile Waste

185,000

Tonnes of second-hand clothes (popularly known as mitumba) Kenya imports annually, sustaining millions of livelihoods. Yet, less than 1% of textile waste is recycled, leaving County governments to deal with mounting heaps of rejects. Discarded textiles are now among the top contributors to microplastic pollution in our rivers, lakes, and terrestrial habitats.

Every second, a garbage truck full of clothes is dumped in a landfill or burned. The fashion industry globally generates 92 million tonnes of textile waste each year, overwhelming waste systems, polluting waterways, and fuelling the climate crisis.

Kenya imports over 185,000 tonnes of second-hand clothes (popularly known as mitumba) annually, sustaining millions of livelihoods. Yet, less than 1% of textile waste is recycled, leaving County governments to deal with mounting heaps of rejects. Discarded textiles are now among the top contributors to microplastic pollution in our rivers, lakes, and terrestrial habitats.

On the other hand, Kenya generates an estimated 8 million tonnes of solid waste annually, of which more than 60% is recyclable. Yet, the vast majority still ends up in dumpsites. This not only pollutes air and water but also costs County governments billions of shillings in collection and disposal.

On 20 September 2025, Kenya celebrated the World Clean-up Day- a global event that goes beyond picking up trash to confront the waste crisis head-on.
This year's focus was on textile and fashion waste, themed- Tackling Textile and Fashion Waste Through Circular Fashion-one of the most visible and fast-growing environmental challenges.
The day highlighted the urgent need to raise awareness and shift habits toward responsible consumption, strengthen local and global waste management systems, and advance policies and partnerships that build urban resilience.
Textile waste fuels the triple planetary crisis: it clogs drains and worsens urban floods, pollutes rivers and oceans, harms biodiversity, and releases greenhouse gases that drive climate change. By tackling textile waste, World Cleanup Day aimed to promote sustainable use of textiles.

For the second time, World Clean-up Day was being celebrated as a United Nations–recognized event. Exemplifying that tackling waste is not just a local responsibility, but also an international obligation.

In Kenya, the national celebrations were held at Machakos University, Machakos County with a major clean-up around markets in Machakos town. The event was graced by various dignitaries led by NEMA, County Government officials, state departments among private sector players.



NEMA Chairman, Emilio Mugo accompanied other board members joined the cleanup exercise at Machakos Market during the World Cleanup Day



NEMA Director General, Dr. Mamo B. Mamo, EBS is joined by RDE Eastern, Patrick Lekenit during the cleanup at Machakos town market.

Speaking during the event, the NEMA Chairman, Emilio Mugo stated, "World Clean-up Day is symbolic, a day of solidarity, action, and hope. But let us be honest: one day of clean-up cannot undo 364 days of mismanaged waste. "He added that we need a systemic shift through segregation of waste at source, counties collaboration, partnerships, support small and medium enterprises as well as through public education.

The Chairman urged every actor — from manufacturers and importers to counties, traders, designers, and consumers to deliberately commit to reduce the burden of waste, safeguard public health, and unlock new opportunities in the green and circular economy.

To tackle the challenge of waste, pollution, biodiversity loss and climate change, the Mr. Mugo noted that NEMA is guided by five strategic goals; supporting low-emissions and climate-resilient development pathways; sustaining the ecological integrity of ecosystems; minimizing environmental pollution; accelerating the adoption of resource-efficient and circular economy practices and strengthening institutional capacity.

While speaking during the clean-up exercise, the NEMA Director General, Dr. Mamo B. Mamo, EBS stated that the day showcases what as citizens we should do every day to keep our environment clean. He added that we should stop the throwaway culture and exercise responsibility towards our waste. Dr. Mamo urged the County governments to ramp up efforts to manage solid waste which is devolved. He further urged citizens to exercise responsibility towards their waste to keep their environment clean.

The Cabinet Secretary for Environment, Climate Change and Forestry was represented by Secretary Administration, Chimwanga Mongo who noted that Unless urgent changes are made, textile waste will rise from 92 million tonnes today to an estimated 134 million tonnes by 2030. This mounting waste threatens human health, drains billions from the global economy, and fuels the triple planetary crisis of climate change, biodiversity loss, and pollution.

He further stated that Kenya aligns with commitments to promote circularity through the National Solid Waste Management Strategy, the Sustainable Waste Management Act (2022), and the Extended Producer Responsibility (EPR) Regulations (2024). Under the Bottom-Up Economic Transformation Agenda (BETA), counties are central to implementing Integrated Waste Management Plans and expanding access to reliable waste services.

NEMA is implementing the National Sustainable Waste Management Act, 2022. This law is a game-changer as it mainstreams circularity by requiring: waste segregation, county waste management plans and Private sector investment in recycling and recovery facilities. The Authority is also promoting circularity requiring producers, importers, and retailers charge of the waste their products generate as well as monitoring and enforcement.



Dignitaries visit some of the exhibitions during the World Clean up Day 2025

NEMA, JICA partnership on Urban Waste

The Second Joint Coordinating Committee Meeting of the JICA Project on Promoting a Circular Model of Environmentally Sound Solid Waste Management in Urban Areas was held on 3rd September 2025 at a Hotel in Nairobi. The meeting brought together government officials, development partners, and stakeholders to review progress and chart the way forward in advancing sustainable waste management solutions.

The JICA-supported project seeks to introduce innovative approaches to waste management in urban areas, with a focus on recycling, reuse, and sustainable disposal. Kenya continues to face increasing challenges with solid waste in its rapidly growing cities, and this initiative aims to promote a circular model that minimizes waste while protecting the environment.

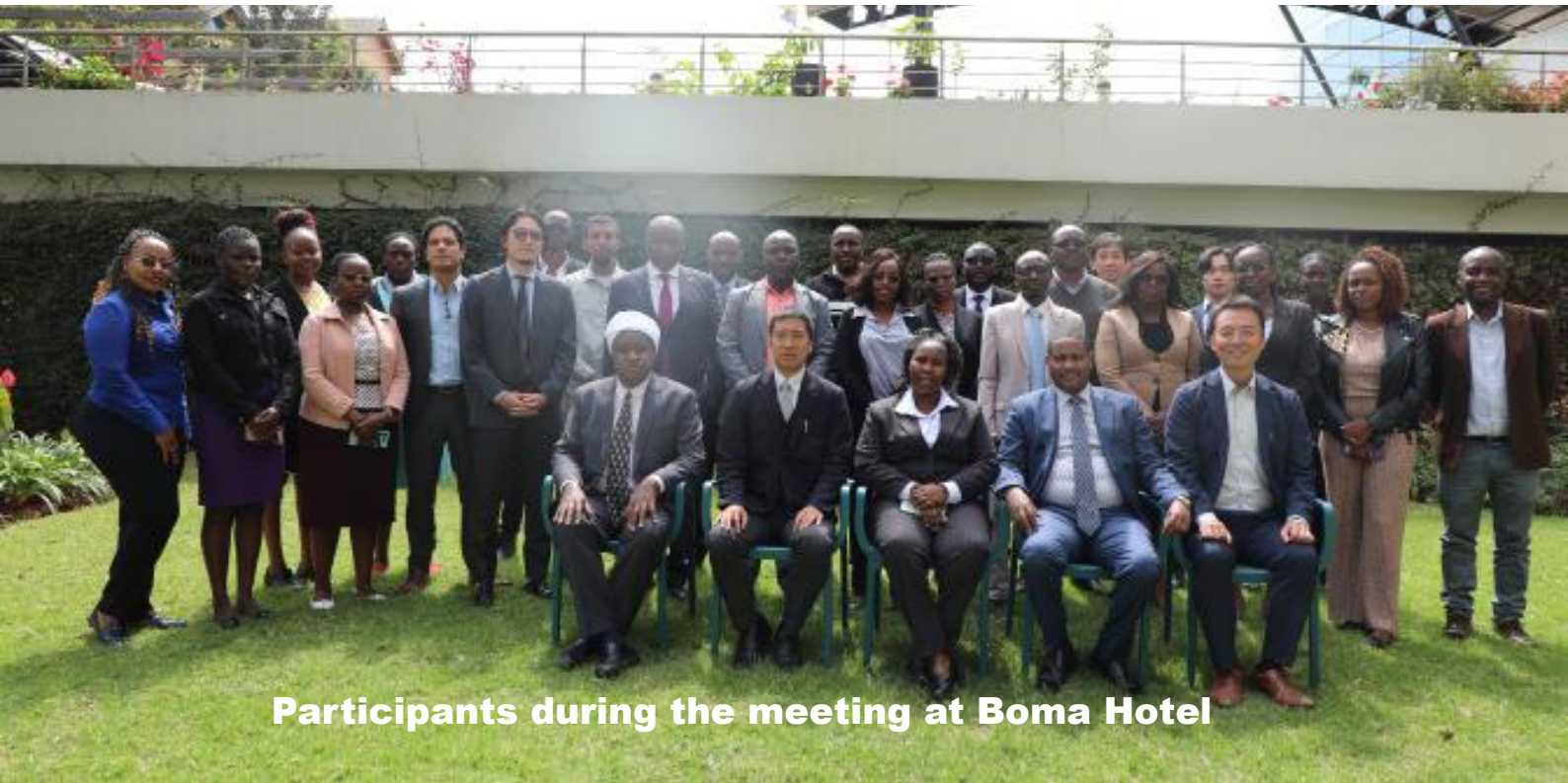
In his remarks, the Director General of the National Environment Management Authority (NEMA), Dr. Mamo B. Mamo, EBS, highlighted the current state of waste management in Kenya. He addressed issues surrounding waste collection systems, the legal framework, segregation at source, and the progress of Material Recovery Facilities (MRFs). Dr. Mamo further emphasized the importance of investing in organic waste sorting machines at MRFs to accelerate the circular economy agenda.

Representatives from the Ministry of Environment and JICA reaffirmed their commitment to supporting policy reforms, capacity building, and technology transfer. Dr. Mamo reiterated the government's commitment to advancing circularity in waste management as a pathway to sustainable cities.

Representing the Principal Secretary, Dr. Eng. Festus Ng'eno, the Environment Secretary, Dr. Selly Kimosop, underscored the importance of establishing recycling and recovery targets and developing a National Circular Economy Strategy and Action Plan. She further emphasized the need to review existing waste regulations to identify and address policy gaps that hinder effective waste management.

Mr. Satoshi Hamano, Senior Representative, JICA highlighted JICA's dedication to working closely with the Government of Kenya and local authorities in scaling up innovative waste management practices that will benefit communities and promote sustainable urban growth.

The meeting brought together representatives from Mombasa, Kiambu, and Nairobi Counties, alongside development partners and private sector stakeholders. As part of the way forward, the committee agreed to strengthen public-private partnerships, expand pilot projects in urban centers, and intensify public awareness campaigns on waste reduction and recycling. Stakeholders also resolved to deepen collaboration between county governments and national institutions to enhance efficiency and accelerate progress.



Participants during the meeting at Boma Hotel

From L: NEMA Ag. Director Environmental Services, Dr. Charles Lange (L), Joyce Imende, Principal Environmental Compliance Officer and Deputy Director Corporate Communication, Evans Nyabuto receive trees seedlings in exchange for clothes.

Clothes for Textiles



NEMA staff taking part in the 'clothes for trees' exercise at NEMA compounds

World Clean-up Day 2025 was celebrated under the theme , "Tackling Textile and Fashion Waste Through Circular Fashion,". As a buildup towards activity the event, NEMA held a "Textile and Fashion Waste Mop-up," exercise dubbed "Clothes for Trees" in partnership with Africa Collect Textiles (ACT).

Staff brought used linens such as bags, beddings, jackets, coats among others in exchange for tree seedlings. The collected items will be handed over to ACT who will sort and redistribute to vulnerable communities- some items will be repurposed and recycled to keep the environment clean. During the mop-up activity, 358 items totalling to 110Kgs of both clothing, textile and footwear combined.

This year, the theme sought to address the challenge of textile waste through clean-ups to promote circular fashion systems.



Participants in a group photo during the national validation workshop at a hotel in Nairobi

Strengthening Rangelands Management in Kenya

|| By J. Ochieno

The Southern rangelands of Kenya are part of the world's savannah scrubland and grasslands, which make up more than 83% of the country. Most of these areas are in Northern Kenya, and they are home to about 4 million pastoralists, who make up over 10% of Kenya's population, along with other rangeland users. Pastoralists also occupy most of Kenya's border areas, with pastoral groups straddling borders with Ethiopia, Somalia, Sudan, Uganda, and Tanzania.

With a total size of 7000 km2, the Southern Kenya rangeland ecosystem is made up of six interconnected sub-ecosystems that extend from Tanzania to Mt. Suswa, Ewaso Ng'iro, and Maasai Mara. The habitat is semi-arid in two-thirds, with an average annual rainfall of 620 mm for the previous 55 years. The worst droughts, with 188 mm of precipitation, were in 1965 (345 mm), 1984 (358 mm), 2000 (280 mm), and 2009. Extensive traditional livestock production, subsistence agriculture, and wildlife conservation are the main land use systems in the southern rangelands

The southern rangeland is 50% degraded and 40% highly eroded, with hard pans, bare ground, and the intrusion of invasive species being the main indicators of land degradation. There are many invasive species, primarily Ipomea carnea, Ipomea hildebrandtii, Gutenbergia (Erlangea), Prosopis juliflora. Livestock is trending upward while wildlife is trending downward.

By 2016, there were about thirteen times as many livestock as there were wild animals. Kajiado and Narok counties are categorised as badly deteriorated in the 2016 national SLM report. Over the previous 20 years, excessive logging, overstocking, and intensive farming have caused the disappearance of native vegetation. Analysis of satellite imagery from 1985 to 2015 reveals that while shrubland and woodlands declined around Suswa, bare land, grassland, and agricultural land continued to grow.

To towards addressing these challenges, NEMA is executing a four-year GEF-7 cycle National Child Project (2023-2027) on "Strengthening Forest Management for Improved Biodiversity Conservation and Climate Resilience in the Southern Rangelands of Kenya" in close coordination with the implementing agency, International Union for the Conservation of Nature (IUCN). The project covers Narok and Kajiado Counties.

To enhance parternships and collaboration in project implementation, NEMA held a national stakeholders forum at a Nairobi Hotel from 28th to 30th July 2025.



NEMA Director General, Dr. Mamo B. Mamo, EBS (R) with Environment Secretary, Dr. Selly Kimosop (C) and Benjamin Mutua from IUCN (L) during the workshop at Ole Sereni Hotel.

Speaking at the forum, NEMA Director General, Dr. Mamo B. Mamo, EBS stated that despite the significance of rangelands in fostering climate resilience and food security, they are currently facing increased pressure from land degradation, climate change, population growth, and competing land uses.

The DG affirmed the Authority's commitment to work collaboratively with all partners to ensure that policies, strategies, and programs are developed for inclusive, practical, and impactful rangelands.

PS Environment and Climate Change, Dr. Eng. Festus Ngeno called on stakeholders to pull synergies from different intervention strategies for conservation and protection of the Southern rangelands in Kenya. He added that the Kenyan government acknowledges that one significant issue facing the nation is land and environmental degradation—the country has made huge strides in ensuring that the integrity of the ecosystems is protected by, among other interventions, ratifying a number of international conventions, including the Millennium Development Goals, the Kyoto Protocol on Climate Change and its successor UNFCC, the Convention on Biodiversity (CBD), and the UN Convention to Combat Desertification (UNCCD). The PS was represented by Dr. sally Kimosop, the Environment Secretary.



Dr. Leonard Tampushi moderates a panel discussion during the national rangelands stakeholders forum at Ole Sereni hotel

Mazingira Welfare Association @26

By A. Kamiri and F. Mosomi

The Mazingira Welfare Association, a nonprofit making Welfare Association, established in 1995 under the Ministry of Environment, Climate Change and Forestry, has reaffirmed its role as a vital support system for thousands of Government and State Agency staff across Kenya.

The Association held its 26th Annual General Meeting (AGM) on 30th August 2025, at Karura Grounds, Kenya Forest Service (KFS) Headquarters, and bringing together members to reflect on achievements, address challenges, and set future priorities.

The day began with the arrival of members from across the country, followed by an opening prayer and introductions. The official meeting then proceeded as per the agenda, after which members shared lunch and refreshments before final departures in the afternoon. The atmosphere reflected both unity and anticipation as members engaged in meaningful deliberations on the future of the welfare.

In her keynote address, Ms. Esther Lokwei chairperson of the welfare, who is also a Senior Deputy Secretary in the Ministry of Environment, Climate Change and Forestry, commended members for their resilience and unity, noting that the association had continued to thrive despite internal and external challenges. She highlighted key achievements, including the successful registration and allocation of prime plots to 73 members, with title deeds already being processed.

The welfare recorded a 15 percent increase in monthly contributions compared to 2024, while membership rose from 3,760 to 4,738. In addition, nine members benefited from connections to the association's borehole project, and a total of 1,433 members accessed loans, grants, and refunds worth Kshs. 104.9 million. These milestones, she noted, underscored the association's commitment to delivering tangible benefits to its members. Membership is open to all employees in the ministries, department and agencies (MDAs), County Government or any other parastatal or project under the Government of Kenya with a monthly contribution of Kshs.700.00. NEMA has a membership of 258 members

However, the management committee also highlighted persistent challenges, particularly the non-remittance of member deductions by certain departments, with arrears dating back to 2010. This has posed financial strain and in some cases delayed services to members. Despite this, members expressed confidence in the welfare's resilience and ability to overcome such obstacles.

Looking ahead, the AGM resolved to strengthen accountability systems and modernize financial management through the adoption of digital contribution platforms. Members also called for expansion into sustainable projects such as housing, water, and income-generating ventures that would provide long-term benefits.

In her closing remarks, Ms. Lokwei reaffirmed the association's mission, noting that "our focus now is on building financial resilience and exploring new opportunities that safeguard the welfare and prosperity of all members."
As the meeting concluded with fellowship and reflection, members departed with a renewed sense of unity and purpose, demonstrating once again why the Mazingira Welfare Association continues to be recognized as a welfare of choice.

As an environment based Welfare, and in an endeavor to support the government initiative through presidential directive under the national tree growing and restoration campaign on 15 billion trees, the association through the chairperson planted 30 trees to mark the close of the 26th AGM.



Mazingira Chairperson Ms. Esther Lokwei planting a tree in Karura Forest



Mikindani Constructed wetland in Mombasa

Tackling wastewater through a constructed wetland

|| By S. Irungu

The UN Environment Programme (UNEP), in partnership with the Kenya Marine and Fisheries Research Institute (KMFRI) and local community groups established the Mikindani Constructed Wetland in Mikindani, Mombasa, a nature-based solution designed to tackle long-standing wastewater challenges in the area.

Located in the heart of Mikindani, a low-income residential area in Mombasa, the wetland showcases an innovative and cost-effective nature-based solution to address the area's persistent wastewater problem through the Go Blue project. Funded by the European Union, the project seeks to build a sustainable blue economy in coastal Kenya while generating environmental, social, and economic benefits for local communities.

Go Blue Environment, which is jointly implemented by UNEP and UN-Habitat, focuses on connecting people, cities, and the ocean through integrated, ecosystem-based land-sea planning and management for a sustainable and resilient Kenyan coast.

For decades, the community in Mikindani has struggled with untreated effluent draining into Tudor Creek, a vital ecosystem that supports mangroves, marine life, and local farming. This pollution severely impacted the health of the ecosystem, depleting marine biodiversity and affecting the livelihoods of farmers who rely on clean water for irrigation.

A constructed wetland using nature-based solutions operates by mimicking the natural filtering process of wetlands to clean wastewater. It uses plants like grasses and reeds to absorb and break down pollutants in the water. The plants and soil help filter harmful substances such as dirt, nutrients, and chemicals. As the wastewater flows through the wetland, it becomes cleaner, safer for the environment, and helps improve water quality.

The Mikindani constructed wetland uses a variety of locally available vegetation, including Typha grass, Cattail, Flat sedge, and Vetiver grass, to naturally filter and clean wastewater. This vegetation effectively removes pollutants, such as total suspended solids, nitrates, ammonia, and nitrogen, significantly improving water quality.

The Go Blue Project is a collaboration between the European Union and the Government of Kenya to advance the blue economy agenda in Kenya through coastal development. The overall objective is to unlock the potential of land-sea opportunities in coastal urban centres for sustained, inclusive and sustainable economic growth.

The project is in line with the Environmental Management and Coordination (Water quality) regulations, 2024 which advocates for treatment of effluent before discharging into the environment where facilities have to obtain the Effluent Discharge License (EDL).

The Silent Threat Around Us: Hazardous Waste

|| By Doreen Kirimi

Every day, millions of Kenyans interact with products that, while useful, can leave behind dangerous footprints. From the pesticide bottle in a farmer's store, to the paint tin in a construction site, to the expired drugs in a clinic, what happens to this waste once it is discarded?

If left unmanaged, such waste doesn't just disappear. It seeps into soil, pollutes rivers, contaminates food chains, and ultimately finds its way back to harm communities. Encyclopaedia Britannica notes that hazardous waste, when improperly handled, can cause significant harm to human health and the environment. Toxic, corrosive, infectious, or ignitable, this waste poses risks that range from headaches and nausea to cancer, birth defects, or even life-threatening accidents.

This is not just a scientific problem; it's a human problem. Families living near abandoned dumpsites, waste handlers without protective gear, and children playing around contaminated soils are among the most vulnerable.

Kenya's Extended Producer Responsibility (EPR) Regulations, 2024 was designed with this reality in mind. EPR mandates producers, that is, companies that manufacture, import, or distribute products to take responsibility for the packaging waste left behind once consumers are done using their products. This is where Producer Responsibility Organisations (PROs) step in. By working collectively, we help producers manage post-consumer waste more efficiently.

The writer is a Communications Officer at Hazardous Waste Producer Responsibility Organization of Kenya (HAPROK)

Promoting circularity through MRFs

|| By F. Mosomi

In a world where excessive dumping of waste has become a reality, Circular economy proves to be the most reliable and optimistic approach when it comes to the handling of waste especially in developing countries.

Circular economy is centralized on the idea that there is a need to reduce, reuse, recycle and regenerate waste. The model idea is to keep products, materials, and resources in use for as long as possible, extract maximum value from them, and then recover/ regenerate them at the end of their life cycle.

Waste handling continuous to be an emotive topic in the public discourse with interest drawn from both government and private stakeholder in Kenya. For the past few years, the country has been able to achieve quite a number of success when it comes to address waste, one of the most recent milestone was the promulgation of the sustainable waste management act of 2022 which was signed into effect on July 7, 2022.

The signing into law of the Sustainable waste management Act, 2022 proves to be a key legal framework and path to the country in order to achieve and promote circular economy practices for green growth. Sustainability acts as an umbrella for every practice that strives to sustain the future while circularity is more about the practices which lead to sustainability.

But, despite all this merits in terms of waste handling policies, its segregation particularly at source continues and remains to be a living nightmare. A key ingredient which the country has not yet effectively realized in order to handle of waste properly is the establishing of adequate running Material Recovery Facilities (MRFs). 15 years later since the coming of devolution, which one would have thought perhaps ushered new system which will support county governments to better plan, deliver and monitor the delivery of public services among them being waste.

Material recovery facilities (MRFs) are a key infrastructure prioritized by the Sustainable Waste Management Act (SWMA) of 2022. The Act stipulates that counties are tasked to ensure that material recovery facilities are established and operational.



A Material Recovery Facility (MRF) at Mwatate, Taita Taveta County

The role of Counties in MRFs is reiterated further in Section 14 where each county is tasked to establish MRFs to be used for final sorting, segregation, composting and recycling of waste generated or transported in the County and transport the residual waste to a long term storage or disposal facility.

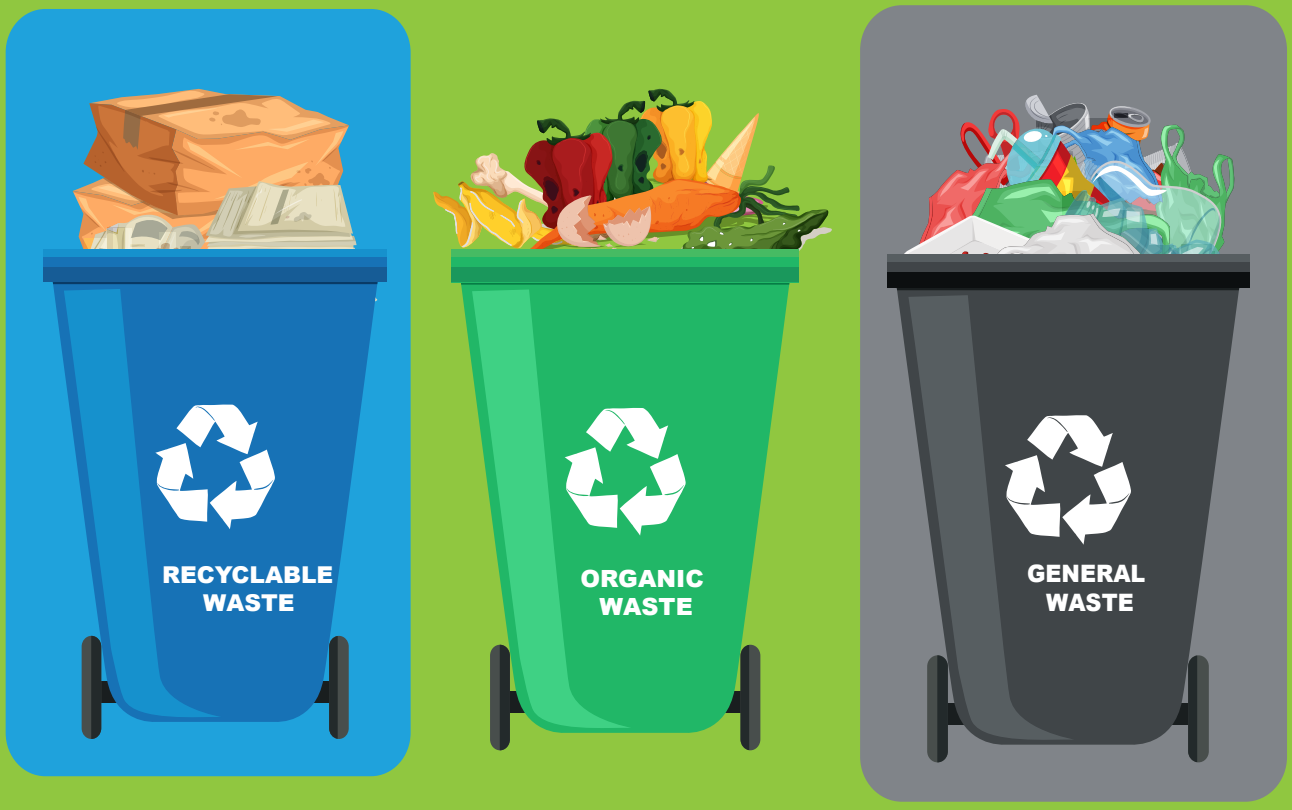
In the old Chakaleri dumpsite in Mwatate, Taita Taveta County a donor funded MRF under the Go Blue initiative, in collaboration with UN-Habitat, CSUDP (Civil Society Urban Development Platform), the European Union, and others look to fulfil the idea of the transitioning from linear to circular economy, promote Sustainable Waste Management, Community Empowerment & Livelihoods, Climate and Environmental Benefits and a Model for Counties. The upside of such project across the country would facilitate and fill the gaps that most counties have failed to address. There is need for county government to be active and come up with robust measures when dealing with waste, bearing in mind that it is a devolved function, so as to facilitate and achieve the sustainable waste management act to its core for the long-term benefits of the society both economically, socially and also environmentally.

Kenya has made commendable progress by passing the Sustainable Waste Management Act, but without functional MRFs, circular economy goals will remain elusive. Counties must move beyond policy to practical implementation, ensuring facilities like Chakaleri and Kisumu's MRFs are replicated nationwide. Only then can Kenya shift from a linear economy of dumping to a circular economy of recovery and regeneration.

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