



## Press Review - Nairobi Workshop On Circular Economy

## November 2023



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Tags : 7CBasalia Global, ACEN, AFAWA, AfDB, ALN, Amnesty International, AU, Climate Change Act, COP 28, CPJ, EAC, EALA, EPA, EPR, EU, FBK, FCDO, Flip Flopi, FSMS, ILO, INC-3, KEPSA, LASEPA, Mananasi Fibre LTD, MESTI, Mr. Green Africa, NDC, NEMA, NEMC, PALU, Paris Agreement, Reporters without Borders, SMEP, Taka Taka Solutions, Tetra Pak, UIRI, UN-Habitat, UNECA, UNCTAD, UNEP, UNESCO, USAID, WFP, WHO, World Bank, WRI, WWF.

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### Some data on journalistic output from the Nairobi 2023 workshop on the circular economy

#### Total number of contents produced : 43

#### Breakdown by media type :

- print media :29
- radio : 9
- TV : 3
- mixed written, audio and video : 1
- Mixed written and audio : 1

#### Geographical breakdown of content by country :

- Kenya : 19 productions
- Tanzania : 5 productions
- Rwanda : 4 productions
- Uganda : 6 productions
- Ghana : 5 productions
- Nigeria : 4 productions

#### Distribution by sex :

- Total number of journalists: 9 women / 6 men
- Breakdown by gender of production : 24 production by women / 19 production by men





## Doreen Ampofo (Ghana) ; Story requesting Government to invest in Circular economy ; Radio Ghana news (GBC), 8 November 2023.

To listen the report : <u>https://soundcloud.com/association-africa-21/circular-economy-</u>

ampofo?si=1540c639aad94cb2abc201dec0ab47b5&utm\_source=clipboard&utm\_medium=te

xt&utm campaign=social sharing

Tags : UNCTAD, ILO, UNESCO, ALN.



Adrina Festo (Tanzania) ; Environmental care by using household food waste to make natural fertilizer ; Tanzanian Broadcasting Corporation, 9 November 2023.

To watch the report : https://www.youtube.com/watch?v=4XQosD-21uE

Tag: Taka Taka, KEPSA.





## Muhyideen Jimoh (Nigeria) ; Circular economy : stakeholders task FG on efficient recycling plants ; NAN News, November 9, 2023.

To access the article : https://nannews.ng/2023/11/09/circular-economy-stakeholders-task-

fg-on-efficient-recycling-plants/

Tag : KEPSA, USAID, Tetra Pak, AU.



Stakeholders in the sustainability sector have called on the Nigeria government to partner the private sector in scaling up efficient recycling plants across the country.

The experts stated this in separate interviews with the News Agency of Nigeria (NAN) on Thursday at the 8th annual Circular Economy Conference in Nairobi, Kenya.

Ms Clare Romanik, Lead Ocean Plastics and Urban Advisor, U.S. Agency for International Development (USAID) stressed the need for Nigeria to diligently implement it's various environmental and waste control regulations.

She decried the increasing pollution of the environment, rivers, lakes and oceans by plastic waste, while calling for concerted efforts to address the alarming trend.

"Countries can make their decisions on how to deal with plastic pollution based on what they see as important and constantly put out incentives.

"So countries like Nigeria need to consider what is right, but absolutely more recycling plants are necessary across the country. "I also think products that are not easily recyclable, then government needs to tell the industry players, you need to change something about your production," she said.

Ms Shereen Shaheen, Head of Corporate Affairs, Middle East/Africa, Tetra Pak, a leading food processing and packaging solutions company said they were working with the Lagos State Environmental Protection Agency (LASEPA) and other stakeholders to address the sustainability issue.

She emphasised the need for Nigeria to put in place more effective waste management regulations, while ensuring strict implementation and compliance.



"We are working with LASEPA and other ministries to address this, but one of the major challenge in Nigeria and other African countries are facing is that they import most of the raw materials and packaging is not locally sourced.

"One of the areas of focus is how can you be sustainable, you don't want to be dependent on certain materials, that at the end are not recyclable," she said.

Shaheen highlighted the need to do more to ensure proper recycling, sorting and collection of wastes across the country, to prevent their pollution of the environment.

"There is need to have a lot of recycling facilities that are ready to recycle materials of different types, there is need for more sorting and collection at different points across the country," she explained.

Dr George Njenga, Founder, Strathmore Business School, Kenya and Chief of Party, USAID strategic partnership stressed the need for more awareness, especially to Nigerians in rural areas on the benefits of a circular economy.

"I think the issue with Nigeria will be will be how to reach the largest population who leave in villages and slum areas, how do you cover the North and South.

"There is need to put in place infrastructure and this must come from government, supported by the AU, you have to also work with donor partners, states and local governments to educate through a positive mindset for profit," he said.

Njenga advised the Federal Government to give tax incentives to recycling companies and enact policies that will encourage Nigerians take used plastics to recycling plants.

"If a company is not recycling it's product and doesn't have a green certificate, then don't import the product, because it's destroying the society.

"Government should give tax incentives to companies to recycle plastics, so that they don't eventually pollute the environment and rivers," he said.

NAN reports that the Circular Economy Conference had sustainability stakeholders, the Academia, captains of industry, entrepreneurs from across Africa in attendance.

The conference deliberated on innovations in sustainable circular business development with focus on various themes, including waste to value, plastics, circular economy, Extended Producer Responsibility (EPR), packaging, agriculture among others.



Adrina Festo (Tanzania) ; Circular economy call for action and solutions, zero waste ; Tanzanian Broadcasting Corporation, 9 November 2023. To watch the report : <u>https://www.youtube.com/watch?v=uXXWWEtaB01</u>

Tag : KEPSA, USAID, WWF.



# Cheky Abuje (Kenya) ; The Kenya Private Sector takes a lead role in bolstering Kenya's sustainability position ; Africa Science News, November 10, 2023.

To access the article : <u>https://africasciencenews.org/2023/11/10/the-kenya-private-sector-</u>takes-a-lead-role-in-bolstering-kenyas-sustainability-position/

Tag : KEPSA, NEMA, WWF, USAID.



The Government of Kenya has lauded the private sector in its efforts to contribute towards strengthening the country's sustainable development on a circular economy.

The sector's bold and unprecedented efforts and investments have set Kenya apart as a country determined to become a global reference point and case study in sustainable waste management with an ultimate national goal of zero waste.

In a statement during the Annual Circular Economy Conference held in Nairobi, the Cabinet Secretary for Environment, Climate Change and Forestry, Ms Soipan Tuya noted that the



ministry is developing a circular economy strategy to guide the nation's transition to circularity.

"Circular Economy is a key priority for the ministry not just because of its centrality in the fight against climate change by eliminating greenhouse gas emissions through waste management, but also because of its immense potential to transform the social, economic well-being of communities through income generating activities," said Tuya.

However, players in the transition process from linear to circularity were challenged to foster a collaborative approach towards ensuring compliance in driving the circular economy agenda in Sub-Saharan Africa and beyond. Technological innovations, proper systems, and structures were pointed out as key pillars to jump-start the smooth transition to the circularity concept.

Addressing journalists drawn from across Nigeria, Uganda, Rwanda, Tanzania, Ghana, and Kenya, KEPSA CEO Ms. Carole Kariuki reiterated the commitment of KEPSA and the role of businesses in promoting economic growth while ensuring environmental responsibility, noting that collaboration in implementing the existing laws and awareness creation is crucial in the entire ecosystem. She said forced compliance and crackdowns as envisaged in Kenya's Environment bylaws do not yield much.

"A sustainable, circular economy is not just a vision; it's necessary for our survival and the well-being of the planet and future generations. As the private sector, we have the opportunity and the obligation to lead this transformative journey," remarked the KEPSA CEO.

The Director of Sustainable Inclusive Business, Ms. Karin Boomsma emphasized the need for innovative approaches to harnessing used materials for sustainable practices while underscoring the pivotal role of a circular economy in building much-needed prosperity.

Addressing participants from diverse sectors of the economy in Africa, Boomsm said the change in the mindset is key to achieving the ultimate transition, terming it as the key to circularity, which was traditionally part of the African culture. "I am very excited to see more and more resource use, not from a perspective of what we can do with waste but where nothing goes to waste," she added.

Other speakers at the event included National Environment Management Authority (NEMA) Director Dr. Ayub Macharia, Coastal Kenya Programme Manager at WWF Kenya Dr. Asma Awadh, Chief of Party of USAID Strategic Partnership and Founding Executive Dean of



Strathmore University Business School Dr George Njenga, Head of Corporate and Public Affairs, Grand Middle East & Africa at TetraPak Ms Shereen Shaheen, USAID's Lead Ocean Plastics and Urban Advisor Ms Clare Romanik among others.

The conference convened over 300 participants, including leaders, experts, and stakeholders across various sectors, to explore opportunities and strategies for catalyzing the transition towards a circular economy.

The forum also provided a platform for in-depth discussions, keynote speeches, panel dialogues, enlightening masterclasses, and a circular innovation expo that yielded insights, connections, and concrete solutions for advancing sustainability.

The conference was organized by Sustainable Inclusive Business Kenya, the knowledge centre under the Kenya Private Sector Alliance (KEPSA).



Doreen Ampopho (Ghana) ; Story on the EPR Treaty ; Radio Ghana news (GBC), 10th November 2023.

To listen the report : <u>https://soundcloud.com/association-africa-21/epr-treaty-ampofo?si=8298d798666143819bc75d9ad7c80fe1&utm\_source=clipboard&utm\_medium=te\_xt&utm\_campaign=social\_sharing</u>

Tag : UNEP, EPR, KEPSA.



# Sharon Ambani Tamba (Kenya) ; Embracing circular economy for waste management and economic development ; Imani Radio, 11th November, 2023.

To listen the report : https://on.soundcloud.com/d6Q7P

Tag : KEPSA, UNCTAD, WWF, NEMA.

The kenyan national government in partnership with various stakeholders in the production and environmental care sectors are partnering to set up strategies to embrace a business system of circular economy, as one way to fight the waste management challenge witnessed in country

#### Cue in sharon ambani on circular economy

While addressing stakeholders from different sectors who attended the 8th circular economy conference held in Nairobi on 10th November 2023, the Cabinet Secretary of the ministry of environment, climate change, land and forestry, Soipan Tuiya, whose speech was read by Linda Kosgei, an officer from the ministry, said that Kenya is facing a challenge in managing waste, with about 8 million tonnes of waste produced yearly, hence a need to embrace a production system that will bring a sustainable solution to the menace.

#### Insert linda on waste challenge

Circular economy involves extending the life of a product by repairing or using it to make other products as a way of waste management.

Cs Tuiya also said the ministry has put a priority to this model of production, revealing that implementing environmental policies, such as the Extended Producer Responsibility and the Sustainable Waste Management Act of 2022, will ensure producers are responsible for the disposal of their products/packaging after consumption.

#### Insert linda on epr

However, the Chief Excecutve Officer of the Kenya Private Sector Alliance KEPSA Carol Kariuki, highlighted the importance of the private sector in actualising circular economy, while asking the government to involve them and increase awareness of the EPR policy before implementing it

#### Insert carol on partnership

Government and stakeholders are now required to invest huge in the production system which benefits to protect the environment and provide employment and income opportunities for Kenyans

#### **Insert Clare Romanique from USAID**

End





Johnson Kanamugire (Rwanda); Plastics are in the fish you eat; Lobby groups now push for regional ban; Newspaper Africa, November 12, 2023. To access the article : https://newspaper.africa/2023/11/12/plastics-in-the-fish-we-eat-lobby-

groups-now-push-for-regional-ban/

Tag : ALN, UNCTAD, SMEP, Flip Flopi, EALA, EAC, UNEP, EPR.



Samples collected from different locations in Ugandan, Kenyan and Tanzanian waters of Lake Victoria, which were investigated in the laboratory pointed to the presence of harmful microplastics in all parts regardless of locality and national boundaries. PHOTO | Courtesy | FlipFlopi

Lobby groups are pushing for a regional legislation to ban single use plastic materials as the threat the latter pose to human health, aquatic wildlife and the food system across East Africa reaches alarming level.

Environmentalists have, for instance, raised alarm over the continued presence of microplastics – the tiny harmful plastic fragments — in all locations of Lake Victoria, one of



the key East Africa water bodies shared by Uganda, Kenya and Tanzania. Inaction threatens livelihoods of millions who depend on the Lake for a living, suggest recent studies.

Despite majority of countries in the region having moved to enforce bans on plastics, slow enforcement and the transboundary nature of the problem continue to foment a disaster that could deplete the fish stocks, compromise water quality and pose a risk to public health.

Plastic pollution is exacerbated by the prevailing inefficient waste management and poor disposal, and individual countries' efforts may not tackle the crisis effectively, experts say.

"Plastic pollution knows no borders. Discarded waste in Lake Victoria will not tell which side is Uganda or which side is Kenya, and it's a challenge to monitor porous borders. We need to have a common legal framework to deal with the problem," said Rosa Nduati-Mutero, Managing Partner at Africa Legal Network (ALN), the Nairobi-based law firm pushing for the regional ban through a legislation drafted jointly with the UN Conference on Trade and Development (UNCTAD), the Sustainable Manufacturing and Environmental Pollution (SMEP) programme and the FlipFlopi Project.

The latter is a Kenya-based movement working to end single use plastic in the region.

A new Bill backed by the group was on November 10 submitted to the Arusha-based East African Legislative Assembly (EALA) for consideration by the regional parliament's committee on Agriculture, Tourism and Natural Resources.

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Rosa Nduati-Mutero, Managing Partner, Africa Legal Network (ALN)

If adopted, the legislation could see all non-essential single use plastic items — from cutlery, plates, cups, cotton buds, straws, balloons, sweet wrappers to wet wipes and others — banned across all the seven EAC countries.

"We are grateful to the committee for receiving our Bill and sharing their contributions as well as unanimously agreeing that harmonized regional legislation is the best way forward for East Africa," Carlotta Dal Lago, head of business development, marketing and communication for ALN, wrote in a LinkedIn post shortly after submitting the proposed legislation Friday.



ALN-led delegation poses for a photo with EALA members after submitting the proposed law on ban of single use plastics. PHOTO | Courtesy

Rwanda, Tanzania, DR Congo and Kenya have taken legislative actions in line with tackling the single use plastic materials mostly with exceptions, and they are at dissimilar levels of enforcement amid lack of substitutes or alternatives, and other constraints.

Peers such as Uganda, South Sudan and Burundi still struggle to institute such bans.

#### Implications

But none is spared by the transboundary threat of plastic pollution as documented in a 2021 study carried out in the course of FlipFlopi's series of plastic pollution awareness-raising boat expeditions across the region.

Samples collected from different locations in the Ugandan, Kenyan and Tanzanian waters of Lake Victoria, which were investigated in the laboratory pointed to the presence of harmful microplastics in all parts of the Lake irrespective of locality and national boundaries. Consequently, as waste volumes increase, aquatic wildlife like fish feed on these harmful pollutants and eventually die. If unchecked, this will take a toll on the fish stocks of Lake Victoria, definitely resulting in the loss of livelihoods for communities that depend on the lake across the three countries and beyond. Water and soil quality, too, get compromised.

Going forward, all eyes will be on governments in the region to enforce a common legal framework to deal with the plastic pollution menace before it's too late, in addition to working together to speak with one voice in ongoing push for a global treaty to end plastic pollution.

#### Week-long negotiations

Negotiations towards a global binding instrument against plastic pollution has been under discussion at the United Nations, and negotiators are expected in Nairobi on November 13 for a week-long meeting to iron out contentious issues in the hope to urgently come up with a treaty that can check rising harmful plastic production.

The global plastic production trend has been on the rise with estimated 369 million tons of plastics (worth \$1.2 trillion) having been traded in 2020 alone, a significant increase from \$933 billion the year before, according to UNCTAD's 2022 data.

Africa is responsible for only 5 per cent of global plastic production. However, the continent bears a huge burden (at 24 percent) of global emissions from mismanaged plastic waste, according to a 2018 study by UN Environment Programme which mapped the global plastics value chain.

The Africa group is understood to be pushing for a global Extended Producer Responsibility (EPR), the arrangement where the producer is compelled to follow through on how the products are disposed off after use, and is held responsible for pollution arising thereof.

"We as the Africa group are asking that producers be responsible for plastic waste treatment. Another issue is legacy waste in our dumpsite. We have them and they were dumped there 50 or 60 years ago. We cannot talk of a global treaty that ignores the past. That's also a key area of negotiation," said Kenya environment management authority's Dr. Ayub Macharia, Director in charge of environmental compliance.



Macharia was speaking at the recently-concluded annual Circular Economy Conference in Nairobi, which this writer attended.



## Muhyideen Jimoh (Nigeria) ; Circular economy: Stakeholders task FG on efficient recycling plants ; Nature News, November 12, 2023.

To access the article : <u>https://naturenews.africa/circular-economy-stakeholders-task-fg-on-</u>

efficient-recycling-plants/

Tag : USAID, KEPSA, Tetra Pak, LASEPA, EPR.



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#### Doreen Ampofo (Ghana) ; Climate Change journalists under attack-UNESCO ; Ghana Broadcasting Corporation, November 13, 2023.

To access the article : https://www.gbcghanaonline.com/general/climate-change-6/2023/



Tag : UNESCO, Paris Agreement, Reporters Without Borders.

The United Nations Educational, Scientific and Cultural Organization, UNESCO has expressed worry about attacks on journalists reporting on climate issues following a number of reports which show that about 75 percent of attacks on journalists since the 2015 Paris Agreement have been against climate journalists.

According to the UN agency, the high rates of impunity against environment and climate journalists are condemnable and calls on governments to investigate such attacks and report back to UNESCO. The UNESCO Regional Advisor on Freedom of Expression and the Safety of Journalists, Lydia Gachungi revealed this in Kenya in an interview during a workshop for East and West African Journalists on Circular Economy.

The studies conducted by Reporters Without Borders in 2021, and another one by the European Federation of Journalists were corroborated by the findings of an analysis by the Committee to Protect Journalists.



The findings said climate journalism is the most dangerous field of journalism now, after war reporting. In Ghana, journalists such as Erastus Asare Donkor have received threats for reporting on damages caused to the environment by to illegal mining.

A member of parliament was seen on live TV instigating attacks against Erastus, asking that he beaten.

In the interview, the UNESCO Regional Advisor on Freedom of Expression and the Safety of Journalists Lydia Gachungi said high political and business interests account for the increased attacks.

We have different players and stakeholders just like any other case where normal citizens attack journalists not just the security organs, she noted. Madam Gachungi said;

"There are business people involved, the people who want to use the opportunity to benefit themselves and journalists are uncovering issues to do with corruption, misuse of donor funding, misreporting on what is happening on the ground, and things that perhaps some countries might want to protect their image from the global community."

The UNESCO Regional Advisor on Freedom of Expression and the Safety of Journalists Lydia Gachungi explained that when journalists get into such spaces where they're exposing corruption, negligence and laid-back approaches, then they are at risk.





She said the exposure and the high rates of impunity and those that are being reported also to the duty bearers should be addressed.

She said UNESCO asks governments to send reports on the number of journalists that have been killed or attacked in a country or region as well as what the governments have done about the attacks. Other activities by UNESCO includes training for judges that are handling attacks on journalists, training for police training for prosecutors and for lawyers.

The workshop which brought together journalists from East and West Africa also discussed UNESCO's development of a Handbook on Disaster Risk Reduction for African Journalists and a Review of the Training Manual on Environmental Journalism.





## Lenah Bosibori (Kenya) ; Ban Unnecessary Plastics, Stakeholders Urge African Governments ; The Africa, November 14, 2023.

To access the article : <u>https://www.theafrica.co.za/africanews/ban-unnecessary-plastics-</u>

stakeholders-urge-african-governments-452442291

Tag : INC-3, UNCTAD, ALN, KEPSA, UN-Habitat, ACEN, Flip Flopi.



As the world meets in Nairobi this week for the third session of the Inter-governmental Negotiations Committee (INC-3) on ending plastic pollution at the United Nations Headquarters in Gigiri, stakeholders in the circular economy have called on African governments to ban unnecessary plastic use like straws, plates, cups and plastics that do not have to exist necessarily.

Speaking during a workshop for journalists on the circular economy in Nairobi, Henrique Pacini, Economic Affairs Officer, United Nations Conference Trade and Development (UNCTAD) said that even though unnecessary plastics promote generate business downstream and recycling, more durable materials could provide much more and less waste.

"We could use more natural materials that employ people locally in countries and that have lower problems of accumulation from nature such as cultural residues, base materials, and seaweed-based materials that can play an important role in replacing plastics," said Pacini. The week-long circular economy training sponsored by Africa 21, Anjarwalla Khanna (ALN) Kenya, Kenya Private Sector Alliance (KEPSA), UN-Habitat (United Nations Human Settlements Programme) African Circular Economy Network (ACEN), The FlipFlop Project brought together journalists. and communicators from seven countries representing Kenya, Uganda, Tanzania, Rwanda, Nigeria, Ethiopia, and Ghana.

Kenya introduced a ban on the importation, production, and use of plastic bags used for commercial and household purposes through the publication of Gazette Notice 2356 in March 2017. Penalties stipulated for violations include fines amounting to \$40,000 and prison terms of up to four years for the importation, production, and consumption.

Kenya has also banned plastic bottles, straws, and related products in all national parks, national reserves conservation areas, and any other designated wildlife areas.

Pacini adds that many people use unnecessary plastics like straws and plates which later become problematic and not easy to control or ban. "We can also promote sustainable substitutes or non-plastic materials and at the same time promote reusability which tends to be the best," said Pacini.

"We should care for reuse and avoid unnecessary use of plastics because plastics will stay for millennia in nature and it will not go away if we don't take action," he adds.

Countries are currently negotiating for a set of rules that will hopefully become an international treaty against plastic pollution, they include some requirements for control, taxation, traceability of plastics, and outright bans of unnecessary or problematic single-use plastics not useful.

According to him, all countries have to agree on common rules on how to deal with plastic waste because the plastic problem is not a problem of a single country it is a problem of the whole trade community and the whole international community.

"Today there is USD 1.2 trillion dollars being traded in plastics, it is a lot of trade so if we don't agree on what to do collectively, the control will not work, we should really reduce using plastics first and foremost, use less or ban all tracks of plastics that are unnecessary," he adds.

Pacini also called on manufacturers to pay attention to what they add to plastics adding that sometimes they add dangerous things like fire retardants, Ultra Violet protectors at the cost

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of organic pollutants that damage people's health. "Dealing away with plastics requires a series of small actions that can collectively reform our global material system," adds Pacini.

According to UNCTAD plastic constitutes an estimated 10-12% of solid waste, amounting to 966,000 tonnes/year. In 2019, Plastic beverage bottles accounted for the largest share (13.26%) of all items collected from beaches, followed by plastic bottle caps (10.5%). Other items collected in large shares included food wrappers, plastic lids and plastic takeaway containers, and plastic grocery bags United Nations Conference on trade and Development.

On his part, Piotr Barczak member of Africa Circular Economy Network (ACEN) said that developing countries face challenges in balancing production and consumption due to differences in per capita footprint and quality of life.

"African countries have much lower footprint per capita and that is not changing over the years, developing countries need to increase comfort and quality of life so that it's linked to increased material consumption," said Barczak.

Barczak reiterates that lack of alignment between politics, policies, and strategies is hindering efforts to reduce fossil fuel consumption and plastic pollution, despite increased awareness and reporting.

Africa's policies are inadequate to meet Sustainable Development Goal (SDG) 12 targets, with a rebound effect hindering progress, goal 12 focuses on Sustainable Consumption and Pr.





#### Sarah Natoolo (Uganda) ; Kadaga Circular investment ; UBC Radio, News Hour Programme, 14th November 2023.

To access the report :

https://drive.google.com/file/d/1iY6ZDSPf3d3vSisqUPE0qsbex6G4DvNv/view

Tag : USAID, UNCTAD, KEPSA, ALN, Mr Green Africa.

Natoolo Kadaga Circular investment 14th November 2023 Nairobi one.

Countries in the East African community have been challenged to have a joint law on waste management as a move to control pollution and related effects.

The move is be spearheaded by all misters for environment in the region.

In this law, countries must ensure sustainable consumption and production patterns of waste that may be re-used.

Circular economy promotes re-use and re- recircle plastics and un plastics.

the key speakers During the Circular Economy annual conference that also combined Africa 21 Media meeting in Nairobi, still believe that the more you re- use , the less impact.

It is up on that the 1st Deputy prime minister, and minister for east African Affairs Rebecca Kadaga calls for more investment in environmental issues.

[Rosa Nduati-Mutero, is the Managing Partner ALN Kenya]

Anjarwalla & Khanna, Said countries extracting raw materials from nature, turning them into products, and then discarding them as waste must think of re-using them through recycling, for income.

She empathized that minister in the region need to exhibit commitment and enforcing circular economy.

[Dr George Njenga], the USAID strategic partnership program officer noted that , Currently, only 7.2 percent of used materials are cycled back into our economies after use, and he stressed need for a joint law in the region.

[Henrique Pacini] is an economist at United Nations Conference on trade and Development UNCTAD in Geneva,

working on trade & circular economy themes. Believes that has Circular economy has a bright future in world's economy A climate expert, said countries need to pla a head for circular economy.

[Glen Wilson] is a Programme Management Officer with UNCTAD, working on trade, circular economy and manufacturing pollution themes challenged Ugandans to make use of banana fibers to expand factories and industries in the country.

The lead ocean plastics and urban adviser USAID Clare Romanik says , it is only good funding that will anchor the circular economy.

Plastics have a significant burden on the environment that it contributes to the climate, biodiversity, and pollution increase in most African countries.

Ends.







Muhydeen Jimoh (Nigeria); "Poisonous ponmo" and Nigeria's untapped recycled tyre ecosystem"; News Agency of Nigeria, December 15, 2023. To access the article : <a href="https://nannews.ng/2023/12/15/ponmo/">https://nannews.ng/2023/12/15/ponmo/</a>

Tag : Flip Flopi.



At Dei-Dei abattoir, located on the outskirts of Abuja, a thick smoke is billowing continuously. Idris and other sweating young men work energetically, hauling large chunks of hide skinned from slaughtered cows into the smearing fire fuelled with tyres and plastics.

Under the heat from the sun and fire, they are assisted by Aisha and a group of women whose dresses have turned black from regularly working in the smoke.

Aisha and her team are washing the chunks of hide in equally blackened water and getting them ready for the market as vans take turns to load their portions.

As the fires go down, more tyres and plastics are hauled to further fuel the inferno as the butchers work to meet the large demand in the ever-increasing *ponmo* market.

Cooked cow hide, otherwise known as *ponmo* in Nigeria is a favourite meat enjoyed by millions of Nigerians. Many migrants to Nigeria have also fallen in love with it.

It is considered a taboo in some parts of the country to have a proper meal without a slice of ponmo.

However, researches have shown that *ponmo* may turn out to be poisonous if it is processed by burning with tyres or plastics-generated fire as is the practice in many abattoirs across Nigeria.

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The <u>U.S. Agency for Toxic Substances and Disease Registry (2012)</u> revealed that "tyre derived fuel" (TDF) contained several heavy metals such as lead (Pd), zinc (Zn), and Copper (Cu) that could be carcinogenic when exposed to consumers over a long period.

The Veterinary Council of Nigeria (VCN) also warned against consumption of such meat, stressing that it could contain cancer-causing chemicals from the burnt tyres.

"The more we eat those meats roasted with tyres, the more we are prone to health risks.

"There are alternatives and healthy ways of de-skinning meat rather than using tyres. Burning tyres contaminates the meat, degrades the environment and pollutes the atmosphere," Dr Fadipe Oladotun, an official of VCN told the News Agency of Nigeria (NAN).

This writer's visit to major abattoirs in Abuja, which include: the Karu, Dei-dei, Kubwa and Gwagwalada abattoirs, showed that in spite of the health risks associated tyres and plastics-processed ponmo it remains is a common practice.

At Karu abattoir, tucked in the outskirts of Abuja, the unavoidable welcome by the stench of filthy environment occasioned by years of burnt tyres and plastics.

The pollution is palpable even to the most skeptic of environmental contamination.

Isa Adamu said he has been involved in the business of roasting slaughtered animals with tyres for no fewer than five years.

According to him, they burn scrap tyres to roast the meat because he tyres are cheaper sources of fuel, though they are not entirely ignorant of environment and health implications.

"We use these tyres for the meat because it burns sharp sharp and the used tyres are cheap to get around, so it makes our work easier," he said.

Adamu said he was aware of the environmental hazard of this practice, but claimed he was not aware it could contaminate the meat and be carcinogenic.

The NAN investigation also shows this is the practice is rampant in Abuja, due to weak effort by the authorities to address it.

A Professor of Environmental Science at Addis Ababa University (AAU), Seyoum Leta, who said the practice also obtains in some African countries, stressed the need to stop this harmful practice.

He said doing so would not only safe potential cancer cases but also reduce emission of Greenhouse Gas Emissions (GHG) from those abattoirs.

"Burning scrap tyres will have not only health effects it will also largely contribute to greenhouse gas emissions and hence climate change with its implications for climate change.

"This practice releases what we call SOx, NOx, VOC and PM which are precursors of GHGs. Burning this resources is also a waste of resources as this can be recyleable material," he said.

Leta told NAN that a number of alternatives can be explored by Nigeria, such as biomass based briquettes which are ecofriendly.

"Biomass-based briquettes are generally considered green technology compared to petroleum-based fuel such as tyres, so this is a good alternative in this regard," he said.

The don advised Nigerians to embrace recycling of scrap tyres into beautiful furniture, shoes, mats and tiles.

Katharina Elleke, Project Designer, FlipFlopi Project Foundation, an East Africa-based NGO that built a sailing boat from recycled plastics in Kenya emphasised the need for Nigerians to embrace recycling plastics and tyres.



"We are East Africa's circular economy movement that built the world's first 100% recycled plastic sailing dhow.

"We use heritage boat building and waste-plastic innovation to create public engagement and drive policy action to ban all single use plastics and ensure all other plastics are part of a circular economy," she said.

Elleke said African countries, including Nigeria, can tackle plastic pollution, through an effective plastic recycling system and keying into the circular economy model.



Recycled tyres for eco friendly furniture and horticulture

The Managing Director, FREEE Recycle Limited, Ifedolapo Runsewe said with Nigeria generating over three million scrap tyres annually, a lot more needs to be done to tackle the environmental/health challenge they pose.

She said that recycling of such tyres would go a long way in reducing environmental pollution and boosting Nigeria's economy.

Sustainable environment stakeholders say all hands must be on deck in creating awareness and right investment in tyre recycling, while stepping up sensitisation and sanctions against burning of tyres.

They say this will engender good health and economic wellbeing of Nigerians. (NANFeatures)

#### Published also on :

The Guardian : <u>https://guardian.ng/features/poisonous-ponmo-and-nigerias-untapped-</u> <u>recycled-tyre-</u>

ecosystem/#:~:text=It%20is%20considered%20a%20taboo,in%20many%20abattoirs

National Accord Newspaper : <u>https://www.nationalaccordnewspaper.com/poisonous-ponmo-</u> and-nigerias-untapped-recycled-tyre-ecosystem/

PM News : <u>https://pmnewsnigeria.com/2023/12/15/poisonous-ponmo-and-nigerias-</u> <u>untapped-recycled-tyre-</u>

ecosystem/#:~:text=It%20is%20considered%20a%20taboo,in%20many%20abattoirs%20acros
s%20Nigeria.

Daily Nigerian : https://dailynigerian.com/poisonous-ponmo-nigeria/

The Eagle online : <u>https://theeagleonline.com.ng/poisonous-ponmo-and-nigerias-untapped-</u> recycled-tyre-ecosystem/



Checky Abuje (Kenya) ; Experts Advocate for an innovative and collaborative approach to Circular Economy ; Africa Science News, November 16, 2023. To access the article : <u>https://africasciencenews.org/2023/11/16/experts-advocate-for-an-</u>

innovative-and-collaborative-approach-to-circular-economy/

Tag : ACEN, ALN.



Stakeholders and experts in the circular economy transition paradigm have called on the African continent to embrace collaborative and innovative approaches to ensure compliance in the transition from linear to circular economy redesigned towards economies that spearhead inclusivity across the continent.

However, low technology absorption, policies, and regulations frameworks remain a hurdle in adopting a common legal instrument both at the regional as well continental levels.

"African continent needs regenerative and collaborative local approaches to the process of Circular Economy, defending the African Indigenous culture as a cornerstone in realising



meaningful transition," said Dr Ndidi Nnoli-Edozien, the chair of the Africa Circular Economy Innovation partnership.

Speaking during a five-day journalist training on circularity in Nairobi Kenya, the South Africa charter on Africa Circular Economy network Ntobeko Bayana underscored the narrative that circularity has been the way for Africans and challenged the continent to revert to the older ways of doing things. "Africans as a people have to go back to the older ways of doing if the Concept is to succeed in Africa," remarked Ntobeko through a virtual address.

The workshop attracted Science journalists from Ghana, Uganda, Ethiopia, Kenya, Nigeria, Rwanda, and Tanzania.

He reiterated and regretted the resource waste that comes with a linear economy globally, noting that circular economy is all about resources management as opposed to wastage management, pointing out that one-third of food is wasted globally resulting in financial loss of USD 1trillion annually whereas marine plastics cost the globe upto USD 2.5trillion per year.

However, the challenge of the legal framework, policies, and regulations around circularity remains big both at regional and continental levels. According to Rosa-Nduati Mutero, an Advocate of the High Court of Kenya, a strong regional legal framework will play a pivotal role in accelerating the paradigm shift around the circular economy to enhance compliance.

Mutero who is also the managing partner at ALN Kenya, urged the East Africa Legislative Assembly to expedite and approve the legal draft governing Circular Economy in East Africa that is before it. Europe has taken more than ten years to galvanising its workable legal framework to support the circular economy.

Hector Guerra underscored the essential role the media plays in ensuring the public gets a grasp of the dynamics of the circular economy in the African context and challenged the journalists to take the lead role in sensitization and public awareness campaigns in the entire chain of circularity in Africa.





Johnson Kanamugire (Rwanda) ; Q&A: Pan-African media lawyers' team to defend journalists against legal threats, for free ; NewsPaper Africa November 16, 2023.

To access the article : https://newspaper.africa/2023/11/16/gachungi-weve-set-up-the-pan-

african-media-lawyers-team-to-defend-journalists-for-free/

Tag : PALU, UNESCO, AU, UNECA, UNCTAD, ALN.



Journalists' associations doing the mapping of cases that need to be taken to the lawyers. PHOTO | FILE

Journalists facing legal threats or prosecuted because of their work anywhere in Africa will be granted free legal service when the newly established Pan-African Media Lawyers Union (PALU) starts its work in the near future.

This is so far one of the key outcomes of the engagements that have been going on among media stakeholders, journalists' associations and the legal fraternity on the African continent



following a resolution adopted at the inaugural Africa Media Convention held in Lusaka, Zambia in May this year to, among other things, provide legal representation to journalists.

NewsPaper Africa's Johnson Kanamugire talked to Lydia Gachungi, Regional Adviser on safety of journalists at the UNESCO Liaison Office to the African Union and UN Economic Commission for Africa (UNECA) on the sidelines of the recently-held journalists' training on circular economy organised by Africa 21 and partners in Nairobi.

The training also served as an opportunity for the media professionals to contribute their input to the handbook on Disaster Risk Reduction (DRR) for African Journalists, and the Training Manual on Environmental Journalism currently being formulated by UNESCO.

#### Below are interview excerpts



Lydia Gachungi, Regional Adviser on Safety of Journalists at the UNESCO Liaison Office to the African Union and UN Economic Commission for Africa (UNECA). PHOTO | Courtesy | Media Council of Kenya

Most of the issues faced by the media and journalists in Africa were discussed at length at the inaugural Africa Media Convention in Lusaka, Zambia in May with a view of finding ways to address them. What is the status so far? Since we left Lusaka, remember there was a declaration that outlined the recommendations of what the African media stakeholders wanted to do. So the first thing that we did as UNESCO Liaison Office to the African Union, we convened the committee that was established in Lusaka. You do recall it was representing the different journalists' associations, the CSOs, the development partners and the African Union. So the committee was established and the leaders of the committees were elected, and then there have been sub-committees that are focusing on implementation of the recommendations.

There's a sub-committee that is focusing on the next African Media Convention in Ghana, there is a sub-committee that is doing the resource mobilization to address the many issues. But besides that, there is also an ongoing assessment on the status of press freedom and the safety of journalists and access to information.

This is using the indicators the Africa media stakeholders put together to assess their own continent on these matters. So the second assessment has just been launched. We hope to have the preliminary report during the next Africa media convention.

We have also done a lot of capacity building. We've done a lot of awareness raising, we've done a lot of coordination and collaboration and co-creation with our stakeholders to make sure that the recommendations are taken forward.



Lydia Gachungi (center) with African Union (AU) Media Fellows Nila Yasmin (left) and Johnson Kanamugire (right) on the sidelines of African journalists' training workshop on circular economy in Nairobi, November 10, 2023.
# I've heard you talk about the arrangement underway to provide legal support to journalists across the African Union member States. How will that work?

In Zambia we did talk about establishing the Pan-African Media Lawyers Union (PALU), a network that brings together the lawyers interested in defending journalists. Since then, the network framework has already been established and PALU is mobilizing the lawyers on the continent and raising awareness on the importance of media law, the importance of protecting journalists and the importance of working together with the media.

So they have formed sub-committees at that level then the journalists' associations have also organized themselves and they're doing the mapping of cases that need to be taken to these lawyers, and remember the lawyers network is to deal with them on pro bono basis.

This is the importance of this engagement because the lawyers that are interested in defending the journalists come together, they understand the issues of journalists, they understood where they need to intervene, and then they are giving their services on a pro bono basis.

### In your view, what difference will the new arrangement make?

Previously, it was very difficult because post COVID-19 the media has really suffered in terms of sustainability, income, and not even just COVID even with the social media being the platforms where many people are getting their news, the mainstream media has really suffered in terms of income.

Audio Excerpt – Lydia Gachungi : <u>https://newspaper.africa/wp-</u> content/uploads/2023/11/Audio-File-Lydia-Gachungi-1.mp3

So many journalists that are working for these media houses or even as freelancers when they face legal challenges, again on top of the challenges they have in terms of income, they don't have the funding to get a good lawyer even a lawyer to protect them.

So before then journalists were used to a lot of impunity. Why? Because there are no lawyers that you can find for free out there individually just to come and protect a journalist. Now with a new approach, it is going to be different.

If, for example, you are an association and some of your journalists are facing a legal challenge or a legal case you know which lawyer to go for and without charge, not because they don't want to get the resources, but because there is this agreement between the media and the lawyers that you can come and support us and of course, there is that also that the media gives back to the society.



Lydia Gachungi (front center) and representatives from Africa 21 and UNCTAD pose for a photo with Journalists from East Africa and West Africa at the end of the week-long training workshop on circular economy at Africa Legal Network (ALN) headquarters in Nairobi on November 10, 2023.

# What worries you the most at the moment when you look at the status of journalists' safety across the continent, and the trend over the years?

My biggest worry being in this space is for sure knowing how important a journalist is and how a democracy cannot thrive, and how the society cannot do without the right information at the right time and from the right sources and information that has been fact checked not just gossip by anybody; knowing how important journalism is and journalists and seeing how journalists are treated like the least of the least in the society, it worries me.

It worries me because as much as they know that in the evening the first thing they do is to switch on the TV or radio on social media to get the latest news, but yet when it comes to the welfare, in terms of sustainability of the media sector, in terms of income for the journalists and in terms of their wellbeing or health, there is not so much that is being done about that.

That's why for UNESCO it's a priority. It's a priority because we recognize how important journalists are and how relevant their work is to the society.

Audio Excerpt – Lydia Gachungi : <u>https://newspaper.africa/wp-</u> content/uploads/2023/11/Audio-File-Lydia-Gachungi.mp3

# You do engage Governments across Africa on issues of journalists' safety. What feedback do you get?

The UNESCO Director General has a mandate to call on member states, if a journalist is killed, for example. She has a mandate to condemn and to ask the government to investigate and to report back. So every year we follow up on each case. And we ask the governments to report back to the UNESCO Director General on what has been done and how far the case has gone.

So there is that mechanism for following up on cases and we work with partners on the ground when journalists are facing issues. We gather this information we verify with them, and we make sure that we follow up on those cases.



## Sarah Natoolo (Uganda) ; Circular research ; UBC Radio, News Hour Programme, 16th November 2023.

To access the report :

https://drive.google.com/file/d/1iY6ZDSPf3d3vSisqUPE0qsbex6G4DvNv/view

Tag : USAID, Mr Green Africa, KEPSA.

Natoolo Circular Research Nairobi two 16th November 2023

Countries in the East African community need to embark on proper research in line with Circular economy.

Circular economy promotes re-use and re- recircle plastics and non plastics.

According to Weather and climate experts, this is one of the ways, for improving and restoring environment.

to them, joint research in the region on waste management will as well control pollution and related effects.

The move on circular economy has to be spearheaded by all misters for environment in the region .

In the research , countries must ensure sustainable consumption and production patterns of waste and the likely opportunities.

As Dr George Njenga, the USAID strategic partnership program officer advises.

Circular economy promotes re-use and re- recircle of plastics and non plastics.

During the Circular Economy annual conference that also combined Africa 21 Media meeting in Nairobi, Dr Njenga emphasized that countries must sensitize and engage the youth.

Climate experts believe that , the more you re-use , the less impact.

[Josephine Wawira] is a communications expert in the sustainability and circular economy fields kenya.

She Said countries extracting raw materials from nature, turning them into products, Need proper policies to address environment challenges in the region.

Mr Green Africa, is a company that is aiming at addressing plastic waste in kenya and has plans of extending to Uganda, as the Project Manager Christian Mungeri Masai explains.

Mr Green Africa has enabled women in Nairobi get jobs.

Currently, only 7.2 percent of used materials are cycled back into our economies after use, however circular economy, ensures, Re- use, and creating more opportunities from waste, Pulity were.

Environmental experts believe that with Circular economy plastic pollution may reduce to 24 percent.

Circular economy promotes re-use and re- recircle plastics and non plastics.

Plastics have a significant burden on the environment in most African countries.

Ends.





## Sarah Natoolo (Uganda) ; industries circular ; UBC Radio, News Hour Programme, 21st November 2023.

To access the report : <u>https://drive.google.com/file/d/1CaWy3wGQB7-</u>

vhHG34ypuwc eE4hmBF75/view

Tag : USAID, ALN, UNCTAD.

Natoolo Circular industries Nairobi three 21 November 2023

Countries in the East African community have been challenged to have a joint law on waste management as a move to control pollution and related effects.

Each country has to give full participation in matters and affairs of developing the circular economy that aims at reducing the waste burden.

The circular economy ensures sustainable consumption and production patterns of waste that may be re-used.

Natoolo industries Circular Investment 21st November 2023

Circular economy promotes re-use and re- recircle plastics and non plastics.

Experts During the Circular Economy annual conference that also combined Africa 21 Media meeting in Nairobi, still suggest that the more you re- use , the less impact.

It is up on that fact, that the Principal Associate | ALN Kenya Huldah Ateka calls for a joint law in the region on environmental issues.

Ateka said that , countries must think of re-using plastics for income.

She empathized that , countries need to exhibit commitment and enforcing circular economy.

Dr George Njenga, the USAID strategic partnership program officer , he noted that , Currently, only 7.2 percent of used materials are cycled back in our economies.

Noting that , a number of women have benefitted.

[Glen Wilson] is a Programme Management Officer with UNCTAD, working on trade and circular economy, and manufacturing pollution themes. said countries must work on the heavy burden of plastics that is a threat to nature.

Good funding can anchor the circular economy, and a number of products can be made from plastics.

Financial institutions are committed to fund countries .

It is the materials around us, that can support the circular economy.

People giving views on supporting the circular economy.

Ends.



Sarah Natoolo (Uganda) ; A four days circular economy annual conference hosted in Nairobi Kenya ; UBC, 22 november 2023.

To access the report : <u>https://www.youtube.com/watch?v=7f4wcgPIpCU</u>

To watch the TV news and the report on the workshop, at the 42nd minute of the program :

https://www.youtube.com/watch?v=NGl0O4DTnCl

Tag : UNCTAD, ACEN, ILO, ALN.





Johnson Kanamugire (Rwanda) ; Experts weigh in on ways to make zerowaste economy work; Newspaper Africa, November 22, 2023.

To access the article : <u>https://newspaper.africa/2023/11/22/experts-weigh-in-on-ways-to-</u>

make-zero-waste-economy-work/

Tag : 7Cbasalia Global, EU, UNCTAD, ACEN.



Africa is responsible for only 5 per cent of global plastic production, but bears the huge burden of the pollution. PHOTO | Johnson Kanamugire

Imagine living in a world without litter, and when there is [litter] it becomes a resource. Experts concur that such a life would be well within reach if people prioritised sustainable lifestyles — where nothing goes to waste.

It's this that paves the way for what's popularly known as the circular economy, and the question many ask is: What does it take?

For years, humanity promoted extract-transform-use-and-throw away lifestyle when it comes to management of earth resources. This has come to hit everybody hard in form of recurrent environmental and climate vagaries expected to spell doom for future generations, if unchecked.

With the increase in industrialization, parts of the globe and Africa, in particular, have had to grapple with pollution dangers emanating from discarded waste such as plastics, hazardous industrial waste and others which pollute the soil, food, water and air, increasingly rendering parts of earth unlivable.

The mess is exacerbated by poor waste collection and inefficient disposal systems.

Environmentalists are of the view that more than 80 per cent of the environmental impact emanating from human production could be addressed at products' design stage, and the responsibility falls on companies to ensure that what they churn out are durable, reusable, easily repairable, non-toxic, and can be easily upgraded or recycled.

According to Dr. Tobias Schmitz, Environmental Advisor at 7Cbasalia Global, the company behind the Basalia technology used to turn waste into valuable products, the above is the key highlight of emerging policies in parts of the globe to support transition to circular economy.

The European Union, for instance, is moving to compel companies to report what they are doing with regard to bringing down resource consumption, waste generation, and how circular their designs are, on top of the recovery of products inside their industrial processes.

Enforcement of such obligations starts next year under the European Union Circular Economy Action Plan adopted in 2020.

"It is going to have an impact in the Africa region because many of these supply chains which are used for European processes are drawing raw materials and resources from the African continent. I think it's worthwhile looking at these products because the production starts in Africa," says Schmitz.

Schmitz is one of the experts who addressed journalists from East and West Africa at a workshop on circular economy held early this month in Nairobi.



Other experts who weighed in on the challenges of transitioning to circular economy include Piotr Barczak, member of African Circular Economy Network (ACEN) and Henrique Pacini, Economic Affairs Officer at UN Conference on Trade and Development (UNCTAD).

#### Sustainable lifestyle

Going forward households and everyone need to come up with ways of reducing waste production, and Piotr Barczak advises people to normalise composting at household level and reusing materials as many times as possible.

"What everyone can do is try using reusable materials, try to repair or repurpose your waste. Don't throw your jacket if it can be repaired. If your shirt is not reusable anymore you can still use it for another purpose like a cleaning material," he said, adding that any other ways of handling waste like burning, dumping and incineration are not sustainable.



Items from clothing waste at exhibition during the Annual Circular Economy Conference in Nairobi on November 9, 2023. PHOTO | Johnson Kanamugire

Calls on the public to embrace sustainable lifestyle grew particularly in light of concerns over plastic pollution across parts of Africa.



The continent is responsible for only 5 per cent of global plastic production, but bears a huge burden of the emissions linked to plastic pollution.

Henrique Pacini of UNCTAD says people must avoid using plastics as much as they can. Instead they could resort to plastic substitutes or plastic alternatives. The former are natural materials that have similar properties to plastics, while the latter are biodegradable plastics.

"Both are ways to contribute to reduction of plastic waste" he said.

The question, however, is — and this worries environmentalists — that increasingly plastics continue to compete with environmentally substitutes and their alternatives. Substitutes often face higher import tariffs than their plastic equivalents.

"To change this, there is need to either put in subsidies or make harmful items more expensive," opined Pacini.

Environmentalists also advocate for tax incentives, green procurement policies and regulatory or economic instruments that promote the development and use of non-plastic substitutes if economies are to achieve circularity.

These are aspects that environmentalists expect governments across Africa to take into consideration as they develop and roll out circular economy action plans and roadmaps.

The African Union is also understood to be at an advanced stage of developing the circular economy roadmap which, once adopted, will guide implementation of similar roadmaps by member States.

### Waste valorisation

Meanwhile, as Africa grapple with legacy waste and more volumes emanating from the prevailing linear economic models, experts are of the view that waste should be leveraged as a resource to make things like metals, energy production and waste water purification, among others.





Kenya-based Mananasi Fibre Limited showcases high quality fibers made from discarded pineapple leaves. PHOTO | Johnson Kanamugire

Dr. Tobias Schmitz, for instance, indicates that negotiations were underway to deploy Basalia technology towards producing green energy out of municipal waste and purifying waste water in urban parts of West Africa's Gambia and Senegal.

"In the case of Senegal, we are using that treat waste water to lift up aquifers and to generate irrigation across the city so that people can get jobs and produce vegetables for the city based on that irrigation from purified waste water," he said.

He allayed concerns over the cost of such projects citing the fact that calculations found the cost to be 10 per cent below usual costs of waste-to-energy systems, and the return on investment is less than 10 years.

"The big difference is that there is zero emission from the system and all the waste are converted into marketable usable products. That means that we can finance most things from impact funds rather than asking the municipality or others who may have restricted budget to invest in something like this," he says.



### Sharon Ambani Tamba (Kenya) ; Rising Threats for Environmental Journalists: Call for Global Action to Safeguard Press Freedom ; Story Spotlight, Nov 23, 2023.

To access the article : <u>https://storyspotlight.co.ke/rising-threats-for-environmental-</u>

journalists-call-for-global-action-to-safeguard-press-freedom

Tag: CPJ, Reporters Without Borders, Amnesty International, UNESCO.



Environmental crime reporting is increasingly becoming a risky venture if recent statistics are anything to go by.

According to the New York-based Committee to Protect Journalists (CPJ), over thirty environmental journalists have been killed since 2009.

The most recent memorable case occurred in 2022 when British journalist Dom Phillips was killed alongside local indigenous expert Bruno Pereira. They were working on an exposé about sustainable development in Brazil's Amazon region.

The increased violence towards journalists is mostly recorded in countries that are characterized by repressive regimes. A tally by Reporters Without Borders reveals that nine out of ten environmental journalists murdered between the years 2015 to 2020 were from Colombia (2), Mexico (1), the Philippines (1), Myanmar (1) and India (4).

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Scores of others face violence, intimidation, imprisonment and life threats for investigating environmental issues.

In Africa, a report from Amnesty International reveals that environmental journalists in Congo and Ethiopia face a higher risk of arrest and imprisonment for reporting on atrocities against the ecosystem. In 2022 alone, at least 124 cases of attacks were recorded in the Democratic Republic of Congo, where one journalist was killed, two were abducted, 37 journalists were arrested, 18 others were physically assaulted, 17 media organizations or programmes were suspended, and 12 journalists currently being detained by authorities across the country. On the other hand, 29 environmental journalists in Ethiopia are on trial.

The statistics on the oppression of environmental journalists may not be conclusive. Many other cases go undocumented. In Kenya for example, apart from Arshad Sharif, a Pakistan Journalist killed last year in Kajiado, whose case turned out to be a political assassination, there is little record about these attacks.

Nonetheless, the risk of venturing into 'protected' conservation areas for environmental stories lingers on.

Kenyan journalist Victor Moturi recalls a situation where he pursued an environmental story but was confronted by an influential individual, who warned him to choose between the exposé and his life.

"I have been forced to drop some stories after receiving death threats from individuals fearing the exposure would affect their interests," recalls Moturi.

He is among the many journalists who have been silenced in their line of duty with most of them not getting the justice they deserve.

A UNESCO observatory of killed journalists since 1993 reveals that nine out of ten cases of attacks against journalists end up unsolved. This creates fear impeding investigative environmental reporting.

This alarming trend highlights the dangers encountered by those who strive to raise awareness concerning environmental matters in recent years, indicating it is a perilous beat second to wartime reporting.



Beyond security risks, journalists covering this beat have also complained of difficulty in accessing up-to-date information from actors.

"Good environmental stories need data to describe the extent of an impact. However it is very difficult and complicated to get this information from government and non-government actors, especially for stories that expose negligence and corruption," says Jennifer Gila, an environmental reporter working for The Guardian Newspaper in Tanzania.

Speaking in Nairobi during a Workshop for African Journalists on reporting on the circular economy, Lidya Gachungi, the regional adviser on freedom of expression and safety of journalists at UNESCO is saddened by the ever-increasing number of journalists facing challenges when covering such thematic areas.



Lidya Gachungi, photo Sharon Ambani

"It is worrying that journalists reporting on the environment, especially climate change, continue to face countless challenges yet they play a significant role in pushing for sustainable development," said Gachungi.

AFRICA 21

Her sentiments were concurred by Professor Seyoum Leta from the University of Addis Ababa Centre of Environmental Science, who says that environmental reporters are essential connectors between the general public and experts.

"Every day, scientists are generating new knowledge that gives insight into emerging environmental issues such as the adverse impacts of climate change. Reporting evidencebased science stories is an integral part of increasing the public's understanding of this knowledge. With rising environmental problems worldwide exacerbated by the adverse effects of climate change, the role of an environmental journalist is vital, hence the need to protect them,"

He also adds that journalists help to keep various stakeholders on their toes to carry through their diligence in attaining sustainable development while protecting the ecosystem.

However, the anticipated goal of raising adequate public awareness of environmental issues through these communication mediums is yet to be fully achieved due to the multiple obstacles confronting these professionals.

Governments are called upon to put in place concrete measures aimed at ensuring security for journalists while allowing them to operate without fear.

For instance, the Constitution of Kenya 2010 under Articles 33 and 34 guarantees freedom of expression and independence of media respectively. In addition, the Access to Information Act 2016, Part II, Sec. 4 dictates that every citizen has the right of access to information held by (a)the State; and(b)another person and where that information is required for the exercise or protection of any right or fundamental freedom.

The law bars anyone from interfering with or controlling journalists who are mandated to give information that is of public concern, as long as the media adheres to the Code of Conduct. Enacting these laws will protect journalists from people who intend to harm them.

Despite having these laws, the injustice against environmental reporters continues to escalate due to lack of enforcement.

Gachungi, however, revealed that UNESCO is fighting for the rights of environmental journalists through a multi-sectoral approach that will ensure a safe working environment for the scribes.



"We promote security for journalists globally by convening all stakeholders including policymakers, the judiciary, system, policy enforcers, media bodies, journalists, human rights activists and the public, to raise awareness on the importance of protecting journalists against impunity," she added.

Prof. Leta notes that the safety of environmental journalists can also be enhanced through training and capacity building, where journalists are provided with skills and knowledge on how to operate in risky environments.

Together with UNESCO, his institution is developing a handbook on Disaster and Disaster Risk Reduction for African Journalists and a Review of the Training Manual of Environmental Journalism. Implementation of safety protocols is among the subjects covered in the content.

The two documents, once launched, will equip environmental journalists with the right knowledge and skills to conduct their jobs.



Checky Abuje (Kenya) ; Africa 21 train science journalists on circular economy concept ; Africa Sciences News, 23 November 2023. To access the article : Pending publication.

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### Tag : UNCTAD, UNESCO, ALN.

Journalists from West and Eastern Africa converged in Nairobi for a one week training on understanding the concept of Circular economy in Africa which plays a great role in waste management and recycling that is geared towards eliminating plastic pollution and sustainable development.

The training which was organised by Africa 21.org in collaboration with UNCTAD, UNESCO and ALN Centre and other partners was meant to equip science Journalist with knowledge and

understanding on circularity as a new frontier not only in waste management and recycling but also as an avenue of sustainable economic empowerment.

The African continent is facing a number of challenges, the most important of which include the transformation of their economies through industrialization and innovation, creation of decent, quality jobs and new opportunities for young people, who enter the job market in their millions every year, and the need to save the environment, and to combat and adapt to the effects of climate change.

Julien Chambolle, Secretary General Africa 21 said journalists play a central role in sensitising and creating public awareness about the circular economy in Africa. "One of the biggest challenge in the transition from linear to circular economy in African continent is communication, and that is why Africa 21 has taken the initiative to train Science Journalists in Eastern and Western africa" said Chambolle

He said his organisation recognises the role of the journalists as information specialists to tell the public about a new way of living and producing adding that Journalists have an important educational and civic roles to play, by showing and highlighting positive examples, initiatives, entrepreneurs and ideas that are emerging and that can transform African societies, encouraging young people to get moving and take charge of their lives.

There are thousands of opportunities in the green economy, and especially in the circular economy where upstream design of needs and new products, maintenance or upkeep, re-use or transformation is encouraged to minimise or eliminate Waste abandoned in nature which can become a serious source of health problems and a negative impact on the community, but has an economic value if reprocessed.

"We are training more journalists in 2024, Africa 21 will be training journalists across Africa who are members of its program in the challenges of the circular economy, so that they become aware of the importance and complexity of this issue, acquire new knowledge, develop expertise and have access to reliable, quality sources to carry out their work" remarked Secretary General.

The one week workshop in Nairobi Kenya brought on board experts from all sectors of economy who took journalists through all aspects of circularity with various relevant initiatives in a number of sectors.

Chambolle noted that many entrepreneurs have ventured in Circular economy and need help to develop and take their rightful place through awareness creation and called on journalists' proactiveness that encourage initiatives in a much more proactive way.

The circular economy is still in its infancy in Africa compared to other continents. However, the advantage of the African continent is that it does not suffer from old production habits, that its industrialization is underway and that it can already adopt the right principles and save a lot of time in the direction of the processes to be put in place. What's more, Africa's population is relatively young on average, and may well be more receptive to new messages and to incorporating better lifestyle habits into their daily lives, provided that the public authorities do what's necessary.

What challenges does Africa 21 face in equipping journalists with the skills and knowledge needed to implement EC requirements?

Despite the association having the advantage of addressing journalists who are already working on environmental and sustainable development issues, Its challenges lie mainly in mobilizing partners to pool their diverse and complementary expertise, gain access to case studies in the field and provide the resources needed to organize these training and expertise development activities. By bringing local and international experts to the table with journalists, Africa 21 tries to create this awareness that the whole is linked. Current international negotiations on plastics are a case in point. Some African states are well advanced in the fight against plastic waste, like Kenya for example, but others don't yet have the tools. The future treaty will push all signatory countries to align themselves on the same standards.

Chambolle disclosed that Africa 21 will endeavour provide platforms to train journalists and provide them opportunities to international events on the circular economy to expand their experience and network.



## Sharon Ambani Tamba (Kenya) ; Nurturing Decent Work and Social Development Through Circular Economy ; Story Spotlight, Nov 25, 2023.

To access the article : https://storyspotlight.co.ke/nurturing-decent-work-and-social-

development-through-circular-economy

Tag : Mr Green Africa, UNECA, ILO, KEPSA.



Vera at her workplace Photo Sharon Ambani

Every morning at 6:00 am, Verah arrives at her workplace, eager to perform the day's tasks. She works as a productivity assistant in the color sorting section at Mr Green Africa in Nairobi, an enterprise that converts plastic waste into post-consumer recyclates sold to other manufacturers for the production of other goods.

On a typical day, she begins by delivering a safety talk to her team, as safety and protection are priorities in her line of work. She then assigns the workers into groups that work together to sort the collected plastics into different colors. Thereafter, Verah weighs the load and sends it to a machine (eddy current separator) that removes non-ferrous material from the plastics. The rank she currently holds did not come easy. Verah reflects on being jobless before 2018. Previously employed as a marketing ambassador for one of Kenya's leading brands at a local supermarket, she was forced to entirely rely on her husband after the back-to-school promotion ended.

In 2018, an acquaintance introduced her to the plastic recycling world, where she started as a colour sorter. She worked on the tables for some time until an opportunity arose for her to climb the ladder. The mother of one boy can now support her family with the salary she gets.

"When I got employed here to do colour sorting, I got excited because I had been jobless for a while. However, the pay at that stage is quite low. After being promoted to productivity assistant, my salary was increased," says Verah.

"Although the money I get is not enough due to tough economic times, I can now help my husband foot some of the bills. The company also provides health insurance for me and my family. When I am sick, I get treated at Komarock Hospital, one of the quality healthcare facilities around here," she adds.

Verah is among many who earn a living from a circular economy, despite some people viewing the nature of her job as a lack of dignity.

Circular economy is a model of production and consumption where existing materials are regenerated into other products in a sustainable and environmentally friendly manner. This can be done through recycling, reusing, repairing, sharing and refurbishing these products to lengthen their life as long as possible while minimizing waste.

According to Prof. Charles Akol, an Environmental Affairs Officer at the United Nations Economic Commission for Africa, the model offers a sustainable way of production that will protect the already depleting natural resources.

"With a projected double increase in the world's population by the year 2050, there is a high chance of depletion of resources used in production to meet human needs. We need a model of production that maximises the use of available resources in production and solving human needs."

While speaking during a media workshop for Eastern and West African journalists on circular economy, Prof. Akol noted that the world is grappling with the adverse impacts of climate



change driven by human activities. Therefore, companies, organisations, governments and individuals should transition to a sustainable development framework to tackle the climate crisis.

While the model conveys an environmental agenda, experts and studies raise the need to tap into the economic and social benefits of a circular economy. The sector has emerged as a contributor to meaningful employment and fostering social progress.



A lady showcasing innovative ways of managing e-waste

The International Labour Organisation estimates that transitioning to a circular economy will create about 7 to 8 million jobs by 2030. Some of the green job opportunities include waste collectors, machine technicians, designers, policy-makers and managerial positions, to name a few. With the current unemployment rate of about 4.9 per cent (2.9 M people) in Kenya, the transition will address the current labour market woes while providing many a livelihood.



Luke Caroll from ILO says having the potential for socio-economic development is not enough. The jobs created need to be decent as well. He notes that those currently working in the sector get little motivation due to the numerous challenges of informality and hazardous working conditions.

"Most workers are clustered in the informal sector, receive low wages, work in a hazardous environment, lack funding and have minimal skills. In addition, there are visible gender gaps where vulnerable groups, such as women, tend to occupy lower positions in the production chain," says Luke.

The United Nations' Sustainable Development Goal 8 recognises the significance of attaining decent work and sustainable economic growth. Circular economy can be used to operationalise this goal among others such as SDG 1 No poverty, SDG 5 Gender Equality, SDG 4 Quality education and SDG 13 Climate.

For a just transition, Luke recommends policies that will address the marginalisation faced by these workers. Such policies will promote labour standards, especially in developing countries, to ensure workers like Verah, economically and socially benefit from decent jobs while conserving the environment.

"Employers must also create a conducive working environment for their employees. They must ensure they pay their workers well. Moreover, employees should have safety materials, such as gloves and helmets, to protect them from injury. In addition, employers should also capacity build their workers through training to equip them with recurring knowledge of the ever-progressing sector," added Luke.



Dr. Njenga Second from left with Speakers from the Conference

AFRICA 21

While addressing the attendees of the 8th Circular Economy Conference in Nairobi, Dr. Gorge Njenga, a lecturer from Strathmore University urged the inclusion of circular economy into the education curriculum to foster innovativeness among students.

"There is immense talent and great minds in these institutions. They have the potential to innovate production initiatives, hence creating jobs for the students after school. Teaching circular economy in schools will equip students with the know-how of becoming sustainably productive," says Dr. Njenga.

Looking ahead, the future of the circular economy involves humanizing its narrative. Beyond statistics and projections, the stories of individuals like Verah, who benefit from this transition, need to take center stage.





### Henry Owino (Kenya) ; Circular Economy : What It Means For The African Market ; Talk Africa, November 25, 2023.

To access the article : <u>https://www.talkafrica.co.ke/the-circular-economy-transition-in-africa-</u>

what-does-it-mean-to-the-african-market/

Tag : Mr Green Africa, KEPSA, USAID, UNCTAD, ALN, ACEN, UN-Habitat, Flip Flopi, UNESCO.



Ayub Macharia (in head gear) following speeches during KEPSA 8th Conference on Circular Economy in Nairobi, Kenya. Photo: Kepsa

Nairobi, Kenya: A new buzzword in town is the Circular Economy (CE) and what does it mean to you and me? The CE is giving waste a new life and in its wake offers several opportunities for Africans.

The circular economy is inspired by nature. It aims to keep raw materials in a closed loop, maximizing their use, reducing the need for new ones, avoiding waste, and extending the life cycle of products.

In a circular economy, waste is turned into raw materials for new products, just like in nature. The 3Rs—reduce, reuse, and recycle—are the traditional pillars of this philosophy. Circular economy differs from the current economic system; the linear system, in which products are manufactured, used, and disposed of. The circular system is based on three principles, driven by design: eliminate waste and pollution, circulate products and materials at their highest value, and regenerate nature. It is a resilient system that is good for business, people, and the environment.



### Photo/ Henry Owino

However, the lack of this information or ignorance of it among many African countries makes it look like a new terminology or jargon. Many nations have been striving to give waste a new life in all aspects of their core business and thus circular economy.

Ntobeko Boyana, CEO, of BenPeta Green Materials Holdings based in South Africa said the circular economy offers solutions to the current linear value chain. It addresses environmental, social, and economic issues which are limits of the world system.

"Circular economy is not waste management but resource management. It is about economic and social benefits not recycling for the sake of saving grace to the environment," Boyana substantiated.

Boyana argued that the population is increasing while resources are not, hence the system is based on a determination to create value with as few virgin resources as possible. It involves

reducing the use of fossil carbon in the value chain while improving sustainability performance.

In a circular economy, organizations or industries constantly develop innovative technologies to create sustainable products. This leads to increased profits, job retention, and the hiring of additional staff.

For example, an organization may want to focus on the optimal utilization and processing of all raw materials, as well as the efficient recovery of chemicals, water, and energy. As a result, waste management is at the core of an effective circular economy.

### **Opportunities**

In such organizations, the waste arising from the production process can be used as a raw material for other processes. That way, reducing the need for new resources, avoiding waste and increasing resource efficiency. At the end of production, environmental impacts are minimized.



The week-long training of 15 journalists drawn from seven African countries: Kenya, Tanzania, Uganda, Ethiopia, Rwanda, Ghana and Nigeria had a role to play afterward. The task is basically to cascade the circular economy concept in their respective countries and across Africa through various media channels including vernacular outlets. According to Julien Chambolle, Secretary General, Africa 21, the 15 scribes were selected from 60 applicants based on their expertise, networks, specialism, and geographical locations among others. The selection Panel found them professional journalists and best suited for the Circular Economy training programme.

Chambolle said the media plays a central role in sensitizing and creating public awareness and so, the experienced journalists were brought on board for a rigorous seminar on circular economy. The seminar adopted a hybrid module thus; a "live" in-person meeting with a "virtual" online component to suit speakers in the diaspora.

"One of the setbacks in the circular economy in Africa has been the transition from linear economy and the other is lack of awareness. It is against the two major backdrops that Africa 21 has taken the initiative to train Science and Environmental Journalists in Eastern and Western Africa to explore insufficient information that limits the progress using their professional tools," Chambolle explained.

### **Circular Situate**

The seminar also had a field visit to Mr Green Africa factory that converts locally collected plastic waste into high-quality Post Consumer Recycled (PCR) plastics and sells it as a substitute for imported virgin plastics at competitive rates.

According to Christian Mang'ali, Project Manager at Mr Green Africa, the project is the first recycling company to be a Certified B Corporation on the African continent. It leverages business as a force for good to realize sustainable, long-term social, environmental, and economic impact through the collection, conversion, and selling of post-consumer plastic waste.

"Our technology is driven plastics collection model enabling waste collection at the source, integrating informal waste workers, micro-entrepreneurs, and consumers into our formal value chain, increasing the amount of post-consumer plastic waste," Mang'ali clarified. Adding; Mr Green Africa collects and provides stakeholders the chance to earn a fair, predictable, and transparent income and benefits."





#### Photo/ Henry Owino

Mang'ali disclosed the factory has approximately 300 casual laborers working in shifts and permanent staff excluding strategic impact collectors famously known as waste-pickers. The teamwork is to change the negative perception of waste, especially plastics.

The waste pickers are invisible heroes whose work is cut out from picking, collecting, and delivering the plastics to the factory. They create the most value in the whole waste-recycling chain thereby making major contributions to society and the environment.

Robert Njoroge, Plant Manager at Mr Green Africa said to close the loop, the factory works closely with brand owners and third-party plastics manufacturers to develop and execute three-way off-take agreements for high-quality PCR, helping FMCGs and others realize their sustainable packaging goals by accessing ethically sourced, locally produced PCR.

"Fast-moving consumer goods, (FMCGs) also known as consumer-packaged goods, are products that are sold quickly and at a relatively low cost. Examples include non-durable household goods such as packaged foods, beverages, toiletries, candies, cosmetics, over-thecounter drugs, dry foods, and other consumables hence we reproduce materials in the form of plastic pellets," Njoroge explained.

### **Experts Perspective**

The Science and Environmental Journalists also had a chance to attend the KEPSA 8th Annual Conference this time round on Circular Economy and Expo in Nairobi. The conference brought together non-governmental organizations (NGOs), civil service organizations (CSOs), private sector companies, government organizations, entrepreneurs, businessmen, and women whose focus was on improving knowledge and information regarding circular economy opportunities, promoting and raising awareness about green jobs for young people and women.

The conference offered more opportunities for the team Africa 21, journalists to meet and interact with various Scientists, Environmentalists, Researchers, Eco-activists, leaders, experts among other stakeholders across various sectors.

Speakers at the event in general, highlighted the importance of collaborations, proper systems and structures, and technological innovations as the key factors that would leapfrog the transition to circularity.

Carole Kariuki, CEO, of KEPSA, acknowledged the role of businesses in promoting economic growth while ensuring environmental responsibility and strongly urged collaboration in implementing the existing laws, adding that forced compliance and crackdowns don't yield much.

Ms Kariuki therefore recommended the creation of awareness to foster a culture of sustainability and to drive demand for eco-friendly products as one of the areas to be explored.

"A sustainable, circular economy is not just a vision; it's necessary for our survival and the well-being of the planet and future generations. As the private sector, we have the opportunity and the obligation to lead this transformative journey." Ms Kariuki noted.





Heap of waste/ Henry Owino

On the other hand, Karin Boomsma, Director of Sustainable Inclusive Business, urged for a change in mindset, terming it as the key to circularity, which was traditionally a part of African culture.

"I am very excited to see more and more resource use, not from a perspective of what we can do with waste but where nothing goes to waste," Ms Boomsma emphasized.

The same sentiments were echoed by Dr George Njenga, Chief of the Party of USAID Strategic Partnership and Founding Executive Dean of Strathmore University Business School. He accentuated the need for governments to introduce the circular economy concept in schools' curricula at early stages of education to help learners inculcate it in their socio-cultural values.

"There are only three primary principles associated with this transition to a circular economy: Design out waste and pollution; Keep products and materials in use and Regenerate natural systems. The current education system can indoctrinate in its curriculum, Njenga recommended.

### **Zero Waste Prospects**

The meeting assembled over 300 participants who explored opportunities and strategies for catalyzing the transition toward a circular economy. The forum also provided a platform for in-depth discussions, keynote speeches, panel dialogues, enlightening masterclasses, and a circular innovation expo that yielded insights, connections, and concrete solutions for advancing sustainability.

The Kenya Government, through the Ministry of Environment, Climate Change and Forestry, disclosed that it was in the process of developing a circular economy strategy to guide the nation's transition to circularity. This means that many African countries are still in the early stages of transition but momentum is growing.

So, Kenya stands a greater chance of improving its economy if citizens practice this regenerative approach, especially in this era where plastics and plastic waste have become a menace.

Nila Yasmin an award-winning Ugandan journalist said journalists must strengthen knowledge, scale up ideas gained in the conference, and help communities come up and implement circular-based projects from one community to the other.

In her opinion, journalists will demonstrate to the community how waste is properly segregated and utilized to generate income for the community.

"I think journalists have a responsibility to localize the circular economy in their native languages for communities we represent to comprehend. Through our continuous participation in circular economy activities, we are capable of reintegrating the principles of circular economy at the local scale by adapting it to the societal needs of each community," Yasmin said.

Unfortunately, the lack of this vital information to most people in the region has created a gap in the African continent among countries. It is for this disconnect that saw intervention of Africa 21 in collaboration with United Nations Conference on Trade and Development (UNCTAD), Anjarwalla & Khanna (ALN Kenya), African Circular Economy Network (ACEN), Kenya Private Sector Alliance (KEPSA), United Nations Human Settlements Programme (UN\_HABITAT), Flip Flop Project and UNESCO organized for a seminar to equip Science and Environmental Journalists across Africa on the circular economy concept. The team Africa 21, journalists acknowledged the privilege of being invited to participate in the whole procedure of learning and knowledge sharing process with members of ACEN and the Legal team; on environmental-related issues and waste management hence turning themselves into strong advocates of the circular economy concept in Africa.



## Checky Abuje (Kenya) ; Sub saharan Africa benefits from SMEP Programme ; Africa Science News, 30th. 11.2023.

To access the article : Pending publication.

Tag : SMEP, FCDO, UNCTAD.

The Sustainable Manufacturing and Environmental Pollution (SMEP) programme established by the Foreign Commonwealth and Development Office (FCDO) is very instrumental in addressing the research component of eliminating plastic wastes from the environment in Sub Saharan Africa.

In partnership with the United Nations Conference on Trade and Development (UNCTAD), the manufacturing sector of the programme provides substantial opportunities for economic growth in developing countries, however, it is frequently associated with high levels of pollution and environmental degradation, especially in developing countries where there are many reasons for poor pollution management and control, in sectors that are dominated by micro-, small- and medium-sized enterprises (MSME) that include limited capacity for investment, poor access to resources and limited technological know-how. Weak regulatory environments and limited application of financial and policy incentives are also contributing factors.

Addressing African journalists in Nairobi Kenya during a workshop on circularity, United Nation Conference on Trade and Development(UNCTAD) economist on Trade and Circular Economy issues Henrique Pacini said the programme activities aim to generate cutting edge scientific evidence that can improve existing knowledge of the environmental health and socio-economic impacts of selected trade-exposed manufacturing sectors across target countries in Sub-Saharan Africa and South Asia. "The programme also identifies suitable technology-based solutions to address the most pressing environmental health issues associated with manufacturing in target countries, and invest in developing business processes and systems that will result in the uptake of pollution control solutions" remarked Pacini.

He reiterated the programme's ability to address the issue of plastic pollution, focusing on identifying and supporting the development of solutions towards material substitution and enhanced biodegradation options.

The SMEP programme is directly connected to SDG12: Responsible consumption & production; SDG 9: Industry innovation & infrastructure; SDG 8: Decent work & economic growth; SDG6: clean water & sanitation; SDG 11: Sustainable cities & communities, where the Independent Technical Advisory Panel (ITAP) provides strategic guidance to the implementation of the SMEP programme including the SDGs.

Pacini said that SMEP programme is funding research and related interventions aimed at reducing the environmental health and socio-economic impacts of the manufacturing sector in target countries, as well as addressing some of the most pressing challenges associated with plastic pollution. £24million have been invested in the programme sine 2018.

The Programme interventions are geared towards accelerating the development and uptake of practical solutions with potential for impact. Research and other interventions include:Developing and testing technology-based solutions and cleaner production methods to reduce pollution generated by manufacturing activities; Identifying the most suitable policies and business models that could facilitate and encourage uptake across target areas; Generating evidence and identifying solutions for reducing plastic pollution, which has reached critical levels in several countries across Africa and Asia and is now posing a serious threat to the health of the oceans worldwide. In an exclusive interview with Glen Wilson of UNCTAD, the project has 13 focus countries (10 in Sub-Saharan Africa and 3 in South Asia). "We are also doing some capacity-building work in the Indo-Pacific region" remarked Glen.



Lenah Bosibori (Kenya) ; Circular Economy Stakeholders Call For Fair Wages For Waste Pickers ; Talk Africa, December 3, 2023.

To access the article : https://www.talkafrica.co.ke/circular-economy-stakeholders-call-for-

fair-wages-for-waste-pickers/

Tag : NEMA, KEPSA, EU, ILO, UNECA.

Nairobi, Kenya: Transitioning to a circular economy presents new opportunities across the world, this is because people are looking at the recovery of resources such as waste products from households which were in the past being thrown away and can now be turned around to be resources and raw materials for recycling.

Speaking during the 8th edition of the Annual Circular Economy Conference in Nairobi, Dr Ayub Macharia, Director Compliance National Environment Management Authority (NEMA) said that Kenya as a country has expanded the circular economy value chain and has tasked the Producer Responsibility organizations to look into the plight of the waste pickers.

"We have tasked the Producer Responsibility organizations to look at the plight of the waste pickers so that they have decent jobs, they need to know how much are the waste pickers going to be paid for their collections for every product," said Macharia

He added that they have expanded the circular economy value chain and provided an opportunity to employ more people in the chain.



Macharia adds, "We expect that they should be dressed properly and be provided with protective equipment because the law says that all the waste pickers should be registered by the County so that they are known and can be budgeted for, it is not like before where we had a lot of informality, now they are formally known," he added.

According to the International Labour Organization, a circular economy could benefit the environment while boosting competitiveness and resilience. Between 7-8 million jobs net growth in jobs globally due to a circular economy by 2030.

The European Commission predicts a 2.7 percent increase in employment in Africa from the transition to a circular economy.

"Circular economic activities will increase the demand for labour in some sectors like product repair, material reprocessing, and recycling generating new employment opportunities in some countries," said Luke Carroll, junior Technical Officer, Extractives, Energy and Manufacturing Unit ILO.



James Boyd-Moss Founder and Mechanical Engineering Mananasi Fibre LTD, an organisation transforming pineapple plant waste into a sustainable revolution in Kenya/Lenah Bosibori.

He also adds that 9 percent of our world is circular. "Instead of today's take-make-dispose linear model of production and consumption, the circular economy is restorative," he added.

Linda Kosgei Head of Multilateral Environment Agreements (MEAs) in the Ministry of Environment, Climate Change and Forestry noted that for many years, Kenya has been utilizing the linear model of waste management where people generate waste, and once finished with it the final product is at the dump site.

"Now the government has put in place new mechanisms, new policies, and new legislations to do with sustainable waste management," she added.

In 2021, through the Sustainable Waste Management Policy and the Sustainable Waste Management Act, the country's policy has shifted from the linear model to the circular model according to Kosgei

Kosgei said that the youth have a big potential in the circular economy value chain if only they organize themselves under various umbrellas like Kenya Private Sector Alliance (KEPSA) so that they can be able to access finance for recycling.

"Let the youth organizations organize themselves under the various umbrella bodies and under the private sector because there is strength in numbers, to approach various financiers, and also come up with innovative models and innovative ideas in which they will be of interest to the various financials to come on board and support them," said Kosgei.

The Ministry of Environment in Kenya is revising legislation to align with extended producer responsibility regulations for plastic and other waste. It is also working to harmonize regulations with other stakeholders to ensure no conflict or duplication, and the regulations will come into force soon.

According to Charles Akol Environmental affairs officer, Green and Blue Economy Section, Technology, Climate Change and Natural Resources Management Division ECA, E-Waste has increased, 2019 7.3 kilograms of e-waste per capita was generated globally

Estimates are that every year close to 13 million tons of plastic leak into the oceans where it harms biodiversity economies and potentially human health

"For Africa, the population is forecast to double its 2017 levels by 2050, this means increased pressure on the continent's already stretched resources, need to ensure efficient and sustainable use of our resources to grow our economies to create jobs and lift around 460 million people out of poverty," said Akol.






Yasmin Faisal Nila (Uganda) ; Equity In Circularity: Women Entrepreneurs' Quest In Africa's Circular Economy Transition ; Glim, 3 December 2023.

To access the article : <u>https://glimafrika.com/equity-in-circularity-womens-quest-in-africas-</u>

circular-economy-transition/

Tag : KEPSA, EPR, AfDB, UNCTAD, UNECA, AFAWA, UIRI, INC-3, AU.



Ingah Carol Ojija left for Mombasa as a student, but her trajectory has since transformed her into a burgeoning waste management entrepreneur. Today, her company Rafiki PEPS is ramping up efforts to fight plastic marine pollution in the Indian Ocean.

"I used to stay in an informal settlement known as Kachonjo. The main problem there was a lack of access to proper waste management; the community around was unable to access waste collection services, and most of the waste ended up in the drainages that led to the ocean," Ojijo tells me as we chat outside the conference hall at Emara Ole-Sereni, Nairobi, during the 8th circular economy conference that took place on November 9th, 2023, in Nairobi, Kenya.

Hosted under the theme "Accelerating Circularity: Trends and Opportunities in Kenya," this year's edition of the annual conference explored conversations and innovations in sustainable

circular business development, focusing on various themes, including Waste to Value, Plastics, Circular Economy, Packaging, Agriculture, Natural Fibers, and the Extended Producer Responsibility (EPR) law that was passed in Kenya in 2022 that makes producers responsible for the environmental impact of their products throughout the product chain from design to post-consumer phase.

Ojijo tells me she is more excited about conversations around this law, which she foresees will diversify the revenue stream for companies like Rafiki Peps and promote recycling. "The Extended Producer Responsibility act that is being put in place is a marketing niche for us. I think we will reap from it through collaboration with producers like Coca-Cola, as we would be collecting the waste for them."

Ojijo is one of the female entrepreneurs looking to capitalize on Africa's budding circular economy, a transformative approach to production and consumption that involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products to maximize their lifespan.



Ingah Carol Ojijo, co-founder Rafiki PEPS

With the continent's population expected to double between 2050 and 2100, to 4.3 billion people, according to UN estimates, and the finite nature of resources, the prevalent linear economy system, built on a model of extracting raw materials from nature, turning them into

AFRICA 21

products, and then discarding them as waste, is depleting resources with experts advocating for the transition to a circular economy.

According to the Global Circulatory Report 2023, currently, only 7.2 percent of used materials are cycled back into our economies after use, which has a significant burden on the environment, contributing to the climate, biodiversity, and pollution crises. However, the circular economy promises to be a game-changer, with the Africa Development Bank noting this shift could contribute \$8 billion to the African economy annually. But for a just transition, women, who constitute the majority of the continent's population, need to be empowered to lead the way.

But beneath Ojijo's optimism lies a looming cloud of challenges from linear economy systems that female entrepreneurs continue to face, threatening their success in this transition. Barely a year into running the company, she intimates that the current regulatory costs do not support entrepreneurs like her.

"There are regulatory challenges, for example, acquiring permits in waste collection and recycling is quite challenging. For startups like us, it's quite expensive acquiring such permits that cost about 20,000 and 30,000 Kenyan shillings annually. It's expensive, considering you have to renew them each year."



Ingah Carol Ojijo (3rd left) with her team during a beach cleanup in Mombasa

In addressing this challenge, Carole Kariuki, CEO, Kenya Private Sector Alliance (KEPSA), says there's a need for supportive local regulations to support such female driven initiatives due to their social contributions.

"If we start incentivising and say if you are in the circular economy, some of the licenses and permits you need to pay will be lower than the person who is polluting, who gets to pay much more, then you will incentivize more people to join the circular economy."

#### Finance, Finance, Finance

In Kampala, I engage in a zoom call with yet another remarkable entrepreneur. Faith Aweko is one of the founders of Reform Africa, a recycling company that transforms waste into sustainable bags and accessories.

Aweko tells me she has built the company, navigating a lack of financial support from financial institutions unfamiliar with their innovative business model. Despite launching the recycling venture half a decade ago, she highlights the frustrating reality of not securing a single bank loan.

"One time when we were at a program that was connecting greenpreneurs to banks, after evaluating the assets of the business like the sewing machines, the amount of money that they were going to give us was really quite little, and we couldn't take that on a loan basis."

#### Aweko Faith, founder Reform Africa

Speaking during a Circular Economy workshop for East and West African journalists organized by Afrika21 and the United Nations Conference on Trade and Development (UNCTAD) in Nairobi last month, Charles Akol, the Environmental Affairs Officer at the United Nations Economic Commission for Africa (ECA), pointed out that being a burgeoning industry, the circular economy sector currently lacks adequate policy frameworks to lure investors, and there is a lack of incentives to invest in the sector. This makes it yet another hard industry for women entrepreneurs to crack into, especially as they already face a \$42 billion funding gap in the linear sector.

However, Margaret Kamau, the Climate Change and Green Growth Officer at the African Development Bank, says the bank has put in place the Affirmative Finance Action for Women in Africa (AFAWA) initiative to bridge this financing gap and ensure a just transition for women entrepreneurs into the circular economy. Additionally, through the program, they are providing capacity building for banks to address and understand their business models and unique needs.

"The AFAWA is working with commercial banks to develop lines of credit for financing businesses. It is now helping sensitize banks to look for other things, for example, women's membership in women's groups, their credit history within that group, so there's a lot of other things to rate lending of the gender aspect," Kamau revealed, adding, "All of this leads to new innovations around the circular industry, as they feel more comfortable approaching a bank that has previously had success in gender equity and climate financing."

#### Commercialization and competition from linear products

Beyond funding, challenges persist in commercialising circular economy products amidst competition from linear products. This is further exacerbated by insufficient policy implementation and infrastructure that inflate production costs, reflecting in the final product prices.

Uganda passed the National Environment (Waste Management) Regulations 2020 that among other things banned polythene bags and called for selective sorting of plastic waste at household. However, there's hardly sufficient implementation, something that Aweko says is affecting their cost of production.

"We lack selective sorting in Uganda, and we don't have sorting facilities to sort waste from households. So waste is collected in one bin, it's put in one track, and then disposed of in the landfills. This makes it expensive for us to buy the waste, as the waste collectors consider the time it takes in picking and sorting the waste. So we come and buy at a slightly higher price; then, we have to transport it to our production place and then wash. This is all money because it involves labor. This is production cost that is even higher before actual production."

"Then to heat press again that costs extra labor, electricity cost is also high, and then we have actual production of our bags which is quite different from other people who make bags using already made cotton fabrics. But our material goes through a process. So it increases the price of the final bag."

#### **Reform Africa**

Additionally, Faith tells me changing consumer mindsets poses a hurdle as circular products are sometimes perceived as inferior.

"In the local market, people like the idea of the innovative products. They will praise them for saving the environment but it does not translate to purchasing them because most people like branded things even if they are fake. They would rather wear a fake Gucci branded bag than a Reform Africa recycled bag."

This, she says leaves their products to the international export market, which also comes with its unique challenges.

"The shipping costs are really high, and we lose out on a number of customers because of it."

But Aweko says government intervention could help female entrepreneurs overcome these challenges.

"The government should provide an innovation space for women entrepreneurs like fully equipped factories where they can produce, with the latest technologies and expert support. I know there is the Uganda Industrial Research Institute (UIRI), but it's too political, and even so, it's not talked about a lot, so it's hard to know of its existence."

Charles Akol says while countries develop action plans to drive the circular economy, there's a need to recognize women's potential in driving this burgeoning sector.

"We need to recognize that women are playing a big role in this sector in many of the African countries, so involving them means the need to make sure that we provide them with financing to be able to run their businesses. The other thing that is being done is to ensure we provide information in terms of market, making sure that they know where the markets are, they know also the players involved in terms of picking this rubbish and how to protect themselves and also give information on access to finance.

But the most important thing is making sure that the infrastructure is actually there," asserts Charles Akol.

#### Way forward

Dr. Akol says a number of key interventions are currently being developed including resolutions by the General Assembly for the adoption of legally binding instruments to drive the circular economy.

Last month, delegates gathered in Nairobi, Kenya, for the third meeting of the Intergovernmental Negotiating Committee (INC-3) to develop a treaty to tackle plastic pollution.

The African Union Commission has also developed a Continental Circular Economy Action Plan (2024-2034) that will provide direction to the continent towards a competitive and cleaner development pathway by setting out Africa's key priorities and intervention areas for an enhanced circular economy approach to development.

A number of African countries are also currently developing their national circular economy action plans, with Rwanda the first to launch its action plan.

While strides are being made, Charles Akol says the circular economy's success hinges on effective policies and implementations ensuring active participation of female entrepreneurs like Ojijo and Aweko.



# Sharon Ambani Tamba (Kenya) ; Zero-waste; A Solution to the Global Plastic Pollution Problem ; Story Spotlight, Dec 18, 2023.

To access the article : https://storyspotlight.co.ke/zero-waste-a-solution-to-the-global-plastic-

#### pollution-problem

Tag : Flip Flopi, UNCTAD, UNEP, KEPSA, Mr Green Africa, FCDO, SMEP, ALN, EPR, EAC.



On 23rd January 2019, a team of environmental enthusiasts embarked on a journey that has since gone down on international records as one of the greatest innovations in history. Led by Captain Ali Skanda, the group from Flip Flopi Kenya sailed along the Indian Ocean coast from the Island of Lamu to Zanzibar on a nine-metre flamboyant boat made entirely from plastic waste and flip-flops.

During the journey that took two weeks, the group docked at various coastal towns in Kenya and Tanzania. Indeed, it was a sight to behold as local people, at every stop they made, scrambled to witness and be part of this historical tale.



However, for the Flip Flopi project team, it was not just about achieving the milestone of sailing across a 500-kilometre expedition on a colourful vessel.

"This was a mission to create awareness, engage key stakeholders and call for action against the global plastic menace caused by single-use plastics (SUPs)," says Katharina Elleke, a product designer at Flip Flopi project.



FlipFlopi project boat made from plastic

#### The plastic problem

The project started in 2015 when the founder Ben Morison was perturbed by the growing heaps of plastic waste on the beaches and the streets of the coastal towns in Kenya. He started by collaborating with locals in clean-up activities along the beaches. This was not enough.

He came up with the idea of turning the trash into treasure. Morison joined forces with Ali Skanda, a local dhow builder from Lamu and Dipesh Pabari, a plastic pollution campaigner to design a boat from ten tonnes of plastics and 30,000 flip-flops, a first of its kind. The project combines indigenous knowledge of boat making from the locals and new technology and machinery used in recycling plastics. They also design other artefacts and furniture made from plastic waste. This has created an income opportunity for the locals while conserving the environment. Although the project's mission of eliminating plastic waste from the vicinity seems promising, it is barred by the global plastic waste problem.

We first need to understand the origin of this problem. Plastic was invented in the 1800s to create a substitute material that would be inexpensive, long-lasting, strong and flexible to use. Before then, man depended entirely on nature, using wood, paper and other materials such as metals, hones and stones. The process started with the use of natural polymers derived from nature. Humans later started creating synthetic/artificial polymers from carbon atoms retrieved from fossil fuels. Currently, plastics are being used to make several products including straws, bottles, carrier bags, and pipes to name a few.

Environmental lobbyists are raising concerns over the havoc caused by single-use plastics (SUPs) on the ecosystem from its production to disposal. Despite being developed for practical and economic reasons, the impact of synthetic plastic is currently overwhelming the planet. Unmanaged plastic waste leads to environmental pollution. Improper disposal of plastics by consumers has increased plastic litter in our surroundings, denying Earth its beauty. Mountains of plastic are accumulated in landfills. Plastics take a very long time to decompose, even up to 1000 years. They release toxic chemicals into the soil hence leading to land degradation. This impacts agriculture, hindering food security.

Moreover, floating islands of plastic waste are a major global problem interfering with marine life. The flow of plastic waste in aquatic ecosystems is projected to reach 29 million tonnes by 2040, a tripled volume from 11 Million in 2016. The presence of microplastics in water bodies poses a threat to aquatic species as plastics block or injure organs, leading to death. Microplastics found in the air, food and water also cause impacts to human health.

#### **Awakening figures**

The plastic waste problem in the world is attributed to the upsurge in the production of the material compared to the world's ability to manage it. It is estimated that about 8 billion metric tonnes of plastic have been produced since the material was invented. This volume is expected to double by 2050 if the trend continues.

Studies indicate that half of the total volume of plastics produced has been registered in the last fifteen years. According to The United Nations Conference on Trade and Development - UNCTAD, about 369 million metric tonnes of plastics were produced and traded in 2021 alone.

"This is enough to fill 18.4 million trucks, each carrying 20 tonnes of plastics. A queue of these trucks would wrap around the globe 13 times." states the UNCTAD stat report released in 2022.

Plastic Ocean.org indicates that out of the total volume of plastics produced annually (about 400 million metric tonnes), half of it is for single use only (discarded after use).



## PRODUCTION OF PLASTIC

Global annual plastic production in million tonnes.

SOURCE: PLASTIC ATLAS, ASIA EDITION, 2021 | © PLASTIC SOUP FOUNDATION

While there is increased production of plastics globally, the rate of plastic waste management is worrying. The UNCTAD report reveals that only 10 per cent of plastic is recycled. The remaining 90 per cent finds its way in waterways, air, dump sites and landfills.

According to the United Nations Environment Program, Africa records the lowest production (5 per cent) and consumption (4 per cent) of global plastics. However, the continent accounts for 24 per cent of the global GHG emissions due to mismanaged plastic waste. This hinders the efforts to limit the global temperature below 2° C leaving the continent to grapple with the adverse effects of climate change.

Kenya, among other developing countries, struggles with SUP pollution due to improper plastic waste management initiatives. Plastic accounts for about 10 to 12 per cent (about 1 million tonnes) of the total waste produced annually in the county. As of 2018, only 27 per cent of the plastic waste generated was collected, with 19 per cent landfilled and 8 per cent recycled.

#### Zero waste and circular economy

Single-use plastics promote a throw-away lifestyle where immediately after using a product, it is thrown away. This generates a lot of undesired waste which is made worse by the nonbiodegradable property of plastic waste. The evident negative impacts of plastic waste call for action that will drive zero plastic waste. To achieve this, environmentalists are lobbying for the avoidance of unnecessary and single-use plastics.

Speaking during the 8th Annual Circular Economy held in Nairobi on 9th November 2023, Karin Boomsma, the Director of Sustainable Inclusive Business Kenya SIB-K & Kenya Plastics Pact KPP, stated the need for manufacturers to replace plastics with substitute materials that are biodegradable and eco-friendly.

Karin's sentiments were reiterated by Henrique Pacini, an Economist at UNCTAD who says that more should be done to boost the trade of plastic substitutes as trade dimensions play a critical role in managing plastic pollution.

"Global plastic trade is soaring with a 1.2 trillion USD trade This is quite high compared to the trade of other substitute material which stands at 388 Billion USD. More needs to be done to promote the trade of plastic substitutes," says Henrique.

However, the plastic pollution menace is already here with us. What then can be done to manage the situation?

Several available initiatives in Kenya are trying to tackle the plastic waste crisis in the country by providing innovative solutions for reusing or re-designing plastic waste. This encourages a circular economy where plastic waste can be re-used by manufacturers instead of accumulating to waste. The Flip OFlopi project is among these innovative movements calling for action against plastic pollution. Even so, these initiatives are faced with numerous challenges from volumes and complexity of plastic waste, to poor infrastructure and lack of capitation. "Our people are willing to fight plastic pollution. However, the project is small-scale. We face challenges in managing the amount of plastic waste in the coastal region due to the lack of advanced machinery that can help us crash more waste. We recycle about 15 tonnes of plastics a month. This is quite low compared to the volume of waste we get from our collectors," says Katharina.

"The poor quality of some of the plastic packaging makes it hard to recycle the accumulated tonnes of plastic waste. Such complex waste cannot be recycled locally due to the lack of the required infrastructure in the country. Therefore, there is a need for better quality standards," added Robert Njoroge from Mr. Green Africa, another initiative that recycles plastics in Kenya.

The two were speaking to journalists from East and West Africa who were attending a workshop on circular economy organised by Africa 21 and UNCTAD among other partners.

There is a need for collaboration among key stakeholders to support such initiatives and maximise their efforts in reducing plastic waste and reusing existing plastics. The Foreign Commonwealth and Development Office (FCDO) in partnership with UNCTAD supports selected manufacturing initiatives across target countries in Sub-Saharan Africa and South Asia through the 'Sustainable Manufacturing and Environmental Pollution Program' SMEP. The program's objective is to generate a cutting edge scientific evidence that can improve existing knowledge of environmental health and socio-economic impacts of selected trade-exposed manufacturing sectors across the selected countries.

"The FlipFlopi projected is among the eight selected projects in five countries supported by the £24.6 million SMEP program funded by the UK government. The program identifies and funds technological-based initiatives that aim at reducing the environmental and socioeconomic impacts of the manufacturing sector. This includes addressing plastic pollution," notes Glen Wilson, a Programme Management Officer at UNCTAD, who is also part of the SMEP implementation team.

Apart from partnerships, such initiatives can be supported by providing a conducive environment for them to operate in. Policies play a critical role in ensuring this happens.



Hulda Ateka, Principal Associate of Africa Legal Network (ALN)

Hulda Ateka, a Principal Associate of Africa Legal Network (ALN) says well-implemented policies help in reducing the trade, packaging and distribution of single-use plastic products. She says this will help countries to phase out single-use plastic products.

Kenya, for instance, has implemented policies that are critical in strengthening the fight against plastic pollution. In 2017, Kenya under the administration of former President Uhuru Kenyatta, banned the use of plastic bags. Another law that helps manage plastic waste is the Sustainable Waste Management Act of 2022 which calls for the reduction of all sorts of pollution through waste management practices.

In a bid to strengthen environmental sustainability through policies, Kenya, through the Ministry of Environment is currently formulating an Extended Producer Responsibility (EPR) policy. It aims to shift the burden of waste management from the government and consumers to the producers themselves. They will be required to take responsibility for the proper disposal and recycling of their products, ensuring that they do not end up as environmental hazards.

"This policy is expected to play a crucial role in managing plastic waste in the country by encouraging businesses to embrace sustainable production, packaging, and waste management. However, the government needs to follow the procedures to the core as well as increase public awareness of the policy to avoid legal issues once the policy is implemented," says Ateka. While individual countries must set up policies and laws that will help manage the plastic pollution crisis, there is a need for inter-state collaboration to efficiently maximize these laws.

For instance, while Kenya has banned plastic bags, they are still in the public's access. How then does this happen yet bag manufacturers stopped production of the bags?

Enforcers have complained of porous borders where business people smuggle single-use plastics from neighbouring countries.

"In collaboration with the police department. We have on different occasions caught people who trade plastic bags yet they were banned. Something ought to be done at the borders for this to work," says John Muniafu, The Kakamega County Director of Environment, National Environment Management Agency.



Rosa Nduati - Mutero Managing Partner at ALN

To manage porous borders, Rosa Nduati-Mutero, Managing Partner at ALN advocates for harmonised policies to fight SUPs across countries.

"Plastic pollution knows no border. We need to find a common legal framework across the region to deal with plastic pollution," says Nduati-Mutero.

On 10th November 2023, Nduati was among the policymakers who tabled a draft Bill to the East African Legislative Assembly EALA Committee on Agriculture, Tourism and Natural Resources in a bid to harmonise SUP legislation across the East Africa Community.



### Henry Owino (Kenya) ; Kenya's Climate Action: Transforming Waste Materials Into New Resources To Reduce Environmental Pollution ; Talk Africa, December 19, 2023.

To access the article : https://www.talkafrica.co.ke/kenyas-climate-action-transforming-

waste-materials-into-new-resources-to-reduce-environmental-pollution/

Tag : NEMA, FAO, WRI, FSMS, Taka Taka Solutions, FBK.



Human, birds and animals compete for salvaging food remains at Dandora dumpsite

Nairobi, Kenya: Kenya's efforts to mitigate environmental waste cannot be overdramatized or exaggerated. The evidence is based on various innovations and technologies transforming waste materials into new resources within a loop and without losing anything.

Environmental waste is unwarranted disposal of mass or energy into earth's natural resource pool such as water, land and air that results in long- or short-term detriment to the atmosphere and its ecological health to negatively impact the living beings and their life both quantitatively and qualitatively. Being a very broad topic, we narrow this down to focus specifically on organic waste or wet solid waste matter and its effects on the atmosphere.



Garbage-pickers collects garbage from truck dumping waste

Therefore, organic waste is any material that is biodegradable and comes from either a plant or an animal. Biodegradable waste is organic material that can be broken into carbon dioxide, methane or simple organic molecules.

The simplest types of organic molecules are hydrocarbons, compounds that contain only hydrogen and carbon atoms. However, most organic molecules contain other elements, such as oxygen, nitrogen, sulfur, and phosphorus among others which are essential nutrients for plants or crops.

It is estimated that Kenya generates between 3,000 to 4,000 tons of waste per day, the majority of which originates from urban areas. According to the World Bank, the country's capital, Nairobi generates between 2,000 to 2,500 tons of waste daily, of which 80% is organic and 20% is in plastic form.

Majority of these waste collected end up in dumpsite with very minimal recovery if any through recycling, reusing or transformed into a form which can yield an economic or ecological benefit. The major setback here is poor waste management, coupled with rising

urban pressure which have heightened the risks of environmental degradation especially in the capital city of close to 6 million inhabitants.



#### Waste Management Procedure

The introduction of the Sustainable Waste Management Act, 2022 under the Ministry of Environment and Forestry in Kenya is currently changing the situation. The National Environment Management Authority (NEMA) has been mandated to oversee its implementation to the letter either through stick or carrot.

Dr. Ayub Macharia, Director NEMA who is also in charge of Environmental Education and Awareness says Kenya's Constitution 2010, devolves waste management as a function of the County Governments. So, the 47 counties in Kenya led by governors are responsible for waste in their counties.

Dr. Macharia clarifies that NEMA is in charge of national policy formulation and coordination to ensure the system is running and counties are functioning. This should be consistent with the new law on sustainable waste management. "The Sustainable Waste Management Act, 2022, requires NEMA to generate waste that is not contaminated from homes, estates, offices, markets, learning institutions among others. The waste should be separated into organics and dry synthetics in at least two distinct litter bins for collections and disposal not at dumpsite but to recyclers," Dr Macharia explained.

Therefore, Environmental Waste Management is the process of handling and disposing of waste safely. The waste should be sorted right from its originating source before pickers or collectors transport it to the recycling companies.



Tipper truck turning organic waste at cycling site for processing into organic fertilizer

Private Sector organizations in Kenya are at the forefront in implementing this new law by actually practicing it in various counties. It has since been known as a circular economy model where resources are managed instead of managing waste.

#### Loss and Waste Management in Supply Chain

According to Winnie Yegon, Food Systems Analyst, Food and Agriculture Organization (FAO), to grasp the issue of food waste, it's important to understand it from a supply chain perspective. From production and packaging to distribution to retail and to the consumer. AFRICA 21

Food waste occurs on every level of the supply chain, and with chains growing longer by the year, waste increases in every stage.

Yegon says food loss and waste are distinct but that food that is intended for human consumption and ultimately it wasn't consumed.

Food "loss" occurs before the food reaches the consumer as a result of issues in the production, storage, processing, and distribution phases. Food "waste" refers to food that is fit for consumption but consciously discarded at the retail or consumption phases.

"The difference between food loss and waste is where it occurs in the value chains, that is actions it takes right from the farm up to the disposal of the food. For instance, from farm to retail is known as food loss while from retail to the final consumer level is what is termed as food waste," Yegon explained.



Employees at Taka Taka Solutions sorting waste for regenerative resource

And if food goes to the landfill and rots, it produces methane—a greenhouse gas even more potent than carbon dioxide. She said about 8% -10% of all human-caused greenhouse gas emissions could be reduced if we stop wasting food.

In Kenya, the food loss and waste are between 30% to 40% which is not consumed hence detrimental to the environment. It has been said and published that food we waste globally could actually feed up to 2 billion hungry people.

Dr. Christopher Mutungi, Senior Researcher, Food Program at World Resources Institute (WRI) says when food goes to the dumpsites as waste, it is responsible for 8% to 10% of greenhouse gasses, specifically methane.

Dr. Mutungi discloses that presently, the Food Safety Management System (FSMS) requires companies not just to be certified in terms of safety and quality of their products but on policies and mechanisms that they have in order to reduce food loss and waste within their supply chain.

"This policy requires companies to audit themselves. For instance, Brookside, Kakuzi just to mention but a few companies by April 2024, must review their systems and demonstrate that they are actually reducing food loss and waste within their food supply chain," Dr. Mutungi revealed.

This new policy is not just within the company alone but it has to reach out down to the farmers as well, the company it is working with.



Using organic fertilizers for urban farming

For small scale farmers or small and medium enterprises (SMEs) are encouraged to enter into food processing techniques and decamp from relying on primary production to minimize loss and waste. It is also the best way to control glut in some areas for supply to other parts of the country with severe shortage.

#### **Turning Organic Waste into Resources**

Taka Taka Solutions is one such private organization regenerating organic and plastic waste into new resources. Organic waste being the highest wet solid matter disposed of from various premises, emits between 8% to 10% of methane- a greenhouse gas responsible for climate change.

According to Dr. Macharia, Nairobi County alone generates approximately 3000 tons of waste daily of which 1,800 tons (60%) are organic waste while about 1,200 tons (30%) are dry synthetic waste. The data may vary a little bit but the facts remain the same that organic waste are just too much in Nairobi.

It is for this reason that I sorted to know how Taka Taka Solutions company is turning the high volume of organic waste in the capital city into a beneficial resource.

According to Joharie Kisiangani, Marketing Representative at Taka Taka Solutions ('Takataka' means 'waste' in Kiswahili), since its inception in 2011 it has developed to become the largest waste management company in Kenya. The organization now serves more than 20,000 households and handles 70 tons of waste per day.



Taka Taka Solutions staff processing waste in factory plant

Kisiangani says the organization operates; a composting facility, three sorting sites, a recycling plant, and two waste buy-back centers. With over 400 employees directly earning their livelihoods from the company and at least 1000 waste pickers its rate of separation and recycling is over 90%, which is one of the highest recycling rates in the world.

"TakaTaka Solutions is an integrated waste management and recycling approach which has today become a state-of-the-art waste management value chain. It is a full circular economy from providing much needed services to creating jobs," Kisiangani affirms.

Thus, TakaTaka Solutions is a Kenyan waste management company active in five aspects of waste management; waste collection, sorting, composting, plastic recycling, and buying back waste from waste pickers.

Every day the company fleet of trucks drives out collecting up to 60 tons of waste daily from residentials, industrial and commercial clients. This is in addition to sourcing 30 tons from six waste pickers at its buyback centers across the country. The organic waste is then taken through various processes turning them into organic fertilizers targeting smallholder farmers.

To effectively make the operation succeed, the company is partnering with rural households, apartments, businesses such as malls, schools, hotels, retail- shops, industries, recyclers industries, local plastic manufacturers, farmers both small and large-scale, urban households, and waste pickers to collect and deliver the new resources.



Truck from Taka Taka Solutions collects waste from households for regenarative purposes

According to Kisiangani, the two most common ways to process organic waste sustainably are composting and anaerobic digestion. Composting is a simpler and cheaper process in terms of sustainable financing and policy models for municipal composting.

"Our waste collection service is for any type of waste producer, while sorted recyclables are used by third-party recycling industries. Processed plastic materials are used by local plastic manufacturers to make new plastic products. And the compost is used by Kenyan farmers to improve their soil fertility and we also sell compost to urban households practicing kitchen gardens," Kisiangani explains.

Tractor working on organic waste Solutions, aims to transform Kenya's organic and plastic waste value chain for good. In addition, the project ensures a second life for 95% of waste collected directly from Nairobi households and businesses.

Dr. Macharia affirms that recovery of food loss and waste led by private companies is helping in reduction of organic waste. For instance, in Nairobi County, it has been at Dandora, Kisumu County at Kachok, Nakuru County at Giotto dumping site while Mombasa at Mwakirunge garbage dump just to mention but a few.

As a result, the Ministry of Environment and Forestry estimates that by 2040, there will be no dumpsites and thus complete reduction of methane emission into the atmosphere hence minimizing global warming.



Taka Taka Solutions staff showcase sorted waste in bins from commercial clients

#### Alternative Organic Waste Recovery

Prof. Jane Ambuko- Professor of Horticulture, University of Nairobi says Kenya produces enough food to feed the population but the leaks cut across. It starts from the farm, transport, storage, all the stages of the supply chain there is concession to the final users.

"People talk about food waste but don't factor in the efforts, resources that have gone into producing that food. Consider the farmer who put his effort, energy, time and financial resources that has gone into producing that food," Prof Ambuko posed.

She finds it painful seeing tomatoes being fed to cows as waste, may be due to overproduction or lack of market due to poor roads. So, governments should also play its role of constructing good roads including feeder roads to the farms to minimize food loss and waste that emits methane.



Tractor working on organic waste

Moses Nyoro, Director, Food Banking Kenya (FBK) admits there is a lot of food loss and waste along the entire supply chain. It starts from farmers, to distributors, retailers even to consumers in the households.

Nyoro discloses that FBK collects 60 tons per month of food which otherwise could have gone to waste. People now understand there is an organization that collects food from families with excess of it. According to Nyoro, the information on food recovery has spread far and wide and people are realizing the importance of avoiding food wastage. In fact, it has helped in reducing food waste found in dumpsites, litter bins among other garbage areas known as waste yards.

Nyoro reveals that statistics show a lot of gases being emitted into the atmosphere is specifically from Agriculture wastage. So, the element of connecting with agriculture stakeholders and networking or collaborating with other recycler companies to ensure food recovery is very important.



## Lina Mwamachi (Kenya) ; Kenyan Children Turning Tide on Plastic Pollution ; Climate Lens News, 19 December 2023.

To access the article : <u>https://climate.co.ke/kenyan-children-turning-tide-on-plastic-pollution/</u>

Tag : USAID, KEPSA, WWF, UNCTAD, EAC, Flip Flopi, Tetra Pak, Taka Taka Solutions, UNEP.

This is Jayden, not his real name, a young boy in Kongoni primary school in Taita Taveta County, speaking on the importance of keeping the environment free of plastic materials to safeguard humans, livestock, and wildlife.



Jayden, a pupil at Kongoni Primary, explains the importance of fighting single-use plastic. Credit Lina Mwamachi

[audio, see link]

#### UCHUMI MZUNGUKO – LINA 20 11 2023 – SIFA FM NEWS

Cooperation amongst multiple stakeholders, society, donors and sponsors of different environmental projects alongside private sectors, is paramount in order to attain goals aligned with Circular Economy.

Speaking during the 8th edition of the Annual Circular Economy Conference

held in Nairobi, Kenya, on the 9th of November 2023, Chief of Party, USAID Strategic Partnership Doctor George Njenga, said cooperation, enough funds and resources plus proper planning, will enable and effect circular economy process more so to dealing with plastic waste management.

Insert: Professor (Unity)

Jayden and other pupils and teachers from 31 different primary schools in the vast Taita Taveta county had gathered on this particular day to clean up the environment of plastics along the Tsavo West National Park. They all gathered alongside other stakeholders and leaders.

Jayden says it's their mandate as members of a school club called Wildlife Club Members to clean the environment by collecting plastic wastes and nylons weekly from their school compound.

On this particular day, over 100kg of plastics, bottles, and metals were collected during a clean-up exercise organized by Lions Bluff Douglas Mwashi, operations manager.

Mwashi cites that they decided to involve school-going children in the initiative to brew up a crop of conservators who will change the environment for now and future generations, ensuring doing away with single-use plastic.

[audio, see link]

#### VYAMA VYA USHIRIKA – LINA – 21 11 2023

Society at large has been advised to embrace cooperative societies, as one way of achieving wealth and enabling the process of recycling, reusing and re-using of materials again and

again to protect environment.

Speaking to Sifa fm, during the 8th edition of the Annual Circular Economy Conference, Chief of Party, USAID Strategic Partnership Doctor George Njenga, said cooperatives will robustly increase capacity of adding value to food commodities as well as other materials, for the benefit of every one and environment.

Insert: Rais USAID (Youth and Cooperatives)

But why involve school-going children? Purity Manyatta, a liaison officer at the Lumo Conservancies, elaborates on the involvement of school children in cleaning the environment and managing plastic litter as key to pushing for a cleaner and safer environment away from plastic pollution.

[audio, see link]

Women Involvement in Enviromental Issues

Coastal Kenya Programe Manager, WWF-Kenya, Dr. Asma Awadh, says in WWF, they are engaging directly more women in different matters concerning environment, in order to enlighten more women and society about programs like Circular Economy.

Dr, Awadh says if more women are involved in different campaigns and projects regarding environmental issues, it will help in reaching the goals pertaining to Circular Economy and dealing with environmental issues, most importantly dealing with the issue of single use plastic, where women play a very vital role of directly involving in collecting plastics.

Insert: Dr. Awadh (Women Involvement)

Indeed, it's a bottle for a book program that Purity says will continue every year to buy stationery for pupils in the area and safeguard their education.

In replica research conducted by Water Journalists Africa, a local organization in western Uganda, the Kazinga Channel schools project sows seeds of plastic waste management in young people through school conservation clubs. Through these clubs, the pupils, their parents, teachers, and villagers in the sub-counties of Lake Katwe in the Kasese district and Katunguru in the Rubirizi district collect used plastic bottles that are later recycled into plastic shelters for saplings (growing trees) and trash bins. The remaining are burnt from the four incinerators built by this organization.

#### **Plastic Pollution in Figures**

Global plastic pollution remains unabated, with recent UNCTAD figures revealing that the international plastic trade will hit a record of 1.2 trillion USD in 2022.

Despite increased awareness and environmental campaigning, a recent report highlights a record 139 million metric tons of single-use plastic waste in 2021 and hazardous waste generated, a 6 million metric ton increase from 2019, as explained in the data below from Our World in Data.

#### https://ourworldindata.org/grapher/hazardous-waste-generated-per-capita?region=Africa

#### **Strides in Africa**

Africa stands at a critical juncture in its development, facing unprecedented economic growth and environmental challenges, particularly the increase of single-use plastics.

While African countries have initiated conversations on legislation, the approach remains decentralized, with some nations forming national laws and others collaborating on a harmonized regional system, as seen in East Africa with the draft single-use plastics bill tabled before the East African Community legislative assembly.

According to data from Our World in Data, the Sub-Saharan Africa region is responsible for 8.9% of globally mismanaged plastic waste (plastic that is either littered or inadequately disposed of).

As the world population and economies have grown, the global production of materials, such as plastics, paper, and aluminum, has increased significantly.

The data alludes that without proper waste management systems, this growth in consumption leads to a significant increase in mismanaged waste, leading to pollution of ecosystems such as rivers, lakes, and the ocean.

#### What Way Ahead

Flip Flopi Program Manager, Ms. Davina Ngei says pollution is everywhere, and plastic, one of the most visible representations of our footprint, is currently dominating community, policy, and media attention.

She adds that mismanaged plastic waste is, unfortunately, a familiar sight – piling up on streets, covering estates, clogging sewers, littering our parks, and lining the beaches.

Solutions like recycling plastic bottles and remodeling and reusing to make chairs, dhows, and beds, although temporary solutions to curbing plastic pollution, Ngei counts as simple solutions to managing the menace.

Flip Flopi Project, a collective of global change-makers and the number one innovator, built the world's first recycled plastic sailing dhow, bringing color and hope to the plastic pollution movement.

Ali Abdallah Alias, Ali Skanda, is a Lamu resident and one of the pioneers of the Flip Flopi project, and the brains behind the making of the sea dhows, including the vast plastic sailing ship in Lamu Island. He decided to forgo everything and immersed all his efforts in marine and environment conservation.

Abdallah says that the environment is vital to our daily lives and is one way to help curb climate change due to dirty emissions from incinerated plastics and other fossil fuels.

To watch the video : <u>https://youtu.be/Q9bs-acNfHs</u>

Ali Abdallah Environment Conservator -Flip Flopi – Lamu Island – Video Credit Lina Among other players who are also inventing less destructive and sustainable solutions to managing plastic pollution is Tetra Pack, which has redesigned a new carton packaging for their commodities, including water, milk, and others, as seen in the clip below.

#### Tetra Pack repackaging – Credit Lina Mwamachi

Nevertheless, all efforts by different stakeholders and innovators, including Taka Taka Solutions, BAUS Taka Solutions, Mananasi Fibre, and more, are geared towards achieving one goal: to try to end single-use plastics and find simple solutions to managing plastic pollution. Henrique Pacini, an economist at the United Nations Conference on Trade and Development in Geneva, UNCTAD, where he works on trade and circular economy, says it's essential to care about plastic pollution, citing that it is time for the world to rethink other adaptable ways and usage of nonplastics materials to replace plastics.

Pacini says governments should negotiate to rethink and set rules that multiple nations will agree upon to become an international treaty against plastic pollution, including control, taxation, and more on the use of single-use plastics.

To watch the video : <u>https://youtu.be/-itAUMKynII</u>

According to the economist, countries need to agree collectively on simple long-term solutions because plastic pollution isn't a problem of one person but affects everyone globally, and it's a collective thing that will require effort from all players.

#### The Single-Use Plastics Dilemma in Africa

The continent's rapid growth has led to an uptake of SUPs for various solutions, including packaging and service ware. These materials, designed for convenience, end up causing severe environmental degradation, often ending up in landfills, water bodies, and open spaces. The negative impacts on wildlife, soil fertility, and water quality are evident, affecting urban and rural communities.

We are now faced with an overwhelming supply of cheaply made plastic, most of it unnecessary. We use plastic for only a few minutes (think of a packet of crisps), but it takes hundreds of years to break down.

Unsurprisingly, communities that historically have wasted very little are now wasting plastic. After all, what can you do with soda bottles, soap sachets, and sweet wrappers? Where should you throw them when you live in an area that lacks basic waste management infrastructure?

According to scientists, as many unique ideas as we have to recycle and reuse this 'waste,' there will never be enough to stem the growing tide of new plastic created every minute, adding that there is a need to put a stop to the overproduction of plastic and then figure out what to do with the hundreds of millions of tonnes littering our land and sea.

According to the UN Environment Programme, "one million plastic bottles are purchased every minute" worldwide. Half of these are designed to be thrown away after a single use.

#### Is there a solution?

The answer is simple: Inaction over plastic pollution is catastrophic, and the consequences are severe in different ways. A 2019 study published in the Environmental Science and Technology journal found that an average person eats at least 50,000 microplastic particles annually. Most of these particles were found in rivers, oceans, soil, and air.

Further, the study warned that people who take water only through bottled sources may be ingesting an additional 90,000 microplastics annually, compared to 4,000 microplastics for those who consume only tap water.

However, improving waste management practices can also help us reduce the amount of raw materials generated by recycling (although not eliminating) by managing the production of new resources.

Otherwise, experts allude that by protecting the world's ecosystems and our general health from plastics, we need to ensure that waste is managed correctly.

This story was compiled by Lina Mwamachi – Sifa Fm, through the help of Africa 21 and partners and data from Infonile and Our World Data.



Lenah Bosibori (Kenya) ; Circular Economy: How a Kenyan firm is utilizing pineapple waste to produce sisal fiber ; Talk Africa, December 20, 2023. To access the article : https://www.talkafrica.co.ke/circular-economy-how-a-kenyan-firm-is-

utilizing-pineapple-waste-to-produce-sisal-fiber/

Tag : ILO, Mananasi Fibre LTD, UNCTAD, SMEP, FCDO.



From Left, Lilian Ndungu and Agnes Kiloko arranging processed fibre to sun dry before going back to the machine for fine processing

Kiambu, Kenya: In the beautiful landscapes of rural Gatuanyaga village located at the heart of Kiambu County in the Central region of Kenya, a remarkable change is happening, as a local firm is transforming waste from pineapples into fibres useful for textile and structural applications, similar to sisal fibers. Surrounded by endless fields of pineapples, lush hills where pineapple farming is a way of life, this unique initiative is reshaping the community's future by providing job opportunities and taking care of the environment.

During my recent visit to the firm, Mananasi Fibre LTD, an organization transforming Pineapple plant Waste into a sustainable revolution in Kenya, I met a group of employees busy working despite the hot afternoon sun. Loyce Nafula is a women who is employed at the firm despite her physical disability. Nafula shares.

"My main work here is to make pineapple fibre baskets as I can't stand for long to operate the machines due to my disability," Nafula shared with Talk Africa.

Nafula adds that she has been tarmacking for so long looking for employment as many employers used to turn her down due to her disability. Luckily, she got one at the Mananasi fiber. "I have tarmacked for long looking for a job around this area which many people turned me down due to my disability but luckily I am happy here at Mananasi fiber," shared Nafula.



Loyce Nafula, an employee at the firm showcasing a wooden basket made from the fibre as a result of the pineapple waste

Nafula moved from Kakamega county in western Kenya and got married in Eastern parts of Kenya and due to poverty and high living expenses, Nafula was forced to look for a job and take care of her family.

"Life was extremely difficult because I only depended on my husband who also works as a casual laborer with little income that could not sustain our family of four," Nafula said while holding fibre bags she had made from her current occupation.

Four months ago, Nafula heard that Mananasi Fibre was opening its doors in the area and she decided to try her luck in employment. Luckily, Nafula was one of the employees picked for the job as a bag maker.

"When I came, I was scared because I didn't know what I was going to do, I had no idea about machine operation and due to my disability, I could not stand for long. Luckily I was employed as a fibre basket maker," added Nafula.

Evelyn Kerongo is another employee who has trained as a machine operator at the firm. She has also been working for two months and she looks forward to more employees to get job opportunities when the company expands.

"I earn 672 Kenya shillings (\$4.32) per day, as this is just a start, I am hoping that our boss will increase the figure when the firm gets into full operations," said Kerongo.

Our boss is a nice person, we have not faced any challenges so far apart from the dust from the machines, we know it is normal but we ensure that we put our protective gears on and take a lot of water and milk so that we are not dehydrated while operating the machines," adds Kerongo.

Kerongo urges women to take any job opportunity around them and put more effort and energy into learning so that they can be independent and stop relying on their husbands.



Boyd-Moss, Founder and Mechanical Engineer, checking on the machine before comencing afternoon operations Paul Mwangi is the assistant supervisor at the firm, he has also been working for two months and is looking forward to the company to start full operations so that he can earn more. "We are working hard, and looking forward to huge returns as the work progresses," he adds.

Located about 60 kilometers from Nairobi's Central Business District (CBD), Mananasi (Pineapple) Fiber LTD has been in operation for only four months but to a new visitor the firm looks older than the days it has been operating credits to coordination from employees and the founder.

Curious to know more, I met James Boyd-Moss, Founder and Mechanical Engineer at the firm busy repairing machines that kept on crashing down because they were just brought in and were still being fine-tuned for the operations. Moss shares the motive behind the firm.

"When I came here, this place was a kichaka (forest) Moss proudly repeated it as he enjoyed my interview in Kiswahili, as you can see, it is now looking like a fully functional factory," said Moss.
Moss shares with me that it is an idea that came into his mind a year ago since he grew up in a sisal growing area and decided to copy it to his firm." I grew up on a sisal plantation so I took the sisal concept and applied it to pineapple plant waste," said Moss.



Currently the firm that is only four months old has made progress, apart from employing close to 30 people, the firm is looking at building up stocks to send to Ananas Anam an innovative company that repurposes pineapple leaves into the sustainable vegan textiles headquarter in London UK with subsidiaries in both the Philippines and Spain.

"We are in the commissioning phase so only producing about 1000kg per month, this should reach 10,000 kgs at full capacity," added Moss.

In Kenya, about 80,000 tons of pineapple waste is produced monthly. This waste is either eliminated through burning or decomposition, releasing tons of carbon dioxide and methane gas, which are greenhouse gases that contribute to climate change.

#### **Environmental Impact**

Moss says that the pineapple leaf fibers used to create the products are from agriculture waste which means that no extra land is required but plenty of water is consumed. The water is also reused as it is put in ponds waiting for a purifier to clean it for further use.

"This production requires a lot of water, currently we get our water from the river through the Delmonte pipes that pass through here. The beauty with our production is that it reduces the amount of pineapple leaves being burnt in the air by reducing carbon emissions from being released into the atmosphere," said Moss.

Del Monte Kenya Limited is a Kenyan food processing company that deals with the cultivation, production, and canning of pineapple products.

In her remarks during the 8th circular economy conference in Nairobi, Linda Kosgei, the Head of Multilateral Environment Agreements (MEAs) in the Ministry of Environment, Climate Change and Forestry said the government has put in place new policies and legislations to promote sustainable waste management.

"The country's policy has now shifted from the linear model to the circular model, as we all know, the linear model has been using products without reusing them thus generating a lot of waste," said Kosgei.

In addition, Casper Edmonds, the head of Unit for Extractives, Energy and Manufacturing at the International Labor Organization (ILO) told African journalists in Nairobi during a recent training on Circular economy that Africa urgently needs to protect those who work in the waste picking industry.

"We urgently need to protect those who work in the circular economy today from the hazards they face, whether through fumes, dust or chemicals, we need to step up our work," said Edmonds

While at Mananasi Fibre, Moss has really adhered to Edmond's remarks as I could clearly see every employee fully protected from the dust, noise and even gloves to protect their hands from the waste as the photos clearly show.



A pile of pineapple waste awaiting production

Data by Kenya Pineapple Industry Outlook 2022-2026 shows that Kenyan consumption of pineapple is expected to reach 284,000 metric tons by 2026, growing at an average of 2.2% year-on-year. This is an increase from the 247,000 metric tons recorded in 2021. Since 2017, demand for pineapple has grown 2.3% year-on-year. In 2021, Kenya ranked 23rd, with Malaysia coming in first with 402,000 metric tons in Johor province alone in 2022. Brazil, India and the United States followed as number 2 and 3 respectively

The report further says that Kenyan production of pineapple is set to reach 303,660 metric tons by 2026, with an annual growth rate of 0.2%. Since 1966, production has increased 6.2% year-on-year. In 2021, Kenya came in 25th place. The Philippines, Brazil and China were ranked 2nd, 3rd and 4th respectively.

#### Extraction

After pineapple harvest, the suitable plant leaves which are left behind are collected in bundles and brought to the firm by a vehicle, the long fibers are extracted using semiautomatic machines, the fibers are then washed and sun-dried and during the rainy season, the fibers are dried in ovens. The dry fibers go through a purification process to remove any impurities which results in a fluff-like material. They are then taken to the second machine to get the fine fiber that is exported to Ananas Anam, located in London, United Kingdom as raw material for making products like sanitary ware, baby pampers, clothes, shoes and many more.

#### Waste From The Waste

However, it's important to note that even in this process, waste is still generated. The challenge now lies in addressing and minimizing the environmental impact of the secondary waste produced during pineapple fibre extraction.

## BALANCING THE BENEFITS OF UTILIZING PINEAPPLE WASTE WITH THE RESPONSIBLE MANAGEMENT OF BYPRODUCTS BECOMES CRUCIAL IN ENSURING A TRULY SUSTAINABLE AND ECO-FRIENDLY APPROACH TO THIS INNOVATIVE VENTURE. THIS IS HOW MOSS MANAGES HIS WASTE FROM WASTE.

"The idea is to produce organic or compost using the waste from the decortication process and the method that we will be using is aerobic static pile composting so it gets put into big piles with a pipe, feeding the bottom and then periodically you come and blow air down the pipe and that aerates the compost," said Moss.

At the moment, Moss says that they are commissioning machines and hence no big profit is being realized. "When it will be fully operational, we are hoping to produce 400 kilograms of fiber from the pineapple waste per day (2 shifts)," says Moss.

"We will be processing 2,900 tons of raw materials from the field per month, that is the stems, roots, leaves," he adds.

Currently, Mananasi Fibre relies on the waste from Del Monte but with time he says that the firm will be like an aggregation center for the smallholder farmers to bring their waste and get paid for it. There are ten additional industrial producers of pineapple around here," said Moss.

"If there are other smallholder farmers that want to commercialize to gain extra value from the plant, they would bring and get paid," remarked Moss as he checked on the machine that kept on breaking down, as they were still under active development and fine-tuning.

#### Challenges

Moss says that pineapple leaves are very light as compared to sisal. "Pineapple leaf is like 60 grams and sisal leaf is like 1kg. A very great difference in weight and difference is size and the fiber content for pineapple is small, so the yields from the fiber extraction process are much more than that of sisal," says Moss.

He says that another challenge is the regular breakdown of machines. "This machine keeps on breaking down. Me and my team of technicians work on the machines together, so maintenance knowledge is disseminated, since a lot of the time I am busy on other parts of the business and not around in the machinery site" adds Moss.

At the moment, the firm has employed close to 30 employees. "I currently have 30 employees and hope to increase them to 160 when the firm will be fully operational if everything goes as planned," adds Moss.

Mananasi Fibre Limited is sponsored by the Sustainable Manufacturing and Environmental Pollution (SMEP) Programme, a joint initiative by the UK-FCDO and the United Nations Conference on Trade and Development (UNCTAD).





Johnson Kanamugire (Rwanda) ; Funding woes plague circular startups working to fix the waste crisis ; NewsPaper Africa, December 25, 2023.

To access the article : <u>https://newspaper.africa/2023/12/25/funding-woes-plague-circular-</u>

startups-working-to-fix-the-waste-crisis/

Tag : Flip Flopi, SMEP, EPR, AfDB.



Briquette production operations at Kigali-based COPED Ltd. The products serve as a substitute to wood and charcoal for cooking. PHOTO | COURTESY

Despite dominant stories of inaction on the worsening garbage disposal crisis across Africa's fast expanding cities coupled with the health and environmental dangers linked to pollution, all is not bleak.

There is a rise in the number of initiatives and innovative ideas by individuals or communities that promise to tame the crisis, but whether governments create a conducive environment to allow scale up, or do the requisites to promote transition to circularity still divides opinions.

Entrepreneurs in the circular space across parts of Africa have been recycling or reusing a wide range of garbage into other products, from transforming food waste into pellets that serve as a substitute to wood and charcoal, to turning plastics and worn out clothes into reusable products at households and across sectors.

Others have dedicated their efforts towards cleaning up water bodies, among other social environmental activities.

Their collective work promises to minimize volumes of waste that end up at landfills and other locations in rural and urban parts of the continent where poor disposal foments pollution responsible for estimated 1.2 million deaths annually, according to World Health Organisation.

It has emerged, however, that their gains and potential to scale operations could be lost as they continue to grapple with little to no incentives or funding, not even from the waste management departments of governments and other public agencies whose mandate is to deliver a livable environment to the citizens.

This is more so in light of unmet commitments under the Sustainable Development Goals (SDGs) especially on the aspect of preventing waste pollution.

#### Challenging

Majority of circular startups battle multitude of constraints ranging from limited access to funding, inadequate policy frameworks to provide incentives, and limited demand for circular products, among others.

"It's been extremely challenging raising funding beyond normal bank loans and that weighs down our efforts because interest rates are so high and there is no consideration given to the social and environmentantal impact aspect," said Paulin Buregeya, head of COPED, a Kigalibased waste company.

"You cannot even mention the circular economy. It has to be a business that generates income and that has acted as a setback for social environmental initiatives by individuals,



women groups, youth and associations that had entered waste recycling at community level," he added.

Lack of support implies they cannot meet costs associated with routine collection, sorting and transportation of the garbage that range from paper, plastic, metals and organic materials for recycling.

Mr. Buregeya currently pins hopes in the government of Rwanda's green investment facility introduced a few months ago, allowing entrepreneurs in circular economy to access funding in terms of both grants and low interest financing.

#### Not alone

Flip flopi, Kenya-based East African movement working to end plastic pollution operated for six years without funding to support their activities around collection of the plastic garbage, operationalizing the recycling facility, as well as meeting others expenses like utility bills and paying workers.

The project is credited for riding East Africa water bodies off tonnes of discarded plastic waste that they turn into sailboats and other products as part of campaigns to inspire communities to embrace circularity.

"We've been running this project for almost six years without any funding. Sometimes we opted for crowdfunding or asking for donations especially in our clean up campaigns. We ask the people in the area where we are cleaning up what they can contribute... can you bring a rake, a basket, can you bring your workers to help us?" said Ali Skanda, co-founder and general manager.

They breathed a sigh of relief when the project received funding from the Sustainable Manufacturing and Environmental Pollution (SMEP) Programme, allowing the initiative to turn the aspiration of the big boat into reality, and since went ahead to build smaller boats and carry out regular waste collections.

"There's so many more organizations out there in Nairobi, and the whole of Africa has an enormous amount of these kind of projects struggling to scratch funding together. Collectively, they would change a lot if they got predictable government support. Even for us fundraising is still a full time job because the SMEP funding officially end in April next year," said Katharina Elleke, Flipflopi's program manager.

#### Holding manufacturers to account

Actors in the circular economy expect governments across Africa to consider these constraints in their design of circular economy action plans and roadmaps, and especially considering tax incentives, subsidies, and green procurement policies that can create a conducive environment for initiatives that promote circularity.

In particular, there are high hopes in the enforcement of the Extended Producer Responsibility (EPR) to compel producers to support work that goes into dealing with their products after use.

Margaret Kamau who works at African Development Bank's Climate Change and Green Growth Division says these efforts will be complemented by the Bank's business support programme for startups in circular economy which seeks to address challenges around developing bankable ventures that attracts capital for early stage financing to support their further scale up.

She said that the financial institutions still treat circular startups like other business firms when it comes to weighing credit risks, and the former barely understand the circular economy models.

Their plight is worsened by limited commercialization make their products more expensive than linear ones.

"There is also need to strengthen market demand for circular economy products," she said. Meanwhile officials say circular entrepreneurs with innovative models could come together and approach potential financiers.





Jenifer Gilla (Tanzania) ; Environmental Pollution: Hindering Economic Growth, Boosting Zero Waste Solutions ; Habitat media, 25 december 2023. To access the article : https://habitatmedia.co.tz/environmental-pollution-hindering-

economic-growth-boosting-zero-waste-solutions/

Tag :



Dar es Salaam. In a candid statement, Mkana Mohamed, the Head of the Environment Department at Temeke Municipal, sounded the alarm on the adverse effects of environmental pollution on economic development.

Mohamed contends that the financial resources currently allocated to treating illnesses resulting from pollution represent a significant impediment to individual and governmental economic growth. He posits that by addressing the root causes of pollution, communities can not only enhance public health but also redirect vital healthcare funds towards initiatives that foster a more robust and prosperous economy.

He said over 70 percent of diseases are linked to uncleanliness, when controlled can curb frequent illnesses and redirect healthcare funds towards economic growth. Noting cholera as

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an example, a disease with long recovery times or even fatalities, reducing the workforce available to build a thriving economy.

He said this the other day at the ceremony of handing over the zero-waste project to Kibasila Secondary School which was given by the Environment Plus Institute in collaboration with TCCI Environment, Dar es Salaam.

The project presents a model for tackling this challenge by involving a setting up waste sorting and separation facilities, as well as educating students on turning waste into economic opportunities.

Mohamed emphasized that waste shouldn't simply be dumped in landfills. It can be utilized for various purposes, from creating fertilizers to supplying raw materials for factories. He stressed the importance of the school taking on this project, praising its academic excellence and the potential for students to become environmental educators for their community.

Ramadhani Mwakae, project coordinator from Mazingira Plus said the project aims to support the government's goal of diverting 80 percent of solid waste from landfills by equipping schools with the tools and knowledge to cultivate a culture of environmental awareness in future generations.

Kibasila Secondary School Principal Patrick Sinyinza expressed pride in their role as pioneers in this national initiative. He reported a noticeable shift in students' attitudes towards waste, with a new respect for proper disposal.

Student project ambassador Edson Michel highlighted the project's successes since its launch in September. These include environmental education, planting 500 fruit trees and vegetable gardens, and producing fertilizer from collected waste for the school's garden. Additionally, students collect and sell plastic waste to farms for recycling, and hazardous materials are responsibly disposed of by the municipality.

While acknowledging challenges like the lack of essential tools, Michel remains optimistic about the project's impact. He sees it as a beacon of hope in the fight against environmental pollution and a catalyst for economic growth driven by responsible waste management.



# Sharon Ambani Tamba (Kenya) ; Waste-to-energy: A Boost to Kenya's Transition to Clean Energy ; Story Spotlight, Dec 27, 2023.

To access the article : https://storyspotlight.co.ke/waste-to-energy-a-boost-to-kenyas-

#### transition-to-clean-energy

Tag: NEMA, WHO, Paris Agreement, NDC, Climate Change Act.



At the heart of South Kabras Ward in Kakamega County of Western Kenya lies a lively upcoming town. The area that was once a dull village has been brought to life, thanks to the presence of one of the well-known sugar factories in Kenya.

Farmers in the area grow sugarcane to supply raw materials to the West Kenya Sugar Company. Several business people are trading goods and services to meet the needs of an increasing number of residents. The booming business environment has also led to improved infrastructure in the area.

"Our youths have been employed to run operations in the factory. I have also raised my family using the income I get from growing and selling sugarcane to them. We are grateful for the company's presence amidst us," says Wafula Juma, a resident of Shiruma village. While the people living near the factory acknowledge the positive socio-economic development it has brought, they confess to experiencing the other side of the coin. They recall cooperating with the company by giving land where the bagasse would be dumped. However, they had very little knowledge of the aftermath. They are currently grappling with the disastrous environmental and health impacts brought by the huge mountains of disposed bagasse waste.

As one nears the dumping site, they are hit by an unwelcoming odour from the waste that has existed for many years. Plumes of smoke caused by random fires from the ignited dry fibrous residue increase with every blow of the wind. Livestock munch on the grass from nearby fields filled with darkened pools of dirty water.

"The once clean water sources are now contaminated. We can no longer use the water for domestic or agricultural use. Women are forced to walk for long distances to fetch water from the next village where the company drilled water. Our livestock have died from drinking the affected water, but we have nowhere else to take the remaining ones for grazing," sadly noted Juma.



#### A pool of contaminated water near burning bagasse heap

"During dry months, fires strike from nowhere, as you can currently see the smoke coming from one of the heaps. Sometimes the smoke is too much that you can't see where you are going. When there is a strong wind, it blows the ashes and the solid particles in the air and into our houses. During the rainy season, the stench coming from the dump site is



unbearable, making our stomachs bloat," added Sammy Sakula whose land is adjacent to the site.



#### A cow grazing near affected water

There is more to the negative impacts of the bagasse waste mentioned by the two residents. According to the National Environment Management Authority's Kakamega County Director John Maniafu, the heaps of waste emit methane gas into the atmosphere. He says methane is among the top greenhouse gases that contribute to the increasing warming of the earth.

Maniafu also says that liquid leaching from the bagasse, once in contact with the soil and water reduces their pH level. This explains why the water in the surrounding area is unsafe to use. In addition, the affected soil has impacted the healthy growth of other foods and crops.

The environmental woes from bagasse waste are widely spread in Kakamega County as it is home to three major sugar-cane milling companies in Kenya. Every ten tonnes of sugarcane crushed is said to produce about 3 tonnes of wet bagasse. Maniafu says the rate of bagasse generated by the millers in the region is higher than the ability and the rate at which the companies manage the waste. He says this has contributed to the adverse effects on the surrounding ecosystem caused by the challenge of unmanaged bagasse waste.

In a wider context, Kenya's sugar production industry, made of over ten factories, is estimated to generate about 2.4 million metric tonnes of bagasse annually, a solid waste product of

crushed sugar cane. While a portion of the waste (about 25 per cent) is utilised as a heat source in the factories, a larger volume is discarded in landfills or incinerated in open air. The environmental consequences of this organic waste are profound, hence calling for an urgent sustainable intervention to curb the menace.

However, a beacon of hope emerges not very far from the affected community. An international non-governmental organisation, Eco2librium, has taken up the mantle of transforming this waste into a valuable clean energy resource. The organisation sources bagasse waste from West Sugar Company and then employs an innovative and technological process to create carbonized charcoal briquettes.

The journey from waste to energy begins with the collection and transportation of the bagasse from the sugar factory to the Eco2 site located in Ivakale village in Shinyalu Constituency. The bagasse is then sun-dried for 1 to 2 weeks to remove moisture from the residue. After that, the material undergoes a carbonisation process, where it is burnt in a kiln without oxygen, converting it into black charcoal dust. The dust is then mixed with a binding agent, water and soil. Subsequently, it is compressed using an extruder machine to form cylindrical eco-friendly briquettes.



#### **Charcoal briquettes**

The founders of the organisation initiated the process in 2017 to create sustainable solutions to environmental problems such as increased waste and deforestation while providing a livelihood to the community.

"People living around this area depend on firewood to cook. They cut down trees to source wood hence leading to deforestation. The organisation aims at protecting Kakamega Forest, the only tropical rainforest in the country. Therefore, we produce an alternative fuel for the communities around here so they can stop cutting down trees," explains Jackson Mwanje, a production worker at the Eco2 site.

The project aligns with global efforts to combat climate change by curtailing the need to cut down trees for traditional charcoal production. This promotes Sustainable Development Goal 13; climate action.

Importantly, these briquettes play a pivotal role in promoting Kenya's transition to clean cooking energy. Biomass contributes a large share of Kenya's energy demand, with more than 90 per cent of rural households using charcoal, wood fuel and agricultural waste to meet their energy needs. However, most of these fuels are harmful to users' health and the environment. According to the World Health Organisation, about four million people globally are linked to air pollution from these dirty solid fuels.

Danson Ligare, an engineer and clean energy champion in Kenya, says it is essential to increase the use of clean fuels and technologies in the quest to curb the impacts of household air pollution emitted from traditional fossil fuels.



#### Danson Ligare, an engineer and clean energy champion in Kenya

"Charcoal briquettes fall under Tier 3 in the Multi-tier Framework developed by the World Bank to monitor the impact of clean cooking solutions. The renewable biomass fuel is a competitive and safe cooking fuel compared to wood and charcoal which fall in Tier 1. They



minimise pollution and have increased burning time, making them reliable over nonrenewable fuels," says Ligare.

"The process of making briquettes also helps in managing waste through a circular model of production. The amount of bagasse waste produced annually in Kenya is wanting. This calls for the government and other stakeholders to invest in such initiatives that solve the bulk bagasse waste that lies idle in landfills. We are also developing innovative ways of using other wastes such as municipal waste to produce briquettes that meet the fuel demand in the country," he added.

Ligare, also part of the Kenya National Clean Cooking Strategy Committee, calls for the sustainability of the bio-energy sector in the country. He says that this is key to Kenya's aspirations to achieving SDG 7 (affordable and clean energy) and Vision 2030 while contributing to the Paris Agreement, through the country's Nationally Determined Contribution (NDC) as well as the Climate Change Act (2016).

Institutions and families, particularly women who are tasked with looking for firewood, are benefiting from this sustainable energy source, aligning with Kenya's commitment to embrace clean energy and reduce reliance on fossil fuels.

"Initially I used firewood to cook. Looking for firewood was very cumbersome as forests had been cleared. Also, the soot and smoke from firewood were not good for me and my family. However, I no longer have the burden of fuel ever since I was introduced to charcoal briquettes," says Saida Nyangasi, a resident from Lurambi in Kakamega.

Saida also says briquettes have reduced the economic burden of acquiring other cooking fuels, as a kilo of briquettes goes for an average of 40 Kenyan shillings unlike a tin of charcoal which currently goes for double the price. This is efficient for families which are struggling with the current hard economic times.

Beyond the environmental impact, the initiative has become an engine for socio-economic growth as it contributes to achieving SDG 8. Mwanje is among the over 30 workers employed by the organisation to foresee the process from production to the assessment of the impact of the fuel on the end users. This has led to the socio-economic development of these workers and their families who depend on the project for their livelihood. In addition, Mwanje says

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the organisation provides safety for its workers at the production site by providing protective wear such as gumboots, masks and overalls.

The transformation of bagasse waste into carbonised briquettes not only addresses the environmental woes in Kakamega County but also embodies a sustainable solution with farreaching implications. It exemplifies the power of innovation and circular economy in addressing global challenges, offering a blueprint for waste management, climate action, and the pursuit of sustainable development.



Victor Moturi (Kenya) ; From Waste to Wonder - Electronic circular economy in kenya ; Radio France Internationale, 27 December 2023. To listen the report :

https://drive.google.com/file/d/1zR8IS\_32sliQsQYFYi6LYNNg7PzYeq2k/view?usp=drive\_link

Tag : UNEP, KEPSA, USAID.

In Kenya, electronic waste (e-waste) is increasingly becoming an environmental problem, growing at a rapid rate and its estimated at 51,300 tons annually. However, with the assistance of international waste recycling companies, young people in Kenya have started initiatives to turn electronic waste materials to other products such as watch frames, picture frames, key holders, necklines and more, increasing their income through a circular economy. Today, in the economic feature program , we focus on this sustainable economic system business in Kenya.

I am Victor Moturi.

#### Ambients, youths weighing e waste

Its 2pm o'clock , and in this bustling market of Ngara at the outskirts of Nairobi Kenya , young people are queuing up, holding in their hands some electronic waste to weigh and receive payments. Some are offloading these wastes from vehicles. Electronic wastes such as motherboards, printers, broken televisions, refrigerators, and the like are brought here to be repaired and other recycled into various products. Jackson Soja and Joseph Saitabao are electronic waste collectors.

#### Bite...Back to back.

Jackson soja... "I have come to look for money; I've brought some waste sockets and motherboards. I've come to weigh them and get paid."

Joseph Saitabao....."Here, we buy motherboards from damaged computers. Instead of letting them be dumped, we bring them here for recycling and make other products. We buy in different prices, with the lowest price being around Kshs 1000(USD 6.5), and the highest around Kshs 2000(USD12). Some of these electronic wastes are processed to extract gold, while others, such as titanium-containing metals, are boiled. Compnets such as Sackets, I believe you've been in a matatu (public service vehicle) with booming music that's the result of these power sackets. Due to the lack of employment in Kenya, young people have turned to this business to earn a living."

#### Ambients ,,,sounds of e waste being sorted

The electronic waste, which has become a nuisance for environmental pollution, has now become a significant economic opportunity for innovative young people. They now make products such as wall clocks frames, picture frames, necklaces, banners, and others are repaired and returned to the markent. Eliud Mburu is one of the innovators.

Bite...Eliud Mburu,,,"This is a faulty laptop screen; we collect them even when they are dirty and stained. We revive them by cleaning, making them shine again, and returning them to the market. The ones in white mode that are not broken but not functional are brought back to life. They are often used to make advertising displays. Doing this work not only provide us with a livelihood, but also contribute to environmental conservation."

A few meters from Mburu's workshop, Hamfrey Mutegi is an expert in refurbishing damaged printers. Here, I find him dismantling electronic components and creating products such as fans and even radio transformers.

Bite, Mutegi..

These are among the machines we often acquire from individuals who may have either failed to use them, or they have become obsolete. For those that are non-functional, we open them directly, remove some components, and place them in other machines.To understand how these machines work, you have to be a skilled person.

#### Ambients ,,,sounds of e waste being offloaded from a lorry

In Kenya, especially in urban areas, electronic waste is becoming an environmental threat, estimated to be around 51,300 tons annually. However, innovations like these contribute to mitigating these impacts, transforming waste into a substantial income for creative young people hence contributing to economy growth.

Bite,,,,George Kiruku. An innovator,,,"My name is Kiruku George, and I deal with renewable energy, specifically inverters, solar panels, and UPS. These are the devices we repair and refurbish to make them functional again, returning them to the market. If you have a faulty inverter for your home, I can repair it to make it work again or use its componet to make other things . My appeal is that instead of discarding waste, people like us can collect and repurpose these items for later use."

#### Ambients ,,,sounds of e waste being offloaded from a lorry

According to the United Nations Environment Programme - UNEP , the world generates 50 million tons of electronic waste annually, with a value exceeding \$62.5 billion, which surpasses the Gross Domestic Product of many countries. However, only 17.4% of this waste is recycled and returned to the market. George Kimani is one of the workshop owners here;;

Bite...George Kimani,,,,,"Our main task is to collect all electronic waste and then see how it can benefit someone instead of being haphazardly discarded in landfills. You know, when it ends up in landfills, it damages the environment and causes public health risks. It becomes advantageous for us and even for those who cannot afford to buy new machines but can afford second hand one. Personally, I focus on computers and laptops. If I go to an office, and find broken laptops computers, I buy, repair and refurbish them, then sell them especially to universities."

Initiatives such as circular economy have engineered the growth of the informal sector in Kenya and even in East Africa, providing innovators with an opportunity to showcase their expertise and become economically self-reliant. According to the International Carbon organization, more than 8 million jobs could be created through these economic initiatives and systems. Laurance Thuo is an electronic waste at the E-waste Initiative Kenya.

Bite ...Thuo ,,,,,"We have something called innovation, and there's a lot of it here. We appreciate these young people we are training ,because they come up with innovative solutions. They create decorative items, earrings, chains, things to beautify homes, and also engage in arts all from e waste. So, when you create these items, you generate income. When innovating anything, even if it's a phone, we take and remove components like the mouthpiece and earphones, and the unused body parts to make other products . We send other components abroad for further processing, and then they come back into the circular chain. Some of these motherboards have high-value minerals like gold, which can be used to make various electronics. For example When using a phone, and its current is **2.2**, it becomes consistent, and that's why you see these devices are very accurate."

#### Ambients, sounds of e waste offloaded from a track

According to the Sustainable Development Goals, specifically Goal 12, there is a need for developing countries to strengthen industries, innovation, promote businesses, and enhance waste management to reduce the impact of waste and e waste on developing nations by the year 2030.

Bite "Laurence Thuo..."Circular economy principles are very much embraced here because you find a large number of middle-class and low-class people. Also, second-hand items are highly appreciated, especially those X- UK, which people say are of better quality. People have wholeheartedly embraced the concept of reuse, and even the government advocates for it. The world is moving in that direction, encouraging us to focus on reuse, and if not, to repair the items we already have. Here in Nairobi, we have over 5000 technicians, and we even make solar equipment from e waste components."

At the recently concluded Circular Economy conference , in Nairobi Kenya ,which brought together hundreds of stakeholders and innovators in recycling sector, waste recycling curriculum is needed in schools to prepare the next generation to be innovative and utilize the raw materials available. Dr. George Njenga is an economist and environmental expert at USAID."

Bite....Daktari George Njenga,,,shirika la USAID,

"For example, starting from nursery school level, the child needs to understand what plastic waste is. As they progress through school, they can learn to make items from bottle tops and other materials. They can be taught why plastic should not be used. However, it is important to begin with training the teacher because without training teachers, we cannot

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# reach the child or student, so from the teacher, we can then extend the knowledge to families and communities."

#### Ambients ... sounds of e waste being sorted

As young people continue to be innovative in Africa, there is a need for governments to create appropriate policies to enhance this creativity, increase employment, and boost the economy through electronic waste.

The end.



Lina Mwamachi (Kenya) ; Poor planning, financial constraints and lack of proper policies, hinderance to proper waste management ;Sifa FM, 30 December 2023.

To listen the report : https://soundcloud.com/user-108576190/feature-maji-taka-dhahabu-

kwa-wakulima-taita-taveta-lina-30-08-

2023mp3?si=207cf5baeeed4533b0e3a009aa29a4f3&utm\_source=clipboard&utm\_medium=t

ext&utm campaign=social sharing

Tag : KEPSA, USAID.

Lack of proper policies, financial constraints, poor planning and more are among major hindrances to proper waste management in Kenya and other developing countries globally.

An expert in charge of Environment in Taita Taveta County Bryton Mwawana, says there should be proper planning in counties to enable smooth and safe disposal of waste from homes, hospitals, industries and dumpsites. Mwawana says dumpsites in Kenya and elsewhere in the world especially in developing countries, have not reached Occupational safety and hazards standards, in terms of storage of waste, distribution and management.

However, he applauds counties for strategically positioning dumpsites in estates in villages, which have eased the act of disposing and collecting of waste.

However he says proper planning regarding disposing, collection and distribution should be put in place to avoid dangers of exposing humans and animals both wild and livestock from consuming any kind of waste.

#### Expert Mwawana...

Lucas Shuma a water expert in Taita Taveta County, says sewage water isn't good for farming, because of components of different kinds of minerals and chemicals, which could be dangerous and cancerous.

Shuma cites that, waste water or sewage water should be properly disposed in a far designated area, far from animals and humans.

Additionally, the expert urges governments both locally and national level, should put measures in place by developing a mechanism to recycle, reuse and manage waste water and other waste materials, to safeguard humans, animals and environment at large.

#### Expert Shuma...

According to the director of health Taita Taveta County, Elvis Mwanwawiro cites that there is danger in using sewage water in farming, citing that contaminated sewage water would expose humans and animals to diseases like Bilharzia and other dangerous and contagious diseases.

#### **Director Elvis...**

Speaking during the 8th edition of the Annual Circular Economy Conference held in Nairobi, Kenya, on the 9th of November 2023, Chief of Party, USAID Strategic Partnership Doctor George Njenga, said there is need for every industry investing in recycling waste water in order to reuse the water again and again, and avoid contamination, and safeguard health, environment and humans. According to him, there is need for proper planning and unity in order to manage waste materials and waste water.

He adds that 60 percent of houses in Nairobi have not invested properly in waste water management and security of riparian and swamp lands, incase its polluted with plastic and other waste materials. Regarding this cites that there is importance of organizations and governments working closely with private sectors who drive and command job and business opportunities.

#### Professor Njenga...

Acoording to data from Our World in Data, as the world population and economies continue to grow, the global production of materials, such as plastics, paper, and aluminum, has increased significantly.

The data shows that, without proper waste management systems, this growth in consumption leads to a significant increase in mismanaged waste, which then leads to pollution of the ecosystems such as rivers, lakes, and the ocean.

However, it states that, improving waste management practices can also help reduce the amount of raw materials generated, through mechanisms like recycling and reusing waste water, in order to protect the world's ecosystems and health, by ensuring waste is managed correctly. <u>https://ourworldindata.org/grapher/most-common-waste-rivers-oceans</u>





Muhyideen Jimoh (Nigeria); Circular economy: don tasks FG on tax incentives for recycling compagnies ; News Agency of Nigeria, 2 January 2024.

To access the article : https://nannews.ng/2024/01/02/circular-economy-don-tasks-fg-on-tax-

incentives-for-recycling-companies/

Tag : USAID, AU.



Dr George Njenga, Founder, Strathmore University Business School, Kenya has urged the Nigerian government to put in place eco-friendly policies and tax incentives for recycling companies to drive circular economy model in Nigeria.

Njenga, who is also the Chief of Party, USAID strategic partnership, Kenya stated this in an interview with the News Agency of Nigeria (NAN).

Circular Economy is a model of production and consumption which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products for as long as possible.

It aims to tackle global challenges such as climate change, biodiversity loss, and pollution by minimizing waste and promoting a sustainable use of natural resources, through smarter product design, longer use, recycling, as well as regenerate nature.

Njenga said Nigeria being the most populous African country can leverage on its population, and resources by putting in place eco-friendly policies to drive its economic development.

"I have been to Lagos and Ibadan, I think the issue with Nigeria will be putting in place policies to sensitise the large population, most of who live in villages and rural areas on the benefits of a circular economy.

"There is a need to put in place infrastructure and this must come from government, supported by the AU.

"You have to also work with donor partners, states and local governments to educate through a positive mind-set for profit to the Nigerian people," he said.

Njenga advised the Federal Government to give tax incentives to recycling companies and enact policies that will encourage Nigerians take used plastics to recycling plants.

"The government should give tax incentives to companies to recycle plastics, so that they don't eventually pollute the environment and rivers and then allocate funds for that again.

"If a company is not recycling its product and doesn't have a green certificate, then it should be sanctioned.

"Why should we buy your products if you are destroying the very society we are leaving in.

"So unless rules are established at that level and certification is given by government, and policies that assist in growing profit are encouraged, we might not go far," he said.

The don said there is a need for government to put in place more infrastructure across the country, such as waste water and sewage treatment facilities, efficient waste disposal system and recycling plants.

NAN reports that the recycling business in Nigeria is gradually gaining traction as it presents a range of opportunities.

"From waste collection and processing to innovative solutions that addresses environmental challenges/drive economic growth, but with a gaping need for an enabling environment to thrive.(NAN)(www.nannews.ng)



### Jenifer Gilla (Tanzania); Women in Dar es Salaam Turn Waste into **Opportunity : The Guardian, 3 January 2024.**

Tag : COP 28, World Bank, WFP.

groundbreak-ing initiative has erged from the historie COP28 climate change con ference: the "Waste to Zero" campaign. This innovative campaign. This innovative strategy aims to address the global waste crisis by turning trash into opportu-nity. In Dar es Salaam, Tan-zania, a remarkable group of women are leading the charge, demonstrating the

CA 21/

charge, demonstrating the power of this approach. Studies reveal the alarm-ing reality of solid waste's detrimental impact on our planet. Landfills overflow with discarded items, re-leasing harmful methane gas, a potent greenhous gas as even more danger ous than carbon dioxide Without intervention, solid waste-related emissions are projected to skyrocket, threatening our environ-ment and health.

A study published on the World Bank's website shows methane is more dangerous than carbon dioxide and contributes 16 percent of global warming (GHGs). Without improvements in the sector, solid waste related emissions will likely increase to 2.6 billion of CO2-equivalent by 2050

According to the United According to the United Nation's Report on How gender inequality and cli-mate change are intercon-nected, shows that women are vulnerable to climate change stems from a num-ber of factors including so-cial corospirand without

mis anagement.

Rehema

limited their economic

market connections provided by Nipe Fagio and Dar es Salaam City Center, empowered the women to envision

waste as a resource, They embarked on a

ber of factors including so-cial, economic and cultural. The report shows that seventy per cent of the 13 billion people living in conditions of poverty are women. In urban areas, 40 percent of the poorest households are headed by women. Women predomi-nate in the world's food pro-duction (50-80 per cent). duction (50-80 per cent), but they own less than 10 per cent of the land. opportunities. The training, cou-pled with funding and market connections

per cent of the land. However, the "Zero waste" initiative presents a unique opportunity to ad-dress both environmental and social challenges. By "Zero empowering women to turn waste into valuable resources, this initiative can generate sustainable livelihoods, promote gender equality, and build resilience

In Kimara, Dar es Salaam,



"boats," a delicacy for chicken and fish farm-ers, fetching Sh. 5,000 cantly improved the local environment, keep-ing streets clean and reducing health risks associated with waste per kilogram Halima also highlights

the "double profit" gen-erated by their initiative. Tamimu, chairperson of the co-They earn from both collecting waste from households (Sh. 2,000 operative recounts the transformative journey of her group. Prior to their "Circular Econoto Sh. 5,000) and selling the processed ma-terials. Their collective my training by Nipe Faterials. Their collective monthly earnings reach sh. 800,000, divided amongst members with the remaining funds used for operational ex-penses and taxes. gio, they were unaware of the potential hidden within discarded waste. Their previous prac-tice of dumping waste in landfills and sewers Halima's life has been not only polluted the environment but also

transformed by her involvement in the cooperative. Her weekly income has jumped from Sh. 10,000 to Sh. 50,000, allowing her to provide for her chil-dren's basic needs and even save for the future. This newfound financial

says that through this work he has opened stability offers a stark contrast to her previous another busine While Halima Muda,

remarkable endeavor transforming the once discarded items into admits that the job has valuable raw materials.

struggles

cause she has found a permanent job that a permanent job that earns her Sh.50000 per week unlike before when she was getting Sh. 10,000 only when he goes to collect waste from people's houses. The single mother of three children said

she uses the money to provide basic needs to her children he collects to provide his children with food and school essentials, and the rest he keeps in the bank, something that has never happened before. He says that the work has changed his life to a certain extent because he was unable to edu-

changed her life be

cate his children, but after he got a grant, they were able to afford it. Another waste collector, Anusiata Mapunda

rais ing chickens and eggs, which he was unable to do when he was collect

"There were waste randomly on the street. before I used to col-lect only 10,000 per week, but since I joined this group and started selling bottles and mak-ing fertilizers and fish food, I earn Sh. 50,000 they used to give out bad smell, but we did not know what to do with them to 60,000 I can afford to so took them to the landfill.

ing waste

admi

After getting training and fund from Nipe Fagio institution, we are now making more money out of it. she says

hati Mayoma from the University of Dar es Salaam underscores the research findings: 80% of household waste can be recycled, unlocking economic potential for many

while the waste col-lectors Cooperative has achieved remarkable success, their journey has not been without its obstacles. The wom-A mother of one is tting that now she can afford to pay her son's school fees in a government school in English, something he did not think would en face a multitude of challenges, including modern work tools like ever happen. "Before I used to colgloves, masks, and gum boots to protect them-selves from potential health hazards during waste collection and

While the Waste Col-

transportation. Unfortunately,

the

Salum

community often views to 60,000 I can attord to pay for my son's fee of \$h.300,000 per year for the government English school," he said. Their success story serves as a beacon of the women as mentally unstable or even thieves due to their work attire and the nature of their job. This stigma creates a hostile environment serves as a beacon or hope, inspiring others to view waste as an op-portunity rather than a burden. Lecturer Baand discourages others from participating in these vital waste management activities. Sauda

sauda Salum says when they collect garbage from people's houses, the community sees them as people with mental problems, others feel that they are thieves and give them dirty words. "When we are wear-ing those dirty clothes, and then we don't have

the necessary equip ment to identify u when we are at work, sowhen we are at work, so-ciety sees us as strange people, there was a day when I wanted to be called a thief and people felt that I was a thief," she narrates.

The effects of waste A Family Medicine Specialist from Agakhan Hospital, Willbroad Specialist from Agamman Hospital, Willbroad Kyejo, says waste that is scattered on the streets or collected in landfills causes diseases such as zania". cholera and the person responsible for caring

responsible for caring for patients is a woman. "Those women are doing something im-portant to collect waste because they are pre-venting the community from epidemic diseases since more than 70 percent of diseases are caused hwdin't "he exid. caused by dirt," he said. Stakeholders provide

direction The National Environ-Conservation ntal and Management Council (NEMC) explains that the Environmental Law has given mandate to Councils, Districts and Local Governments to manage the collec-tion, storage and trans-portation of waste in order to achieve zero waste goals. The Natural Resourc-

es and Environment Conservation Officer of the Dar es Salaam City Council, Tanza-nia Enock Tumbo said that approximately 96 percent of the approxi-mately 319,000 tons of plastic waste produced in Tanzania is not managed, thus endangering environmental sani-

tation and biological ing separated. safety. 10 each street we Tumbo said despite have kept four baskets. one is for plastic wastes, the other is for food

the government ban-ning the use of plastic bags at the moment, "it is strengthening cowastes, another one is for paper plastics and the last one is for hazoperation with non-governmental organizaardous wast tions such as HUDEFO, NIPE FAGIO and the University of Dar es Sa-laam to carry out cleanthey come, they pick what they want and leave," she says.

ing, inspection and monitoring programs for marine litter". Currently, "the City Council is conducting a study on the manage ment of solid waste and the establishment of an agency between mu-nicipalities and stake-holders in the region of

Dar es Salaam as well as the construction of collection cent ers and landfills under the second phase of the funded DMDP project and the World Bank and the Government of Tan-

Need to create

decent jobs Sarah Pima, Direc-tor of Hudefo, says the group's commitment to transforming waste into valuable resources not only protects the environment but also generates income for themselves and their families She highlights, plas

tic waste poses serious threats to the environment due to its long lifespan and GHG emis-sions. She emphasizes the need for waste re duction, recycling, and alternative uses like creating beauty products, charcoal, and fertilizer. cha To achieve this Sara calls for changing the societal mindset towards waste collectors by creating decent jobs and fostering a supp ive environment. 1 ort This requires collaboration between the govern-ment and stakeholders. She said HUDEFO is supporting the groun supporting the group by providing baskets in the streets for people to keep wastes separately so that when waste speakers go there, they find wastes already be-

When



the Waste Collectors Cooperative stands as a testament to the power of "Waste to Zero." This women-led group recognized the dangers of waste mismanagement and decided to take action. They embarked on a journey of transformation, collecting waste not to discard but to utilize

meni and decided to take action. They embarked on a journey of transformation. Collecting waste not to discard but to utilize. Before the group Lacked access to education and financial resources, they struggled to provide for their families. However, an opportunity arose when they received training from an organization called Nipe Fagio on the circular economy. This training opened their eyes to the potential of waste as a valuable resource.

This initiative has not only benefited the environment but also empowered women involved. They now earn a stable income, allowing them to provide for their families and meet their basic needs. Additionally, the group's presence has signili"There were waste randomly on the street, they used to give out bad smell, but we did not know what to do with them so took them to the landfill. After getting training and fund from Nipe Fagio institution, we are now making more money out of it," she says Halima Muda, a mem-

Halima Muda, a member of the group, details their innovative process. They meticulously sort collected waste into three categories: plastic, domestic, and fruit waste. Plastic waste finds new life as raw material for companies, generating additional income.

generating additional income. She says domestic waste is transformed into fertilizer, eagerly sought after by gardeners at Sh. 10,000 per kilogram. Fruit waste undergoes a fascinating transformation, becoming feed for insects like





Doreen Ampofo (Ghana) ; Ghana's Silent Climate Heroes Risking Their Lives for Peanuts; Radio Ghana news (GBC), 5 January 2024.

To listen the report : <u>https://soundcloud.com/doreen-ampofo/ghanas-silent-climate-heroes-</u>

risking-their-lives-for-

peanuts?si=d2e37984b23c4bdcb110780c13940f9f&utm\_source=clipboard&utm\_medium=tex t&utm\_campaign=social\_sharing

Tag : ILO.

Ghanaians have for decades repaired or remodeled their belongings at least twice before disposing them off. Torn dresses are kept for the "Oy3adie y3's" visit to be sewn. Electrical

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gadgets are taken to the "repairer' to bring them back to life while shoes are taken to the shoemaker to glue or sew them back to life. This is what has come to be known as the Circular Economy which many developed countries are vigorously encouraging their citizens to adopt due to the growing impact of climate change. The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended. Agbogloshie is known to have one of the spots for recycling metal waste in West Africa, providing livelihood opportunities and quick cash business to approximately four thousand-five-hundred to six thousand informal workers and perhaps, indirectly, for another thousand 500 people. However, like many workers in the circular economy value chain, there is the absence of decent work. Many of them earn peanuts despite inhaling hazardous chemicals from the waste they work with or work without protective gear, thereby putting their lives at risk. Doreen Ampofo in this report looks at providing decent work for this important class of people without whose work, Ghana will be sinking in a pile of electronic waste.





### Henry Owino (Kenya); Greening And Cleaning Kibera Slum Through Waste Management Initiatives ; Talk Africa, 7 January 2024.

To access the article : <u>https://www.talkafrica.co.ke/greening-and-cleaning-kibera-slum-</u>

through-waste-management-initiatives/

Tag : Mr Green Africa.



Burning Waste Matter In Dumpsite May Cause Respiratory Diseases Local Residents

Typically, informal settlements, regardless of their location, are often linked to unsanitary conditions and haphazard dumpsites, contributing to environmental pollution. Common pollutants found in such areas include single-use plastic bags (nylon papers), plastic bottles, open sewers, flying toilets, open-air defecation, and various types of waste scattered indiscriminately.

Kibera is no exception to this scenario being the largest urban slum in Africa, located in Kenya's capital Nairobi. The shantytown hosts a population of approximately a half a million yet without a proper system of waste management. The waste has always triggered negative impacts to residents, environment and other animals living in such situations. Some of the consequences include; diseases, bad odors, clogged drainage systems, polluted dams and rivers, greenhouse gas emissions contributing to global warming thus climate change among others.



Waste Sorting And Collection Area Before Final Transportation To Recycling Firms

In 2017, the Kenyan government took significant steps to address the issue of waste, particularly plastic waste. A stringent law was enacted to combat plastic pollution, prohibiting the manufacturing, importation, and usage of single-use carrier bags throughout the country. This legislative action was a response to the environmental and health expenses incurred by the government, under the leadership of Judy Wakhungu, who headed the Ministry for Environment and Natural Resources at that time.

At the time of ban, more than 100 million single-use plastic bags were being handed out every year, making them the most commonly used carrier bags for shopping. With poor disposal systems in the densely populated slum, this indicated how the carrier bags posed a major mayhem to the environment. It is now six years since the policy came into place but the country is still struggling with single-use plastic carriers. Many are easily spotted in open air markets, in waterways and landfills piling up in dumpsites.

#### **Shared Problem**

Greenhouse gas emissions from the plastic lifecycle threaten the global community's ability to keep the planet's temperature rise below 1.5°C. This is according to a 2019 study by the Centre for International Environment Law.

It is estimated that by 2050, the greenhouse gas emissions resulting from plastic could reach over 56 gigatons, which is between 10%-13% of the entire remaining carbon budget. In 2019, the production and incineration of plastic was projected to produce more than 850 million metric tons of greenhouse gases – that is equal to the emissions from 189 each with fivehundred-megawatt coal power plants.



Weighing Sorted Paper Waste Which Are Later Recycled Into Toilet Papers

The issue exacerbates in various slums, not just limited to Kibera, due to inadequate waste disposal practices and high population density. Furthermore, the general population in Kenya displays resistance to change, with many individuals resorting to bribing law enforcement officials to persist in using plastics, as old habits prove difficult to break. Nairobi's Kibera slum is just one example in millions of such informal settlements in Africa. Here, plastic bottles are particularly a threat to the environment and residents who have no other choice but to put up with untidiness in their daily lives.

Roseline Amondi aged 60, is a resident and runs business of fried fish and so, popularly known for selling fish in her kiosk (a small open-fronted cubicle). The occupation has since earned her the famous name Mama Samaki meaning; mother who sells fish. She says Kibera is a good place for business especially ready-made food stuff although with challenges of a filthy environment.

"As much as customers are always available to buy fish from my kiosk as a popular fish monger, they are more attracted by the clean environment. So, I always spend time to ensure that my space is tidy by unblocking the drainage system, cleaning it and sweeping the area before opening the business," Amondi laments.



Women Waste Pickers At Work Pulling Handcart Full Of Waste

Amondi complains of plastic bottles as the major problem causing sleepless nights to most of business-people. She however, commended a group of youth who have been picking waste and has helped maintain Kibera tidy to date.

"Nowadays I don't unblock drains each and every single day because there is a group of youth dedicated to cleaning it. I must say they are doing a good job for us here, as far as hygiene is concerned," she applauded.

#### **Practical Impacts**

The youth group is a community-based organization (CBO) dubbed Slum Going Green and Clean (SGGC) that collects waste materials and sells them to various recycling firms. The youth group has been recognized and welcomed by Kibera inhabitants for their good work in the area and residents love their work.

Talk Africa Correspondent patrolled silently in the slum to find out if there was any evidence correlated to the SGGC team. Surprisingly, let the truth be told, the youth group is changing the face of Kibera, the largest urban slum in Africa.



Pressing Waste

Days of stepping over trash and being careful above head for fear of flying-toilets landing on you are long gone. Apart from the SGGC team who are a well-organized CBO, there are other smaller groups and many individuals who are involved in picking plastic waste and selling it to collectors.

Waste collection has suddenly become gold, in other words the main source of income to jobless women and youth in Kibera. Although it may look quite odd, their pockets have enough money to feed their family, thanks to the circular economy model.

According to Gisore Nyabuti, the SGGC Founder and Team Leader, the initiative began way back in 2015 with few individuals. The aim has been to improve the living conditions in informal settlements such as Kibera by promoting environmental sustainability and cleanliness.

Back in the day, the only policy that existed was to collect waste and transport it to Dandora dumpsite for Nairobi County. The rest of the counties each had its own dumping sites, others with several illegal waste yards.



SGGC Waste Pickers With Personal Protective Gears

Subsequently, Nyabuti says the organization had activities which have been changing as new policies come in force and they include: Solid waste management where SGGC works to



improve waste by promoting recycling, composting, and other waste reduction strategies in collaboration with recycling firms.

Environmental education through conducting educational seminars for community members and schools on topics such as environmental conservation, waste management, and health and hygiene. Improving livelihoods by supporting community members with business skills, training in SMEs developments to help them improve their livelihoods.

Water and sanitation by collaborating with other organizations to improve access to clean water and sanitation in slums, building latrines and community bathrooms and sinking boreholes or wells and Urban Agriculture through encouraging tree planting especially fruit trees and food crops to reduce poverty and hunger among residents.

#### **Circular Economic Model**

Nyabuti recalls back at the beginning of SGGC formation, many people brushed him off that it was impossible to clean Kibera slum. But he never lost hope, instead remaining focused with the idea until a few individuals joined him later after seeing the benefits of the work.

"Today membership has grown to about 60 who work in specific villages of Kibera. There are also other waste pickers of approximately 500, majority prefer working on their own but a few collaborate with SGGC team," Nyabuti explains.

Adding "The Youth have realized that there are no job opportunities in Kenya and instead of involving oneself in criminal activities, they have decided to earn from waste collection. Accordingly, many come and talk to me for membership and I do welcome them regardless of their education background," Nyabuti discloses.

Nyabuti says SGGC members are mostly youthful who have been today nicknamed; "Environmental Change Makers' '. This is because the team is changing Kibera into green, clean and free from waste pollution. For example, along the railway line that used to be impassable for years even for trains due to illegal dumping, is currently very clean.


Train Passing Through Railway Line Covered With Waste

In mid-2022, Mr. Green Africa, a recycling plastic firm, made a collaboration with the SGGC team as plastic waste pickers in Kibera. The partnership has been an opportunity where the company collects waste locally and transports it to recycling firms.

"Our motto is; "No Trash Buried, Burned or Dumped". The 2022 new policy on waste management has even fulfilled the slogan," Nyabuti affirmed. Adding; Driving force is the ban of dumping sites countrywide thus advocating for Re-use, Re-duce, Re-cycle."

Nothing is taken to the dumpsite and nothing is burned or buried as it used to be. All trash is 100% used for making other alternative equipment. Dandora residents are soon going to be reprieve from dumpsite stench and toxic fumes while burning waste releasing greenhouse gasses to the atmosphere.

#### Waste Is Gold

In Kibera, SGGC team have saved many streams, rivers, dams from drying and drainage systems from blocking with all sorts of waste. Plastic bottles have been a menace and the only recycle method available then was linear model where bottles waste were used for liquid soaps, paraffins among other non-edible products. Currently, the circular economy model has acquainted residents with the innovative method of recycling various plastics. In fact, it has opened up job opportunities for waste pickers while making very high demand for plastics waste. Waste papers such as cartons, books, or old newspapers or documents are the only known to many waste pickers that are recyclable to toilet papers.

Even organic waste and glass bottles that used to be discarded during collections are no longer left behind as its markets for compost fertilizer. Old glass bottles are fused with silica, calcium carbonate and sodium carbonate to make new bottles and save energy.



Plastic Waste Pickers Pushing Handcart Full Of Sorted Collection Of Waste To Storing Centre

The continuation of demand for various waste is contributing to the process of cleaning the environment from waste pollution. For instance, today, it has restored the railway line to its original clean status, free from all manner of waste.

"With the circular economy model, it requires waste to be segregated, packed according to classification and type, weighed before collectors and transported to recycling firms. No more

conglomeration of waste because each waste attracts a different fee as plastics pays highly," says Angila Onyango, a university graduate but waste picker.

"We usually pick at least a collection of one ton of plastics daily due to other competitors; it could be more. The waste such as papers, electronics may take time but we compost it locally for organic fertilizers," Onyango adds.

Newton Kilungu SGGC member says the organization continues to expand and the vision is to open a recycling center within Kibera. The anticipation is owing to the quantity of plastics and organic materials they collect and money they pocket in a day.

Kilungu reveals there is a lot of money in waste picking and collection and no losses made apart from gains. People may call them names, underrate them or mistreat them but their pockets are ever deep.

"Waste is not waste until you waste it. Unless you turn waste into a verb, it will remain as a noun". I mean all the waste we pick is money and none is thrown away as waste," Kilungu clarifies.



Keeping Railway Line Clean From Waste

SGGC works closely with the local primary schools in inculcating a waste management attitude as part of an academic programme. The pupils collect plastic bottles from their households and neighborhoods and take them to school in exchange for stationery. The programme has helped equip pupils with information about environmental waste management thereby changing their attitudes towards littering.

#### Challenges

Nyabuti reveals that mobilizing the youth in the neighborhood to join the team has not been easy, especially those with a criminal past. Many view the waste pickers as; dirty, hopeless, foolish, senseless, name it, and so would rather stay idle and engage in crime than being a waste picker.

Waste from households usually is not sorted at its source of generation as required by waste management policy, forcing SGGC waste pickers to spend much time segregating the waste. Again, some families are never comfortable with sorting their waste for personal reasons, giving the team the burden of carrying it separately.

Some homes close the entrance to their compounds despite knowing days and times of waste collection. A few perceive SGGC team as thieves who pretend as waste pickers but strategize on plan to steal from them later.



Sorting Waste According To Materials, Colour, Classification At Central Collection Point



A few customers delay payment of their dues which sometimes end up in exchange of words with the waste pickers. When a customer does not pay outstanding fees on time, waste pickers may not be able to buy personal protective equipment such as gloves, gumboots, masks, overall work suits among other protective garments.

Despite the program's immense environmental and sanitation benefits to Kibera residents, the SGGC team receives no government support. Waste management is a devolved function that the County Government needs to chip in and support private organizations to make Nairobi's waste management work.

As much as dumpsite is prohibited under new law, many residents in Kibera still dump their household waste in landfills. In the illegal dumping sites, people throw carcasses, aborted fetuses, flying toilets among other terrifying waste.

Despite all these difficulties, the SGGC team is happy that more and more of the youth are joining them and taking responsibility to change the damage caused to the environment through waste pollution.





## Henry Owino (Kenya) ; Why banning plastics is good for environment than recycling ; Lake Region Bulletin, January 8, 2024.

To access the article : https://lakeregionbulletin.co.ke/2024/01/08/banning-plastics-is-good-

for-environment-than-recycling/

Tag : INC, UNEP.



Unidentified plastic waste collector. (PHOTO: COURTESY)

In November 2023, Kenya played host to the Third Session of Intergovernmental Negotiating Committee (INC) session.

The session was aimed at coming up with a new international treaty to tackle plastic pollution, with main focus being Plastic Credits, a module where plastic producers compensate for removal of the wastes from the environment. But even though the concept is fast gaining ground, a section of players now feel the focus should be on reduction of the production of plastics, as opposed to removal from the environment.



GAIA team. (PHOTO: COURTESY)

#### Anti-plastics

Environmental conservationists see plastic credits as a tactic for companies that rely on singleuse plastic to avoid changing their business models.

Break Free From Plastic (BFFP) and the Global Alliance for Incinerator Alternatives (GAIA) claim that plastic producers use the credits concept for corporate greenwashing.

The two entities presented their case on the sidelines of UNEP-led negotiations in Nairobi, where they discredited the credits concept at 'flawed tool that won't help with worldwide pollution from the material.'

# Without the proper funding mechanisms and tools, event the most ambitious treaty won't deliver its promised impact.

#### Kristen Linscott, Senior Program Officer for plastics policy and markets at Verra

In their presentation, the entities highlighted what they termed as 'serious flaws in financing, transparency and basic auditing,' in the arguments put forward by proponents of plastic credits; Verra and the Plastic Credit Exchange (PCX) Marketplace.

Verra, the world's leading certifier of carbon offsets argued that plastic credits can be a tool for mobilizing the money needed to tackle plastic pollution.

"The finance associated with the treaty is near as important as its ambition," Kristen Linscott, Senior Program Officer for plastics policy and markets at Verra, said in a presentation.

"Without the proper funding mechanisms and tools, even the most ambitious treaty won't deliver its promised impact," Kristen added.

#### **Plastic Credits**

Just like Carbon Credit, the Plastic Credits is a concept that involves plastic producers and users paying for a specified weight of plastic waste collected from the environment.



Experts at the Third Session of Intergovernmental Negotiating Committee (INC) session in Nairobi in November 2023. (PHOTO: COURTESY)

Nairobi's global talks were meant to develop an international legally binding instrument on plastic pollution on land at sea among other water bodies.

The gathering was the third in a compressed five-meeting schedule intended to complete negotiations by the end of the year 2024.

Most of the world's nations, petrochemical companies, environmentalists and others affected by the plastic pollution attended the talks.

#### Why Plastic Credits won't work

However, BFFP movement and GAIA say plastic offsetting fails to deliver on its basic promise of helping companies reduce impact on the environment, and instead substituting one type of fossil fuel for another by burning plastics instead of coal. "Businesses that wish to act more sustainably are better served by reducing plastic use across their operations, and not attempting to offset it," noted a presentation by the two entities.

Often, companies are buying credits under the assumption that they are going to be helping the environment and removing plastic when actually in a lot of cases they are just transforming that pollution from plastic pollution into toxic air

#### pollution.

Emma Priestland, Global Corporate Campaigns Coordinator at BFFP

In their presentation, they claimed that Verra has just one project issuing credits, while most of the projects on PCX's database generate credits from sending waste to be burned rather than recycled.

Verra and PCX are among companies that engage in credits trade or organize creditgenerating activities.

"Often, companies are buying credits under the assumption that they are going to be helping the environment and removing plastic when actually in a lot of cases they are just transforming that pollution from plastic pollution into toxic air pollution," said Emma Priestland, Global Corporate Campaigns Coordinator at BFFP.

They claimed that some projects are claiming credits for infrastructure-built years before, and there are 'serious doubts' about the additionality of Verra's plastic credit program.

"The plastic crisis is too large and imminent to be solved by a single solution or mechanism," they added.

PCX however holds that verified plastic credits can help fund collection, transportation and processing of the eight billion tons of legacy plastic pollution.

The entity's Chief Executive Officer Sebastian DiGrande dismissed BFFP and GAIA presentation as containing 'widespread and significant inaccuracies and misrepresentations' including claims it already refuted.

#### Uphill task in riding the world of plastics

According to Nina Kelsey, Associate Professor of Public Policy and International Affairs at George Washington University, it has been tough for some companies to accept producing less plastic from their factories.

"So they do something that is a bit easier, which is to pay to have that same amount of plastic removed from the world," Kelsey said.

Kelsey claimed it was a good thing to encourage people to take plastic waste out of the environment, but it's not as good as putting less plastic into the environment.

Verra, in its response said that plastic credits in its program have been issued to more than one project, and its plastic program enables new or scaled-up projects to issue credits for plastic waste collection or recycling activities after completing a robust development and assessment process.



Waste pickers in a match (PHOTO: COURTESY)

Verra also denied claims that plastic credits are greenwashing instruments or a false solution.

"A lot of the knee-jerk reaction or greenwashing assumption comes from an assumption that plastic credits are the perfect solution," Linscott said. "Plastic credits are just a tool to be there on the transition to this world we hope to live in where there is no plastic pollution.

Environmentalists argued that issuing credits for plastic burned in incinerators and cement kilns encourages that burning, adding that it puts more toxic chemicals into the environment.

"Plastic credits create a new problem because the pollutants become more spread out and they are invisible," said Yuyun Ismawati, Senior Advisor of Nexus3 Foundation and Plastic Advisor for the International Pollutants Elimination Network Plastic.

Ismawati advocates for communities in Indonesia who are affected by pollution from plastic credits projects.

"They're going to push back against a ban because you're taking away their income," said Neil Tangri, Science and Policy Director at GAIA, who contributed to the report. "There is a competition here and they don't recognize the dynamic that they're creating," he added.



Yasmin Faisal Nila (Uganda); Balancing Act: Women, Decent Work, and the Circular Economy ; Glim, 9 janvier 2024.

To access the article : https://glimafrika.com/balancing-act-women-decent-work-and-the-

circular-economy/

Tag : ILO, UNCTAD, EPR.



"Just imagine all this pile being taken back to the city?" Mary Grace Nakirya points out gazing at the towering pile of plastic bottles ready to be given another shelf life. We stand on the premises of Acacia Foundation Limited, a recycling company situated in Kisenyi, one of the country's largest slums, located a short distance from the bustling city center.

"This heap gets bigger because every day it is reduced by tonnes, not killogrammes but tonnes, when they take it to the recycling plant." Her voice is tinged with wonder and concern.

Right on que, a rumbling track enters the premises eliciting a flurry of activity as waste sorters swiftly pack and load the plastic bottles on to the big truck.

"It is a lot plastics, a lot of bottles" Grace observes. "And what you see here is just the sorted portion. There's residue, the non-PET, that we have to manage separately. So these people that are doing this job as lowly as it may look, they're doing a very big job."

The waste accumulated here has been gathered from various trading centers, towns, and cities, primarily by women and former street children.

Grace cut her teeth in the recycling industry two years ago. The 41 year old Marketing graduate says when she walked into the company's doors and interviewed for a Marketing Managerial position, they were hesitant to hire her, citing no woman had ever held the position. She has since proven her competence through tangible results and is overall contented with the job.

However, operating at the nexus of waste collectors, sorters, and recycling companies, Grace witnessed the stark contrast between her reality and that of the female collectors. While women have entered the realm of the Circular Economy, they often find themselves relegated to low-paying, hazardous positions.

According to the 2023 Global Circulatory Report by the International Labor Organization, the transition to a circular economy is expected to generate approximately 8 million new jobs worldwide. But the pressing question remains: will women partake in these new job opportunities, transitioning into higher-paid, more secure roles requiring enhanced skills and education?

Though Grace earns a decent wage, she empathizes with her counterparts in lower ranks, acknowledging the challenges they face.



"This is a dirty business where you have to collect bottles from the dirtiest places you know, the trenches the waste bins, landfills, dump sites, with no protection whatsoever. No gloves, no boots. So at the end of the day, when you look around you find that if a person tells you that my work is collecting bottles, just look at their fingers, they are usually swollen with nails about to drop off. it is very dangerous kind of work for human health. They lack equipment, protective gear, yet they need it but they can't afford them. They have to go with what they have."

Banura Khalil, a 38 year single mother of two says she was forced to join waste collection after her husband abandoned her. Without education, her options for employment she says were limited.

"This is a type of employment where you don't need any kind of skill. You don't need any kind of experience. As long as you can pick the bottles and deliver them they give you the way and give you immediate cash." She says. However, its a tough dirty industry with barely any decent returns. She says she takes two months to collect a tonne of bottles that fetches her less than 150USDs.

Transporting the bulky bottles to the collection centres has been a huge hurdle. Without any housing facility to her name, she was forced to set up a temporary structure next to the collection store. "I let the children sleep in the temporary structure with the bottles. Some times I have to stay awake in the night to keep the bottles from being stolen by the other people interested in the business." She laments.

Besides decent housing, with her meager income, she has no access to health insurance and treatment when she falls sick. "When I fall sick, I feel I am losing a day because a day without collection means a day without a meal."

Speaking to during a journalist workshop for East and West African journalists organized by Africa21 and the United Nations Conference on Trade and Development (UNCTAD)

Casper Edmonds. Head of Unit; Business and human rights Coordinator at the International Labour Organization in Nairobi says there's need to have policies and laws that protect these women, especially those working in the informal sector, as absence of law to protect them leaves them vulnerable to exploitation.

"There's lack of adequate data on informal workers. We need to find out what is going on at the global, regional, country level and then we need roadmaps, we need them interms of legislations and policies that are implemented in practise."

"These policies have to be for specific industries where there are more jobs generated in the Circular Economy and then we urgently need to protect those who work in the Circular Economy today and the hazzards they face whether its, fumes, dust, or chemicals, we need to step up our work on safety and health of workers. And through all this, we need to ensure that the Circular Economy becomes just and right spaced with much greater attention to fundamental principles of rights." He adds.

In 2019, Uganda passed the National Environment Act that among other things includes the Extended Producer Responsibility regulation (EPR). The act mandates companies that manufacture, sell, or import PET products and packaging to bear the financial and physical responsibility of the products throughout their lifecycle. Uganda, like many other African

countries are currently drafting their EPR regulations. With its operationalization, companies will be required to form Producer Responsibility Organisations (PRO) tasked with recruiting recyclers and subsidizing recycling in the country.

The member firms will pay a monthly levy to the PRO which Grace suggests could be used to improve the conditions of these workers.

"Since they are responsible for most of the plastic in the environment, I think they should mobilize and educate these people on how to protect themselves while handling this plastic and also provide them with protective gear."

"I would also propose that the purchasers of these bottles buy them at a higher price to enable these people earn a little more than they do such that they either grow their business or be able to sustain themselves decently to have a decent kind of shelter, decent health care and decent lifestyle."

The Circular Economy is projected to enhance women's employment opportunities. As Grace looks to climb the career lader in the recycling industry, she remains optimistic about women leveraging the Circular Economy's potential. "Women should consider this as normal and respectable as any other job," she affirmed.

Casper emphasizes the need to learn from past mistakes and ensure the Circular Economy promotes fair working conditions and equality. With support from policy makers and organizations, dreams like Grace's could be realized, offering opportunities inherent in the Circular Economy.

"Our institutions are only as good as the leaders within them. If we don't provide women with better opportunities, we're neglecting half the talent pool."





# Albert Oppong-Ansah (Ghana); Innovative new businesses tackle Ghana's growing plastic menace ; Ghana News Agency, 10 January 2024.

To access the article : https://gna.org.gh/2024/01/innovative-new-businesses-tackle-ghanas-

growing-plastic-menace/

Tag : EPA, MESTI, UNEP, UNESCO.

Kpeshie (G/R), Jan. 9, GNA - This time of year has always been a nightmare for Mavis Adjare.

Seasonal floods have been disruptive for the 45-year-old who makes her living collecting plastic waste and selling it to recyclers.

This year that has changed. Mavis picks 100 kilogramme bags of plastic waste easily here at the confluence of the Kpeshie River and the Atlantic Ocean.

Until mid 2022, the mother of three says, the onset of rain or hot weather threatened her livelihood and the future of her children. Mavis used to comb lorry stations and Accra suburbs -Tseaddo and Teshie – for plastic waste. Now she picks the plastics with ease.

"All I see is plastic waste of different shades, colours and sizes, swimming through the Kpeshie Lagoon into the sea," Mavis says with joy.

The task of clearing the vast amounts of plastics and other waste that wash onto beaches here has been a major concern for operators of some of Accra's most popular leisure facilities – the Labadi Beach Hotel and the La Bomah Beach – located along the shore.

The waste, 80 per cent of it plastic, is often collected and set ablaze at the shore- a major worry for the Environmental Protection Agency (EPA), which says the practice is a growing source of air pollution in Ghana's capital.



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The Kpeshie Lagoon is just one of the many lagoons along Ghana's 550-kilometer coast through which tonnes of waste plastic leaks into the sea.

Nine per cent of the nearly one million metric tonnes of plastic waste generated in Ghana annually leaks into the ocean, according to the Ministry of Environment, Science, Technology and Innovation (MESTI).

It leaks because so much of Ghana's plastic waste – nearly 90 per cent – is not properly disposed, clogging up stormwater drains, rivers, and streams and ending up in the oceans, according to a 2020 report by the World Bank.

Many collectors, including Mavis, have joined associations that coordinate their activities to turn 'waste' to cash to enhance their livelihoods.

But plastics in the oceans and rivers are impossible for collectors to reach meaning they miss out on income. They also miss out on income when plastics are burned.

Elvis Oppong, president of the Plastic Waste Collector Association, says only 20 per cent of plastic bottles and 70 per cent of water sachets are retrieved by the Association.

"Due to lack of space, the majority of the bottle plastics waste are burnt while others go into the marine bodies," Oppong says.

Plastic waste is now a major global problem. A recent analysis by charity Tearfund found that plastic waste is spiraling out of control across Africa.

It predicts that Africans will discard 116 million tonnes of waste annually by 2060 – a sixfold increase from 2019. This is driven by demand for plastic within sub-Saharan Africa.

Plastic waste destroys drainage systems and adds to air pollution but it also threatens food supplies. It has killed so much fish and sealife that many fisheries are on the brink of collapse.



The United Nation Environmental Programme estimates that Ghana's contribution to global marine debris is as much as 260,000 metric tonnes every year, or one to three per cent of the global total.

UNESCO's International Oceanography Commission pegs plastic and microplastics in the ocean at about 50-75 trillion pieces.

The yearly economic costs of plastic in the ocean are estimated to be between \$US6-19 billion globally.

#### New Innovation collects waste from rivers

A new pilot project launched here in Kpeshie seeks to help solve the problem. Riverrecycle, a Finlandbased organization, is working to remove plastic waste from the world's waterways while enabling the most affected communities to prosper in a circular economy.

In January 2022, the company and its partners – Beach Clean Up Ghana Limited and Ambitious Africa – began collecting plastic waste from the Kpeshie Lagoon.

The organisation created a "trash boom" - a floating barge stretched across a river - to capture plastic waste as the currents take it downstream. The boom consists of floats made from standard plastic piping, attached to wire mesh barriers that resemble fencing.





The mesh barrier extends into the water to capture pieces of plastic floating below the surface. It is anchored by ropes to the bank of the river.

Mr John Adelegan, who leads the implementation, explains that every river is unique. The team must first gather information to specifically design the plastic recovery system for this river.

There have been setbacks – the system was damaged by large floating logs and stumps – but the team redesigned it and has seen improved results.

"The changes include the use of steel piles and concrete blocks to make the system more resistant to erosion, high-density polyethylene pipe instead of polyvinyl chloride and a second floater to ensure float even if one floater is damaged," Mr Adelegan explains.

The project is providing both permanent and casual jobs to nearly 200 people. The majority are women – mostly engaged in collecting discarded plastics and factory work. Mr Adelegan says the project has signed an agreement with fisher folks to clear heavy objects that block the recovery system.

For the first three months, the system collected 30 tonnes of low value (single use) plastics and polyethylene terephthalate (PET). The low value plastics are recycled into boards, which are used to produce furniture, a substitute for wood while the PET is shredded into flakes for export.

With a broad smile, Mr Adelegan says already two leading beverage companies have placed orders to buy plastic boards for their partners.



## Jenifer Gilla (Tanzania) ; Dar es Salaam Waste Warriors: Turning waste into opportunity ; Habitat Media, 10 January 2024.

To access the article : https://habitatmedia.co.tz/dar-es-salaam-waste-warriors-turning-

waste-into-opportunity/

Tag : COP 28, UNEP, NEMC.



Even before the Waste to Zero initiative was launched at the COP28 Climate Change conference in December 2023, an inspiring group of women in Dar es Salaam have been spearheading an approach that is tackling the waste crisis in that city by transforming waste into opportunities.

The women are members of a cooperative in Kimara which collects, sorts and repurposes waste for recycling. The Kimara women's cooperative is a member of the Nipe Fagio (give me a broom in Kiswahili) organisation, an initiative started ten years ago to address the problem of waste management in the city.

It is estimated the city produces over 5,600 tons of waste daily. Less than 40% of this waste is collected. When it is collected, it is all mixed up and ends up in one location— the Pugu Kinyamwezi dumpsite, located nearly 35 km from the city centre. The dumpsite was planned



to be constructed as an engineered landfill site with all the pollution control mechanisms in place in the mid-2000s.

However, due to funding constraints, these plans failed at the construction and resulted in what it is today, an open dumping site without any fencing, barrier layers, soil cover, leachate and gas collection or treatment systems. Most of the garbage is either dumped illegally, buried or burnt and when it rains, it clogs the waterways contaminating soil and increasing urban air pollution. Open dumping of solid wastes is also a major health and environmental threat to communities surrounding city dump sites.

Numerous studies have shown the severe impacts of open dumping of solid waste on the environment, public health and climate change. These range from soil degradation and contamination of water sources as hazardous chemicals leach into the ground. This, in turn, disrupts ecosystems and poses a threat to biodiversity.

Open dumps become breeding grounds for disease vectors, leading to the spread of infectious diseases such as cholera and respiratory illnesses, especially among communities living near such dumpsites who are exposed to harmful toxins and pollutants. Additionally, the release of methane, a potent greenhouse gas even more dangerous than carbon dioxide, from decomposing organic matter in open dumps significantly contributes to climate change, worsening global warming.

An August 2023 report by the Global Climate and Health Alliance said landfills and wastewater make up about 20 per cent of global anthropogenic emissions. Anthropogenic emissions are pollutants or substances released into the air, water, or soil as a result of human activities. These emissions come from various human-related sources such as factories, vehicles, power plants, and other industrial processes.

Examples of anthropogenic emissions include carbon dioxide from burning fossil fuels, pollutants from industrial processes, and waste disposal. Essentially, anthropogenic emissions are human-made contributions to environmental pollution.



Reducing human-caused methane emissions by as much as 45 per cent, or 180 million tonnes a year (Mt/yr) by 2030 will avoid nearly 0.3°C of global warming by the 2040s. "It would also, each year, prevent 255 000 premature deaths, 775 000 asthma-related hospital visits, 73 billion hours of lost labour from extreme heat, and 26 million tonnes of crop losses globally," according to this report by UNEP.

Climate change impacts are not "gender neutral" as women and girls experience disproportionate challenges from climate change. They depend more on, yet have less access to, natural resources. In Tanzania, like many other regions in the world, women bear a disproportionate responsibility for securing food, water, and fuel.

Women, as agricultural workers and primary procurers, work harder to secure income and resources for their families. At least 70 per cent of the 1.3 billion people living in poverty are women. In urban areas such as Dar es Salaam, 40 percent of the poorest households are headed by women. Women predominate in the world's food production (50-80 per cent), but they own less than 10 per cent of the land.

It is in this context that the women of Kimara came together to see what they can do to address some of these challenges and at the same time, contribute to the wellbeing of their communities. Rehema Tamimu, chairperson of the cooperative recounts how she and other women decided to come together to not only make their environment clean but to also make money out of waste.

"There used to be waste thrown all over the place. The mounds of garbage would stink. But we did not know what to do. When it was collected, it was just dumped. That is when we reached out to Nipe Fagio for help on how to deal with the problem," she says. This training opened their eyes to the potential of waste as a valuable resource. "After getting the training and seed funding from Nipe Fagio institution, we are making money out of waste!," she adds.

Nipe Fagio provided the women with awareness training on the impact of waste on their environment, and how to safely separate garbage for recycling.

The women collect the garbage from households in their neighbourhood which is then stored at a decentralised centre where it is sorted and desegregated into four categories —organic, recyclable and domestic hazardous waste.



Organic waste is kitchen waste such as vegetables, fruits, and leaves while toxic or domestic hazardous includes such things as batteries, paint, old medicines and other chemicals. Recyclable waste includes such things as glass, cardboard, paper, plastics and metals.

Halima Muda, a member of the cooperative proudly explains how she and other members sort and segregate the waste which they then sell. Plastic waste is sold for recycling. The plastic waste is sorted according to density, melted and then mixed with sand to produce



bricks, paving blocks or tiles which have been used for the construction of affordable housing, public toilets and other buildings, especially in the rural areas.

Organic waste is transformed into fertiliser, which is eagerly sought after by gardeners. The women sell the organic fertiliser at Sh. 10,000 per kilogram. The fruit waste is fed to black soldier flies whose larvae are used as chicken and fish food.

The women sell the larvae at Sh5,000 per kilogram. The Dar es Salaam city centre and Nipe Fagio provide the women's cooperative with market connections to sell their products.

Halima also highlights the "double profit" generated by their initiative. They make money from collecting waste from households. For this service, they charge each household between Sh2,000 to Sh5,000 per month. They also make money from processed materials such as fertiliser and from the sale of recyclable waste which they sort such as plastics, paper, wood and other such products which are recycled into other products.

The co-operative makes Sh800,000 on average which is then shared among the members. They retain a percentage of their earnings which is then given out as loans and also to cater for their operational costs and taxes.

The initiative has transformed the lives of the women and their families as they are not only employed, but can count on having money to meet their basic needs. Halima says that cooperation has transformed her life for the better. Her weekly income has quadrupled since she joined the cooperative. She previously earned an average of Sh10,000 per week from collecting garbage from peoples' homes but she currently makes between Sh40,000 to Sh50,000 per week because she is able to 'add value' by processing the organic waste into fertiliser and animal feed.

Halima, who is a single mother of three, relishes her new found financial stability which has enabled her to meet her family's needs such as school fees and other essentials and also save some money. "This is something I never thought I would be able to do. Open an account and save money!," Halima says.

Her colleague, Anusiata Mapunda has opened a side business where she is raising chickens for eggs and meat. The extra income she makes from the business as well as the stability of having a regular income from the waste processing job means she is now able to pay school fees for her only child who is attending a government school. "Before I used to collect only 10,000 per week, but since I joined this group and started selling bottles and making fertilisers and fish food, I earn Sh. 50,000 to 60,000. I can afford to pay for my son's fee of Sh.300,000 per year for the Government English school," she said.

The women not only earn a stable income but also contribute to keeping the streets clean and reducing health risks associated with waste mismanagement.

Waste picking is not considered to be 'decent' work particularly for women. Since waste picking is predominantly conducted by men, the members of the Kimara waste pickers cooperative society face unique challenges. These range from lack of modern work tools, health hazards during waste collection, and societal stigma. They also often face negative perceptions from the community, hindering their participation in waste management activities.

"Sometimes people think we are mentally unstable or are thieves and this makes our work of collecting garbage difficult," says Sauda Salum

"When people see us wearing dirty clothes, and nothing to identify us for the work we are doing, people think we are strange or weird people. There was a day when I went out to collect waste from a household and they thought I was a thief because of the way I looked dirty clothes and all. If we had proper equipment, especially protective clothing, we could avoid some of these challenges," Sauda adds.

To create awareness about the essential services they provide, the women teach households how to separate their waste. They also provide them with different baskets or containers to keep the waste separate. This makes it easier for the women to collect the garbage and sort it for recycling or processing.

Nipe Fagio also conducts community awareness campaigns and encourages them to sort their waste. Wilyhard Shishikaye, Nipe Fagio's Zero Waste System Coordinator, explains the organisation provides both technical and financial assistance to the cooperative. "Our goal is to empower communities to manage their waste effectively and contribute to a cleaner and healthier environment," says Shishikaye.

Nipe Fagio conducts house-to-house education sessions on street waste collection and encourages residents to actively sort their waste into different categories: organic, recyclable, and hazardous.

Nipe Fagio also has decentralised material waste processing facilities where the collected waste— particularly hazardous household waste, is treated. The other recyclable waste such as paper, glass and plastic is also collected at these facilities for onward distribution to the recycling firms.

Shishikaye envisions a future where this zero waste system becomes part of the national strategy on solid waste management. "Imagine every street equipped with this infrastructure, diverting waste from landfills and transforming it into valuable resources and providing employment!"

Nipe Fagio's ambition extends beyond the capital city. The organisation has already replicated the system in Zanzibar and Arusha, with plans to expand to other regions across the country.

Shishikaye notes that the government has already shown interest in the Nipe Fagio model. Through the Regional and Local Governments (TAMISEMI), they have invited the organisation to share its knowledge and expertise, paving the way for wider implementation.

The head of the Ilala District Waste Management and Cleaning Department, Rajabu Ngoda says their education and public awareness campaigns are geared towards making people see the opportunities of waste management instead of seeing waste collection as a burden.

And to encourage more people to exploit these opportunities, the government provides loans usually with a repayment of 10 per cent interest to interested youth groups, women and people living with disabilities. The funds are to help the waste pickers buy protective equipment and set up their waste processing such as fertiliser and animal feeds.

Sub-national governments and local authorities and municipalities are, under the Environmental Law, responsible for the collection, storage, sorting and transportation of waste to achieve the zero waste goals that the National Environmental Conservation and Management Council (NEMC) has set out.

However, most of the waste produced in the country is not managed and continues to pose a threat to the environment and present public health concerns. "For example, at least 96 per cent or about 319,000 tons of the plastic waste produced in Tanzania annually is not managed. This is despite the ban on the use of single-use plastic bags," says Natural Resources and Environment Conservation Officer of the Dar es Salaam City Council Enock Tumbo.



He says community-driven waste management initiatives such as Nipe Fagio are important in bridging this gap. The council is also considering setting up a landfill site with pollution control mechanisms to partially address the problem of waste management.

The Waste to Zero initiative, as exemplified by the women of Kimara, not only addresses environmental and health challenges but also provides a sustainable solution to waste management. The success of this initiative highlights the transformative power of communitydriven waste management, offering a model that can be replicated nationally to achieve cleaner and healthier environments.

As we envision a future where waste becomes a valuable resource, the stories of these women serve as inspiration, emphasising the potential for positive change through innovative and community-driven solutions.