



A Quarterly Publication

# nema

National Environmental Management Authority

July - September 2018

# Plastic Bag Ban Successful one Year on



**Over 80% compliance with ban | 226,339Kg of banned bags seized  
More than 1,000 arrests | Job opportunities increased**



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# Editorial

## Kenyans enjoy fruits of plastic bag ban



One year on, one can confidently say the plastic bag ban in Kenya has stood the test of time. Kenyans have since adapted to the alternatives available and enjoying the results of the same. The streets are cleaner and the water bodies less obstructed. The ban of plastic bags has also led to the reduction of deaths of livestock and wildlife brought about by ingestion of plastic bags. The ban was a win situation.

For the past one year, the Authority has engaged in massive awareness creation targeting the Kenyans in the 47 Counties. Moreover, several crackdowns have been undertaken in various regions where the culprits have been taken to court where some have been fined, warned and other imprisoned according to the direction of the different judges. In general, there has been over 1,000 arrests and prosecutions. This has played a critical role in enhancing the success of the ban which is currently above 80 percent success rate.

The major challenge in implementation of the ban has been the presence of porous borders where the banned plastic bags from neighboring countries that have not banned the bags have found their ways into the country. Going forward, the NEMA is working with Authorities with neighboring Countries to either facilitate banning of plastic bags in Eastern African Countries or enhance surveillance of the Kenyan borders to completely cut the supply.

To enhance coordination of the services in the Counties the Authority has established regional offices to facilitate management of environmental matters for easy

accessibility. The regional directors will help in coordinating operations within counties under them to enhance efficiency and service delivery. This will facilitate achievement of the Authority's mandate.

In this quarter, management and conservation reserves of riparian reserves took a centre stage. To achieve this, the Authority with other coordinating Authorities was involved in demolition of various structures that had been erected on the riparian reserves. This was critical to ensure that water resources is not interfered with especially in the capital where its demand is on high. In the same breath, NEMA in collaboration with National Land Commission (NLC) and Regional Centre for Mapping of Resources for Development (RCMRD) launched a project titled; 'Geo-mapping Riparian Zones/Lands for Catalyzing Sustainable Development in the Designated Special Economic Zones. The project aims at mapping of riparian zones, Geo-code developments within riparian areas and develop online and interactive public portal for riparian zones verification and environmental crimes reporting.

More tidings were also evident as Kenya was elected to head the Nairobi Convection during the Conference of Parties (COP) to the Nairobi Convection held in Mombasa.

Enjoy the reading!

Evans Nyabuto,  
Chief Corporate Communications Manager

# Board of Management induction held



The Board of Management and Staff in a group photo during the workshop  
*[PHOTO: S. IRUNGU/NEMA]*

By Samwel Irungu

The NEMA board of management held an induction workshop for newly appointed board members in Naivasha from between 30th July to 3rd August 2018.

The departmental and sectional heads made their presentation to the board on the progress reports, opportunities and challenges being experienced where the board advised accordingly.

The board of management pledged to support the management team in discharging their duties. The board also constituted the following committees; Audit, Governance and Risk Management; Environment management and Technical; Strategy, Legal and Resource mobilization and Finance and Human Resource to facilitate policy decisions within the Authority.

{The writer is NEMA's Corporate Communications Officer}



The NEMA board meeting in progress at Sawela Lodge, Naivasha  
*[PHOTO: S. IRUNGU/NEMA]*



# Environment CAS visits NEMA



CAS, Mr. Mohammed Elmi, Prof. Geoffrey Wahungu and NEMA staff when he visited the GIS Section [PHOTO: S. IRUNGU/NEMA]

By Samwel Irungu

The Ministry of Environment and Forestry Chief Administrative Secretary (CAS), Mr. Mohammed Elmi visited NEMA on 10th July 2018.

Mr. Elmi held a meeting with Director General, Prof. Geoffrey Wahungu and the management team. Mr. Elmi also visited several offices including GIS, Air quality, Library, police unit, EIA Section among others.

During the visit, Mr. Elmi congratulated the Authority for its quest to keep Kenya clean. He noted that the Authority should strive to achieve its mandate as the Ministry of Environment and Forestry is ready to support the Authority in all fronts to see that a clean and healthy environment is provided for all Kenyans.

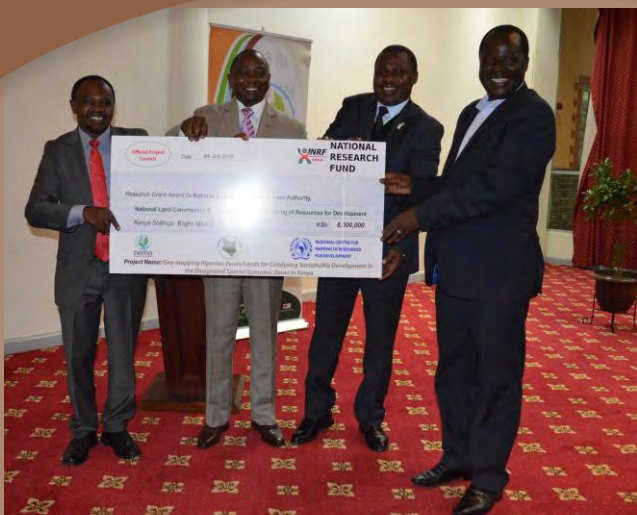
NEMA Director General, Prof. Geoffrey Wahungu appreciated the CAS for visiting the Authority and recognizing its vital role in management and coordination of matters environment in the Country. Prof. Wahungu informed the CAS that the Authority is committed to achieving its mandate.

[The writer is NEMA's Corporate Communications Officer]



Ministry of Environment and Forestry Chief Administrative Secretary, Mohammed Elmi receives a gift package from DG NEMA, Prof. Geoffrey Wahungu during the visit [PHOTO: S. IRUNGU/NEMA]

# NEMA pulls funds to protect riparian reserves



L-R - Mr. Ngatia, NRF, NEMA DG, Prof. Geoffrey Wahungu, Dr. Emmanuel Nkurunziza, DG RCMRD, Mr. Bernard Opa, NCL holding the dummy cheque award to the Authority at Panari Hotel [PHOTO: S. IRUNGU/NEMA]



NEMA's Deputy Director EPRC, Dr. Charles Lange making a presentation during the launch at Panari Hotel [PHOTO: S. IRUNGU/NEMA]

By Dr. Charles Lange & Carol Muriuki

NEMA in collaboration with National Land Commission (NLC) and Regional Centre for Mapping of Resources for Development (RCMRD) launched a project titled; 'Geo-mapping Riparian Zones/Lands for Catalyzing Sustainable Development in the Designated Special Economic Zones in Kenya' at Panari Hotel on 4th July 2018.

The project was awarded Ksh 8 Million by the National Research Fund (NRF) through a competitive process. The project, under the leadership of Dr. Charles Lange, the Deputy Director for Environmental Planning and Research Coordination will be implemented for three years.

The objectives of the project are to Map riparian zones, Geo-code developments within riparian areas and Develop online and interactive public portal for riparian zones verification and environmental crimes reporting. The geographical coverage of the project is Lamu, Mombasa and Kisumu counties.

The event was attended by Prof. Wahungu, DG NEMA and Dr. Emmanuel Nkurunziza, DG RCMRD others include Benard Opa representing CEO NLC, Mr. Ngatia representing CEO NRF, Joy Kivata representing Director Wetland International, Mr. Maritim representing CEO WWF.

Prof. Geoffrey Wahungu in his remarks thanked RCMRD DG for accepting to partner with NEMA in this project and assured him

of his support in other initiatives in future. He also noted that NLC is an important partner in the project as the agency in charge of land matters in the country. He applauded the effort of the team in putting together the project ideas and assured them of his full support to ensure that the project is successful.

Prof. Wahungu added that riparian areas are under threat from development and the government is keen to protect these zones. "Therefore, this project is timely and will contribute towards informing the status of riparian zones and enforcement actions by NEMA," Wahungu noted.

The Director General, RCMRD, Dr. Emmanuel Nkurunziza, remarked that he was pleased to work with NEMA on this project and his institution will support this initiative and even look forward to other engagements in future.

Mr Ben Opa noted that NLC is a key player in defining and zoning of the riparian areas as outlined in the Public Land Act. The NLC will provide all relevant information, maps and support needed in the to ensure success of the project.

On his part, Mr. Ngatia from NRF commended NEMA, NLC and RCMRD for submitting a good proposal and hence the award. He noted that the 8M award is not a very large amount as some of proposals get up to 20M.

[The writers are NEMA's Director EPRC and Wetlands Officer]



# Counties sensitized on environmental governance

By Samwel Irungu

The promulgation of the new constitution in 2010 and subsequent implementation changed the legal landscape for environmental protection, conservation, management and embedded environmental matters within the devolved system of governance in Kenya.

In its preamble, the constitution recognizes the need to respect and sustain the environment for the benefit of future generations. NEMA has identified Counties as key stakeholders in the environmental sector because they have capacity to make or influence the making of proper environmental laws.

It is for this reason that the National Environmental Management Authority organized a sensitization forum at Kenya School of Monetary studies from 11th to 13th September 2018. The forum was graced by officials from various Counties in the Country as well as NEMA officials mainly from legal department.

The forum sought to enhance the capacity of the Counties to provide a platform for partnership in environmental governance. During the workshop, Counties were urged to integrate environmental matters in their County Integrated Plans and take into consideration the principle of sustainable development.

Over the years, the Authority has been making deliberate efforts to partner with Counties through Council of Governors (CoG) in organizing forums and activities to bring the two governments together and chart the way forward towards environmental protection.

Speaking during the forum, NEMA Director General, Prof Geoffrey Wahungu noted that, "Counties are strategically placed to act at the link between NEMA, the public and communities which are also key stakeholders for NEMA. With this key function, all the interactions between NEMA and Counties will reach the public and communities and advance the objectives of both NEMA and Counties and hence emphasis on how critical their involvement and contribution to environmental governance and management."

Since Counties have an integral role in ensuring sustainable development and environmental governance, Counties that have not established County Environmental Committees (CECs) were urged to do so since through the committees, environmental matters can be well championed.

[The writer is NEMA's Corporate Communications Officer]



NEMA officials, County officers in a group photo during the event [PHOTO: S. IRUNGU/NEMA]



NEMA Director Compliance and Enforcement, David Ongare speaking during the event at Kenya School of Monetary Studies. [PHOTO: S. IRUNGU/NEMA]



NEMA's Legal officer Erastus Gitonga moderating the event [PHOTO: S. IRUNGU/NEMA]



NEMA Director Legal Services, Irene Kamunge opening the workshop at Kenya School of Monetary Studies [PHOTO: S. IRUNGU/NEMA]



# NEMA regional offices established



By Sylvia Gitau

NEMA is established to supervise and coordinate all matters related to the environment. The Authority is the mandated principal instrument of government in the implementation of all policies relating to the environment.

As such, the Authority strives to take services closer to the people. Since 2013, the Authority has successfully established operational County offices in the 47 Counties all over the countries.

To enhance coordination of the services in the Counties, the Authority has established Regional Offices to enhance management of environmental matters as follows;

- Mombasa Region that comprises of the following Counties-Kilifi, Kwale, Lamu, Mombasa and Taita Taveta
- Central Region-Embu, Isiolo, Kirinyaga, Laikipia, Marsabit and Meru Counties.

- North Lake Region- Bungoma, Busia, Kakamega, Kisumu, Siaya and Vihiga.
- South Lake Region- Bomet, Homabay, Kisii, Migori and Nyamira.
- Nairobi Metropolis- Kajiado, Kiambu, Machakos, Makeni, Muranga and Nairobi
- North Rift region- Elgeyo Marakwet, Nandi, Turkana, West Pokot, Uasin Gishu.
- South Rift region- Baringo, Nakuru, Kericho, Narok, Nyandarua and Samburu.
- North Eastern region-Garissa, Kitui, Mandera, Tana River and Wajir.

The regional directors will help in coordinating operations within the Counties under them to enhance efficiency and service delivery. This will facilitate the Authority to achieve its mandate of a clean and healthy environment for all.

{The writer is NEMA's Communications Intern}



NEMA Director General Prof Geoffrey Wahungu (C) with Regional Directors during their commissioning at NEMA HQ - {PHOTO: S. IRUNGU/NEMA}



# NEMA, Safaricom climate change forum

By Samwel Irungu

NEMA iExtreme weather events have clearly demonstrated that climate change is becoming more pronounced. The effects are manifest in all sectors of human life. As a result, various measures to combat climate change are required to alleviate the impacts of climate change for safeguarding the environment, economy and human livelihoods.

The magnitude of these global challenges requires a collaborative efforts among stakeholders for a transformative interventions on climate change and mitigations.

With this understanding, NEMA and Safaricom organized for a climate change forum at Intercontinental Hotel in Nairobi on 12th September 2018.

The forum brought together climate change experts, scientists and other partners from both public and private sector. The forum sought to synergize a collaborative effort with various

sectors to ensure that there is transformations in various sectors of the economy.

Speaking during the event, NEMA Deputy Director Environmental Planning and Research Coordination, Dr. Charles Lange stated that, "In the spirit of combating climate change, I would like to inform you that NEMA has successfully initiated several climate change programs." He noted that the Authority is currently the accredited as the National Implementing Entity (NIE) under the Adaptation Fund and Green Climate Fund (GCF).

As the National Implementing Entity, the Authority has facilitated the development and roll-out of major climate change adaptation and mitigation project across the country. Among them include, the food security project at Waldaa, Marsabit County spearheaded by the Red Cross Kenya, the water security projects at Kajiado and Wajir counties that is supporting development of water-pans.

[The writer is NEMA's Corporate Communications Officer]



Participants in a group during the forum at Inter-Continental Hotel, Nairobi {PHOTO: S. IRUNGU/NEMA}

# The menace of Water Hyacinth



By Cindy Shigoli

At Kenya's western frontier lies the great expanse of L. Victoria. This massive lake, locally dubbed 'The Nyanza' is twice the size of Wales, with a length of 337kms, a width of 250 kms, a surface area of 68,800 km squared, and water volumes of up to 2700 km cubed. Its average depth is 40 kms, and its maximum depth stands at 83 kms. Worldwide, Lake Victoria is the largest lake by area, and the second largest fresh water lake by surface area, after the great Lake Superior of North America, with its main sources of water being direct rainfall and numerous streams feeding into it. It forms a natural boundary separating Kenya, Uganda and Tanzania, and is a thriving ecosystem housing numerous fish and reptilian species.

Water hyacinth, a weed from South America has become a major invasive plant species in L. Victoria. People from the Lake region, the counties of Kisumu, Siaya, and Homabay to be precise are the most affected by the hyacinth menace given the fact that most of them obtained their livelihoods from the lake through activities like fishing, and water sports, among many others. These activities are all curtailed by this overgrown weed that renders the deep waters inaccessible, resulting in high levels of poverty. The weed also provides breeding ground for malarial causing mosquitoes, hence an influx in malaria infections.

To reduce the lake area covered by hyacinth, a number of interventions have been carried out, including efforts to mechanically remove it with a harvester, manually by

fishermen and their boats, and through biological controls, which involves the introduction of beetles into the lake to feed on the weed's roots. None of these interventions have, however, been sustainable, and the weed continues to thrive, threatening livelihoods.

At the moment, due to a change in wind directions, the Lake, at least from the beaches of Kisumu can be seen to be clear and free from hyacinth. None the less, it is only a matter of time until the hyacinth menace returns, and when it does, Kisumu County needs to be prepared to deal with it. It is time the government in collaboration with researchers comes up with more permanent solutions to the problem that is water hyacinth.

{The writer is NEMA's Environment Officer in Kisumu}



The menace of water hyacinth





# Kenya to head the Nairobi convention

By Samwel Irungu

Kenya, through the Cabinet Secretary for Environment and Forestry, Mr. Keriako Tobiko will be chairing the Conference of Parties to the Nairobi Convention for the next two years. Kenya was elected to head the convention during the COP 9 conference held in Mombasa on 30th and 31st August 2018.

This year's theme was 'sustainable Ocean Economy for Wealth Creation' and focused on tapping into the blue economy opportunities through the 2030 agenda on sustainable development. This is an initiative by the Western Indian Ocean states, private and public sector as well as the civil society groups to aid in the sustainable exploration of the coastal resources.

The conference was hosted by the Ministry of Environment and Forestry in collaboration with the UNEP. The conference

was opened by CS Mr. Keriko Tobiko and was attended by ministers of member countries among other delegates. NEMA was represented by NEMA Director General Prof. Geoffrey Wahungu and Board chairman, Mr. John Konchellah.

Among the member counties who attended the conference that attracted over 200 delegates were Comoros, Mauritius, Mozambique, Madagascar, Seychelles, South Africa, Tanzania and Somalia.

The Nairobi convention operations began in 1996, with the aim of controlling and addressing the increasing rates of coastal areas and the oceans. The core principles which form the basis for the COP operations are the sustainable exploration and the use of coastal resources by member states.

{The writer is NEMA's Corporate Communications Officer}



Delegates during the COP 9 conference in Mombasa English Point Hotel - [PHOTO: S. IRUNGU/NEMA]

# Kenya to head the Nairobi convection



NEMA Chairman Mr. John Konchellah (L) and DG Prof. Geoffrey Wahungu who represented the Kenya during the COP 9 conference in Mombasa [PHOTO: S. IRUNGU/NEMA]



NEMA Chairman Mr. John Konchellah being taken through the NEMA's exhibitions during the COP 9 conference at English Point Hotel, Mombasa. [PHOTO: A. MWANGI/NEMA]



Environment and Forestry CS, Keriako Tobiko addressing the participants during the conference at English Point Hotel Mombasa. [PHOTO: S. IRUNGU/NEMA]



NEMA Director General, Prof. Geoffrey Wahungu addressing the participants during the event [PHOTO: S. IRUNGU/NEMA]



The outgoing COP to Nairobi Convection chairman, Mr. Wallace Cosgrow of Seychelles during the conference in Mombasa [PHOTO: S. IRUNGU/NEMA]



# One year on, Kenya is cleaner due to plastic bag ban



NEMA officers Wachira Bore and Patrick Lekenit inspect a bus during an inspection in Narok town on banned plastic bags.



NEMA's Deputy Director Compliance, Mr. Zephaniah Ouma inspects a butchery using banned plastic in Keroka, Kisii County during an inspection.



NEMA's CDE Machakos County Titus Simiyu (L) with Grace Maina inspects a factory in Mlolongo caught with the banned plastic bags.



NEMA's police inspector, David Kamau takes some of the confiscated paper bags during an inspection in Ngong town during an inspection in Ngong town.

Pursuant to Section 144 of EMCA, Any person who contravenes the provision of the gazette notice shall be liable to a fine of not less than two(2) million Kenya Shillings, and not more than four (4) million Kenya Shillings or imprisonment of a term of not less than one (1) year but not more than four (4) years or to both such fine and imprisonment.

# plastic bag ban



NEMA Chairman, John Konchellah and Director General, Prof. Geoffrey Wahungu addressing media at a press conference at NEMA boardroom

By Samwel Irungu

The National Environment Management Authority (NEMA) is mandated by the Environment Management and Coordination Act (EMCA) of 1999 to exercise general supervision and coordination over all matters related to the environment. The Authority is further mandated to be the principle instrument of government in the implementation of all policies relating to the environment.

The Authority's recent undertaking was to ban plastic bags. In a Gazette Notice No. 2334 of 28th February 2017, the then Cabinet Secretary, Ministry of Environment and Natural resources, Prof. Judi Wakhungu banned the use, manufacture and importation of all plastic bags used for commercial and household packaging. Prior to the ban, plastic bags were widely used as a key packaging material in several sectors of the economy namely manufacturing, trade, transport, agriculture and hospitality. According to a research done by NEMA, United Nations

Environment Programme (UNEP) and Public Policy Research and Analysis (KIPPRA) revealed that 100 million plastic bags were being handed out annually in Kenya by supermarkets. A separate research conducted by NEMA in 2017 revealed that more than 50 percent of cows had paper bags in their rumens in Kenya.

The purpose of the Government to ban the use of plastic bags is to avoid health and environmental effects resulting from the use of plastic bags.



A trader selling some of biodegradable bags in Ngong town.



# Pictorial



L-R\_NEMA officers Dr. Catherine Mbaisi, Evans Nyabuto, Mamo Boru and Anne Owino at NEMA exhibition booth during the launch of tree planting exercise at Moi Forces Academy, Nairobi.



NEMA Director General, Prof Geoffrey Wahungu ( L), NEMA's Chief inspection officer, Robert Orina (C) and Rift Valley Regional Director, Marrian Kioko ( R )during the board visit to Trans Mara



NEMA Board Members, Director General and some staff of Kilima Pesa Gold Mine during the visit to the firm



Board members with staff during a visit at NEMA's Kericho County office



# Pictorial



Participants during a cleanup exercise at Jomo Kenyatta Public Beach in Mombasa



NEMA DG, Prof. Geoffrey Wahungu hosts NEMA Officers (L-R), Deputy Director EEIPP, Mamo Boru, Ruth Nderitu, Shieni Koiyiet, Joseph Masinde at his office



NEMA officers during an inspection on the banned plastic bags in Donholm, Nairobi



NEMA Director General, Prof. Geoffrey Wahungu speaking to Board member, Hon. Halima Ware during the board's visit to Kilima Pesa Gold mining company in TransMara.



# plastic bag ban



NEMA Chairman, Mr. John Konchellah

These effects include,

- The inability of plastic bags to decompose and thus affecting soil quality; the littering of such bags at various parts of the country;
- The blockage of sewerage and water drainage infrastructure causing floods during the raining season;
- Damage of ecosystems and bio-diversity due to plastics bags,
- Death of animals after consuming plastic material;
- Endangering human health when used for packaging food in particular hot food;
- Poisonous gaseous and when used as fuel to light charcoal; and
- Air pollution when disposed by burning in open air.

#### Penalties

Pursuant to section 144 of EMCA, any person who contravenes the provision of the gazette notice shall be liable to fine of not less than two (2) million Kenya Shillings, and not more than four (4) million Kenya shillings, or imprisonment of a term of not less than one (1) year but not more than four (4) years or to both such fine and imprisonment.

“

**NEMA**  
*is now targeting  
the source of plastic  
as a way of enforcement  
to ensure that the  
'big fish' who have  
evaded arrest are also  
brought to book,*

”

**Prof. Wahungu**

# plastic bag ban



NEMA Director General, Prof. Geoffrey Wahungu

## Plastic bags ban, one year on

It is one year since the plastic bags ban took effect. The eyesore of plastic bags littering that used to litter our roads and fields has reduced significantly. The Authority has achieved over 80 percent success rate in implementing the ban on plastic bags. NEMA Director General, Prof. Geoffrey Wahungu appreciates the citizens of Kenya and the media for their support and critique of the ban. He adds, however, that more support is requested from them.

NEMA has reported an impressive reduction on the amount of garbage by over 50 per cent in majority of the counties as a result of the plastics ban that took effect on August 28, 2017. The report notes that 50 per cent of the generated waste was therefore contributed by the plastic bags.

## Benefits

Currently the environment is choking from plastic waste littered all over, which is an eye sore. The following benefits will accrue from the ban of plastics carrier bags:

- Improved aesthetics. Littering from plastic bags will be curbed.
- Reduced sewerage blockage

- Reduced livestock deaths
- Reduced mosquito breeding grounds
- Plastic carrier bags will cease, hence an incentive to reduce their issuance particularly in supermarkets, and hence an incentive to re-use alternative bags already acquired. This is in line with the 3R principle of plastic waste management: Re-use, reduce, and recycle.
- Increased jobs opportunities in the recycling, waste collection and making alternative bags e.g. Kiondo.

## Arrests and prosecution

So far, more than 1000 arrests have been made and the perpetrators have been charged in court. This year alone, the Authority has seized 226,339 Kilogrammes of the banned plastic bags. The offenders have been arrested and presented in various courts in different Counties throughout the country. These includes users, manufacturers and importers.

"The journey of initiating the ban began with legal setbacks but we have gotten over it," Prof Wahungu says. He continues that there is still a problem with the flat plastic carrier bags in the local residential areas and markets. Additionally, vendors and hawkers are still a nuisance.



# plastic bag ban



NEMA Officer during an inspection on plastic bags in Nairobi

Most Kenyans have embraced different forms of carrying their goods since the ban took effect. As a result, most of traders sneaking plastic bags to the black market have even found it hard to utilize them. As a result, the Authority has reported high levels of compliance all over the country. This has contributed to the environment being generally clean. After the ban, the Authority established plastic bags drop-off points at the major supermarkets throughout the country to enhance compliance.

## Challenges to implementation

Despite the remarkable achievements, there is still a problem with the flat plastic carrier bags in the local residential areas and markets mostly being used by vendors and hawkers. The challenge the Authority is facing is the presence of porous borders from our neighboring countries that have not yet banned plastic bags. "Tanzania and Uganda have not effected the ban on plastic bags," NEMA Director General, Prof Geoffrey Wahungu said. He adds, "Most of the plastic bags are coming from Uganda but there are discussions with the National Environment Management Authority – Uganda to address this issue." This follows the recent pronouncement by President Yoweri Museveni on the ban of plastics in Uganda.

The small and medium enterprises have opportunity for recycling and innovation. The recycling of plastic in the bottle industry is striving but rather slow. "Most of the offenders are vendors and hawkers who are still using the flat bags, however, the Authority is working on establishing the source of the bags," Prof. Wahungu states.

There is also reduced cooperation from the public as they feel that the ban is punitive to small traders and poor Kenyans. However, the Authority urges members of the public to continue supporting the ban as it is for the goodness of the country. For instance, the support from the Kenyans could go a long way in enabling the Authority to arrest the suppliers of the plastic bags. "NEMA is now targeting the source of plastic as a way of enforcement to ensure that the 'big fish' who have evaded arrest are also brought to book," Prof. Wahungu says.

Some of the court penalties are not punitive enough. Most of culprits when arrested and presented in court are either pardoned, released with a warning or fine just a few thousands. This presents a challenge for the Authority as the same individuals continue selling or using the banned plastic bags as they feel that once

# plastic bag ban



NEMA's Mamo Boru (L) and Dr. Catherine Mbaisi (R) with Brian Sariton who is utilizing paper bags to make clothing. [PHOTO BY S. IRUNGU/NEMA]

arrested again, they will get away with it. Hence, the recurrent behavior continues especially for a few known traders. This year, the Authority has arrested 505 people caught either manufacturing, using or either importing the plastic bag out which merely 258 have been prosecuted in the courts.

The fines of the plastic bags are based on the revised EMCA 2015 that was reviewed through public participation in order to make environmental crimes punishable enough. Pursuant to section 144 of EMCA, any person who contravenes the provision of the gazette notice shall be liable to a fine of not less than two (2) million Kenya Shillings, and not more than four (4) million Kenya shillings, or imprisonment of a term of not less than one (1) year but not more than four (4) years or to both such fine and imprisonment.

## Opportunities

It is estimated that implementing the plastic bags ban will require 100 million yearly across the country for it to be successful, Obadia Mungai, NEMA's Chief Environmental Economist says. As a result of this heavy financial obligation, the Authority has been seeking the support of various stakeholders

to partner with the Authority in supporting implementation of the ban. The Authority has also urged partners to support the implementation of the ban across the country by undertaking initiatives within their capacity.

## Engaging Counties

Although counties have not enforced the embargo on plastic bags ban despite the care for the environment being a devolved function, the Authority is striving to tighten its relationship with Counties to harness synergies in implementation the ban and waste management in general. Recently, the Authority hosted County officials from all the 47 Counties to deliberate on legal engagement with Counties especially on establishment of County Environmental Committees (CEC) in all Counties to facilitate implementation of environmental activities.

The Authority has also engaged County Executive Committee members in charge of Environment from all counties to foster relationship with the Counties on implementation of the ban. Moreover, the Authority has also a Colloquium of Environment and Land Court judges to help sensitise them on environmental matters and especially how undertake plastic ban cases. This has yielded fruits, as the Authority has been able to win two legal handles that have been presented in court trying to stop implementing the ban. This implies that judges now understand environmental matters better.

Speaking in Mombasa during the World Cleanup Day 2018, NEMA Chairman, Mr. John Konchellah stated that Authority will enhance its working relationship with the Counties to ensure that plastic bags are wiped from the countries. He warned those taking advantage of the porous borders to smuggle plastic bags into the country that the long arm of the law will catch up with them. "The Authority will upscale enforcement actions in all regions to ensure compliance with ban," Konchellah adds. Engaging partners and stakeholders

The Authority has been engaging stakeholders both from the private and public sector in implementing the plastic bags ban. Private sector plays a critical role in enhancing growth of the country. As such, the private sector have been urged to come with initiatives for recycling and reusable plastic free bags. "The



# plastic bag ban



NEMA officers during an inspection in Nairobi

Kenya Association of Manufacturers has also been a faithful partner,” NEMA Director General says. The government through the Ministry of Environment and the National Treasury have played a critical in enabling the continued implementation of the ban.

The Authority also works closely with the Kenya police who give backup to NEMA officials when undertaking inspection in various areas all over the country. This amplified the authority of NEMA when undertaking inspections in all parts of the country. “The cotton industry revival is encouraging. NEMA is working with KEBS to come up with a standard bag,” Prof. Wahungu said. Prof. Wahungu adds that the East African Network for Environmental Compliance and Enforcement (EANECE) has its next meeting in October this year. The agenda that is to be discussed is the standard on implementation of the plastic ban.

#### Awareness creation

Since the ban took effect, the Authority has focused on awareness creation to the members of the public. This has been

done to complement enforcement exercises all over the country. Various campaigns have been launched to educate the public on alternatives through the media, roadshows, exhibitions among other convectional public awareness campaigns. The Authority is also supporting the public to come up with alternatives and initiatives for plastic packaging. In addition, the Authority has over the past one year been issuing clearances for plastic (flat) bags used for primary industrial packaging. This has helped to vet and control plastic bags being used for primary industrial packaging which was exempted in the ban.

[The writer is NEMA's corporate communications officer]

# World clean up day



Dignitaries who participated in the cleanup exercise at Mama Ngina Drive, Mombasa [PHOTO: S. IRUNGU/NEMA]

## Kenyans urged to keep environment clean

By Samwel Irungu

**World Cleanup Day is a global environmental event that is commemorated every third weekend of September. The Day was first commemorated in 1993. The day aims at promoting community action as the key to long-term environmental change.**

Kenya joined the world in this year's World Cleanup Day that was celebrated at Mama Ngina Drive in Mombasa County on 15th September 2018 under the theme "beat plastic pollution". Apart from the national celebrations in Mombasa, various counties organized cleanup exercises within their jurisdictions. The aim was advancing the ongoing campaign on anti-littering and riding off the environment of plastic waste. This year's event sought to unite the world for a one massive cleanup action towards promoting positive action in the world.

The day also marked some of the milestones that the country

has achieved in environmental management. Moreover, it provided an opportunity for the country to reevaluate strategies used to implement the ban in order to address challenges of plastic waste into the environment.

During the day, dignitaries joined the public at a cleanup exercise at Jomo Kenyatta Public Beach, Mombasa old town and Mbaraki sports club. This was followed by a procession from the Mombasa golf club to the venue of the event.

The event was attended by ministry of environment and forest CAS Mohammed Elmi, Mombasa County Deputy Governor Dr. William Kingi, NEMA board of management led by its chairman, Mr. John Konchellah, Director General, Prof. Geoffrey Wahungu among various members of the staff.

Chief Administrative Secretary, Mohammed Elmi challenged the counties to come up with lasting solutions such as waste management by reducing, recovering and recycling. He further



# World clean up day

urged the Counties to increase waste management budgets and set aside cleanup activities.

The event was also graced by UN Habitat Country Director, Maimuna Sharif who noted that countries all over the world are working on turning waste into cash through Reducing, Reusing, Recycling and Rethinking. She added that international organizations have also joined the call to support governments in provision of clean environment and waste management.

Speaking during the event, NEMA board chairman, John Konchellah highlighted some of the successes that the Authority has achieved in its bid to provide a clean and healthy environment. Among them included the ban on plastic bags that had achieved commendable success over the past one year since August 2017. He noted that despite the success of the ban, the country is still grappling with presence of flat bags that normally get into the country from the neighboring countries.

NEMA Director General, Prof. Geoffrey Wahungu urged the enhance the waste management initiatives since waste management is a devolved function. He appealed for their support in the continued implementation of the plastic ban. He alluded that the success of the plastic ban will be due to effective collaboration between the various government agencies, County governments and private sectors.

[The writer is NEMA's Corporate Communications Officer]



NEMA Chairman John Konchellah (2nd R) with DG, Prof. Geoffrey Wahungu (3rd R) exchange notes during the event. UN Habitat Country Director, Maimuna Sharif ( R ) and NEMA Board member, Neto Agostinho (L) during the event [PHOTO: A. MWANGI/NEMA]



The procession at Mama Ngina Drive in Mombasa during the event [PHOTO: A. MWANGI/NEMA]



Participants during the cleanup at Jomo Kenyatta Public Beach, Mombasa [PHOTO: S IRUNGU/NEMA]



NEMA Chairman John Konchellah addressing participants during the event



# NEMA-DENMARK



## Partnership

By David Ong'are & Joseph Makau

Denmark has been a traditional development partner for Kenya over several decades. This has seen the implementation of a variety of programmes across different sectors. Two previous programmes have been successfully implemented in NEMA including the Environment Programme Support (EPS 2006-2010); the Natural Resources Management Programme (NRM 2010-2016). Discussions started a while back over a successor programme to the danida funded Natural Resources Management (NRM) programme (2010-14). In December 2015 NEMA signed off on a partnership agreement on a new programme dubbed The 'Green Growth and Employment Programme (GGEP)'

The Green Growth and Employment Program is based on the vision of the Denmark-Kenya Partnership Policy 2015-2020 and will support the objective of Kenya's Vision 2030 "Contributing to a globally competitive and prosperous nation with a high quality of life by 2030". The Government of Denmark has agreed to partner with the National Environment Management Authority (NEMA, Kenya) to implement the 'Greening Kenya's Development Pathway' component of the 'Green Growth and Employment Program' (GGEP) that is earmarked to run from July 2016 to June 2020. The total funding support to NEMA over this period will be approximately 40 Million Danish Kroner (approximately KES 560 Million).

### Programme Management



Green Point in Isiolo

A programme management team has been constituted comprising of representation across all departments.

A DANIDA advisor, Mr. John Balarin has been seconded to NEMA to provide strategic insights to the programme. Unlike previous arrangements, NEMA is now considered mature enough and will not therefore benefit from a long term Technical Advisor company facility.

### Summary Achievements

Both the NRM and GGEP programmes contributed substantially to the revision of the Environmental Management and Coordination Act (EMCA) CAP 387 of the Kenyan Laws in 2015 to align it to the Constitution of Kenya 2010 and other current legal, institutional and environmental realities. The revised Act is now seen as one of the most progressive in the region.

Enhanced capacities of counties to undertake their environmental functions

In our current constitutional order counties play important roles in environmental management including county planning, air pollution, and solid waste management. In this regard NEMA needs to work closely with county governments. One of the avenues for achieving this outcome is through the county environment committees (CECs). According to EMCA CAP 387 the CEC is meant to be in charge of all environmental functions in a county. It is therefore important that NEMA works towards ensuring that CECs are established in all the 47 counties and that they are operational. To this end the authority through GGEP support has initiated a number of important interventions including the development of county environmental committee operational manual and guidelines; formulation of a basic enforcement course for counties; study tours with counties to a number of environmental facilities in Denmark; and

frequent consultations with the council of governors. Joint inspections have also been undertaken between NEMA and a number of county governments

Environment Action Plans are a smart way of setting the environmental targets that a country wishes to attain over a certain planning period. NEMA has always achieved these through the National Environment Action Plan (NEAP) and the County Environment Action Plans (CEAPS). The NEAP traditionally integrates the 47 CEAPs. A number of important results have been realized in this area including the rollout of Environment Action Plan Preparation guidelines at both the national and county levels; 10 counties have been supported to develop and review their action plans while 27 counties have already developed draft action plans and a CEAPs due diligence toolkit has been developed and validated. The 2016/17 National State of the Environment Report is nearing completion with key input from lead agencies in various environmental sectors.

The Environment Performance Index (EPI)

NEMA has begun a transformation process of changing the "mind-sets" of different lead agencies (i.e. MDAs and Counties) and private sector aimed at affecting a shift from Kenya's current brown economic growth trajectory towards a greener economic pathway. Progress towards this goal is reflected in the Yale and Columbia University 2018 global Environmental Performance Index (EPI) which shows Kenya has moved from a 2014 ranking of 140/180 to 130/180, and from a baseline EPI of 36.99 to 47.25. NEMA is now leading a process to generate a home-grown Environmental Performance Index (EPI) which will now be a more scientific way of measuring the country's environmental performance based on local indicators. Additionally this



# NEMA-DENMARK Partnership

will also help monitor and compare performance by counties; shape discussion at the local level regarding the place of environmental goods and services; and secure resources for the environmental sector. On a broad scale this tool will help inform policy decisions and resource allocation at County, Country, and private sector levels

## Green Points

Danida agreed to support the development and activation of green points along the key agro-ecological zones of Kenya. These serve a number of functions including: demonstrating that NEMA practices what it preaches in terms of green designs (solar usage; water recycling; solid waste management etc.). The green points also serve to link NEMA and county governments where joint meetings are undertaken for a variety of activities. Several community-inspired activities have taken place including thematic exhibitions on issues such as energy conservation, water resource use, conflict management, human rights issues, and climate change, to name but a few. These centres have also been used to demonstrate local innovations and promote the voice of the private sector in sustainable environmental management. Due to the information, education and communication materials in these facilities the centres continue to receive visits from both research and educational institutions. To date, eight green points have been established in Taita Taveta, Kilifi, Embu, Isiolo, Homa bay, Kajiado, Elgeyo- Marakwet, and Samburu. The Japanese Development agency, JICA is looking to place volunteers from Japan at the green points to advance both their learning and to strengthen the outreach capabilities of these centers of excellence.

As a coordinator and supervisor of all environmental matters in the country, NEMA receives and is required to respond

to environmental incidents in a timely and effective manner either directly or in conjunction with lead agencies. This informed the need to establish a Rapid Environment Response Unit (RERU). The latter unit needs to be designed from a human, technological, and operational front.

The programme has engaged a consultant to redesign NEMA's response unit. This will look at how incidents are received, classified and handled. The consultant will map out and assess the current institutional status and players in the National Rapid Environment Emergency Response Framework (RERF). The aim is to clarify the role of the Disaster Management Unit (DMU) and first responders, lead agencies and county roles, to undertake a vulnerability assessment and to recommend a clear RERF structure and role of NEMA, recommending ways to strengthen NEMA's coordination and supervision mandate as in the Environmental Management and Coordination Act (EMCA) CAP 387.

To support the Rapid Environment Emergency Response Unit (RERU), NEMA, through GGEP support, designed and ordered a vehicle for the purpose of having a mobile team that can react to emergency incidents. It is kitted with Personal Protection Equipment (PPE) and kits for effluent and air emission quality checks in an effort to pre-empt or contain potential hazardous situations from developing.

On the same note the laboratory at NEMA has undergone major upgrades and has been re-fitted and equipped, and is complementary to the water and air quality mobile units supported by World Bank's Kenya Petroleum Technical Assistance Project, which are now fully functional.

Danida Fellowship Centre Trainings

As one of the implementing partners of the Green Growth and Employment Programme (GGEP) NEMA is a beneficiary of training opportunities at the Danida Fellowship Centre (DFC) in a wide array of areas including management, climate change, gender, green economy among others. To date over 100 NEMA staff have benefited from these trainings from both headquarters and the field offices. These trainings have translated into direct capacities for NEMA to implement her mandate. Whereas it might not be possible for all staff to access these courses, those trained are expected to mentor others. Relevant course materials are expected to be deposited in the online Knowledge Management System (KMS) for access by all.

## Testimonials

"While I have travelled to Denmark I have attended one course through DFC and a study tour of the municipality of Odense courtesy of Danish Environmental Protection Agency (DEPA). The first course I attended was on Natural Resources management that had international participants and hence it offered me a great opportunity to share my experience with other professionals in the world, and we continue to interact and network to date. I was privileged to attend a study tour that gave me the chance to learn how Denmark, a developed country manages her environment because it is very clean and beautiful. From that experience I remain hoping to get an opportunity to work with the Danish



Kajiado Green Point

# NEMA-DENMARK Partnership



Environmental Protection Agency". Wachira Bore; Regional Director, Mt. Kenya

"I attended two DANIDA training programs in Denmark in the year 2017. The first was on environmental inspection and the second on Green and Circular Economy respectively. The training contributed to my understanding of green and circular economy and the available technologies and measures necessary for a green development pathway. It further improved my skills in building partnerships and collaborations within the county of Kajiado where I work."

The most exciting moment was when the organizers (DFC) ensured that the learners attended the Building Green conference held in Copenhagen where we were able to learn more, build networks with the participating institutions, researches, students, and innovators with practical solutions towards green growth.

Enhanced Public Private Partnership in the Adoption of Green Technologies and Practices

The Government of Kenya, and by extension NEMA, in the aspiration of the sustainable development goals No. 17 acknowledges that a successful sustainable development agenda requires partnerships between governments, the private sector and civil society. The role of non-state actors in the sphere of environmental management especially through their practical knowledge bases; voluntary compliance, and adoption of cleaner production technologies can play as co-partners cannot and can never be overlooked in the modern environmental management.

With support of GGEP and in collaboration with the Kenya National Cleaner Production Centre (KNCP), NEMA continues the initiative for compliance promotion and assistance to industries in the Nairobi River Basin, the Lake Victoria basin and the coastal zone. The program

aims at reducing emissions and effluent discharges as well as increasing competitiveness of the industries by promoting resource efficiency, waste reduction and optimizing material use, water and energy utilization efficiency through the application of cleaner production, greener technologies and techniques. The initiative has been building the capacities of participating 46 industries on self-regulation and compliance promotion through industrial systems assessments in Nairobi basin.

Due to the benefits accrued from the Nairobi Basin cleaner production and compliance assistance programme, NEMA and KNCP extended it to the Lake Victoria Basin and the coastal region. A technical team from NEMA and KNCP has been leading the undertaking of recruitment, mapping, and sampling as well as detailed in-plant assessment of industries in readiness for cleaner production and circular economy using the industrial symbiosis concept. In the recent past the exercise has managed to map 102 industries from 14 counties namely Kisumu, Kericho, Nandi, Bomet, Kisi, Nyamira, Homabay, Narok, Bungoma, Kakamega, Vihiga, Elgeyo Marakwet, Nakuru and Uasin Gishu. NEMA sees a great transformation of environment in the manufacturing sector when these recruited industries will increase their resource efficiency and wastereduction.

NEMA has also initiated a partnership with the Ruaraka Business Community (RUBICOM) and Denmark's Environment Protection Agency (DEPA) that aims at making the Ruaraka industrial zone a "living laboratory" for industrial symbiosis, and a circular and green economy, a first of its own kind in Kenya and East Africa with scope for harmonized up-scaling in other parts of the country and the region.

NEMA has undertaken a plastics mass flow in Kenya and reviewed trends in

plastics management globally and prepared a draft strategy for plastics management in Kenya. Further, the Authority with GGEP support commissioned a study on the costs and benefits of using Economic Instruments that could be used for establishing a circular economy in the country.

A collaboration between the Ministry of Environment and Forestry, NEMA and Kenya Association of Manufactures (KAM) has been enhanced in pursuit of a sustainable management of plastic bottles and reduction of their pollution to the environment. A model take-back scheme has been developed and is under pilot as part of the extended producer responsibility concept and life cycle approach. This will ensure that waste plastic bottles do not continue to litter the environment but will be collected and probably be re-used; recycled or properly disposed of following the best practices. This cooperation has extended to leverage on the advantages of modern ICT innovation especially the use of mobile apps and online systems in data collection and management for the scheme. The actions here will assist in the formulation of environmental award schemes.

As the Green Growth and Employment programme 2016-2020 strides into its last half of implementation, the National Environment Management Authority reiterates her commitment to the goal of steering Kenya's development into a greener pathway. Through the inclusive partnership of Denmark and Kenya built upon principles and values, a shared vision and goals for a green economy, a clean health and sustainable environment for all in Kenya the NEMA board of management and the entire NEMA fraternity looks forward to a continued partnership beyond GGEP 2020.



# NEMA urges private sector to adopt Green Technologies



Dignitaries holding a tree seedling during a ceremonial tree planting at Ruaraka during the launch of a circular economy

[PHOTO: S. IRUNGU/NEMA]

By Joseph Makau

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# Protection of Riparian zones

By Joseph Makau

The demolition of structures on riparian reserve began on 6th August 2018. The exercise aimed at clearing Nairobi River and its tributaries of illegal structures that have been built on the riparian reserve. The exercise was under the inter-ministerial and multiagency activity under the Nairobi Regeneration Initiative.

In a press release, NEMA Director General Prof. Geoffrey Wahungu urged the public who have encroached on the riparian reserves in contravention of the Environment Management and Coordination Act (EMCA) to move back to the legal setback distance stipulated in law or/as stated, as a condition in the EIA licence where this has been issued.

Some of the structures that have been demolished includes Java

Restaurant and Shell Petrol Station, SouthEnd Mall, Ukay Centre, part of Oshwal Centre among others. The activity will continue for facilities where the notices issued have lapsed and at a cost to the proponent of these structures.

Speaking on an interview with Citizen TV, Prof Wahungu stated that the Authority in collaboration with other agencies were working within the law to bring structures that have encroached on riparian reserve. Wahungu observed that all buildings marked for demolition were sanctioned in 2016 as they had encroached on the riparian reserve. He added that the aim of the exercise is to clear Nairobi of any illegal buildings.

{The writer is Brenda Rajwai, NEMA Intern}



Demolition of Shell Petrol Station in Kileleshwa {PHOTO: COURTESY}



# School's effort to protect environment

By Samwel Irungu

The Orchard school in Kitengela hosted a Tree planting and World Environment Day on 21st June 2018.

During the event, the school planted 1200 trees within its compound. The school also unveiled a signage at her gate proclaiming the school to be "Plastic bag free School".

The Director General was represented by Dr. Catherine Mbaisi who praised the school for its effort to conserve environment and joining the rest of the country in planting trees. The school's director, Josphine Mutua appreciated the NEMA for its support towards making the event successful.



NEMA's Dr. Catherine Mbaisi watering a tree during the tree planting at Orchard School [PHOTO: S. IRUNGU/NEMA]



Guests standing at the signage at the school's gate that declares it is a "plastic bag free school" during the event [PHOTO: S. IRUNGU/NEMA]

# Climate change competition launched

By Samwel Irungu

The National Climate Change Art and Essay Competition was launched on 1st August 2018 at Kilimani Primary Primary School.

The event was officiated by Environment Permanent Secretary Ministry of Environment and forestry, Susan Mochache and Chief Administrative Secretary, Mohammed Elmi.

The ministry of Environment and Forestry invites participants to share their creativity and artistic talent by showcasing their level of awareness, knowledge, skills and activities on climate change by drawing, painting or writing.

The competition was open to public and private, primary and secondary schools. The winners from various schools walked home with various awards such as Ipads, Laptops and a fun edutainment trip.



NEMA's Anne Theuri receives PS Environment and Forestry, Susan Mochache at NEMA Exhibition booth during the launch [PHOTO: S. IRUNGU/NEMA]



Dignitaries who attended the launch of climate change and art competition at Kilimani Primary School [PHOTO: S. IRUNGU/NEMA]

# Key Services



**nema**  
mazingira yetu | uhai wetu | wajibu wetu

## **The Authority Key Services include:**

**Registration and Licensing of  
Environmental Impact Assessment (EIA)  
and Environmental Audit (EA)**

**Environmental Impact Assessment  
Licensing Environmental Auditing**

**Environmental Incident Management**

**Environmental Inspection**

**Environmental Information, education  
and Communication (IEC)**

**Environmental Reporting**

**Environmental Planning  
Development of Curriculum for  
Training of Environmental Impact**

**Assessment/Audit Experts**

**Administration of An  
Environmental Awards  
Scheme**



**nema**  
mazingira yetu | uhai wetu | wajibu wetu

### **Our Vision**

To be a World - Class  
Environmental Management Authority

### **Mission Vision**

To ensure a clean, healthy and sustainable environment  
in Kenya through supervision and coordination  
of all matters relating to environment

### **Our Motto**

Our Environment, Our Life, Our responsibility  
Mazingira Yetu, Uhai Wetu, Wajibu Wetu

### **PLEASE**

Report Environment Incidents to:  
Tel: 0786 101 100 | 0741 101 100  
Email: [incidence@nema.go.ke](mailto:incidence@nema.go.ke)

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