



nema

mazingira yetu | uhai wetu | wajibu wetu

A Quarterly Publication

nema news

The National Environment Management Authority

January - March 2018

# Lake Ol Bolossat declared a Wetland protected area



**Kenyans comply with plastic bag ban**



Ministry of Environment  
and National Resources

## EFFECTING THE GAZETTE NOTICE ON THE BAN ON PLASTIC BAGS



nema  
mazingira yetu | uhai wetu | wajibu wetu  
National Environment  
Management Authority

### FREQUENTLY ASKED QUESTIONS (FAQs)

**Question 1: Which plastics have been banned?**

**Answer:** The ban applies to all plastic carrier bags and flat bags used for commercial and household packaging.

**Question 2: What is a plastic carrier bag?**

**Answer:** This is any bag regardless of its thickness or colour, used at the supermarkets, retail stores, shopping malls and grocery stores as secondary packages.

**Question 3: What is a flat bag?**

**Answer:** A flat bag is a plastic bag constructed without handles and may have a gusset or not.

**Question 4: What are the major concerns of plastics bags?**

**Answer:** Plastic bags are usually manufactured for single use and generally tear or puncture after a first use. They are easily transported by the wind and are some of the most visible components of roadside and shoreline litter. Plastic bags are produced from oil and natural gas, and never fully biodegrade, remaining in the environment as small or even microscopic particles, essentially forever.

**Question 5: Are plastics used for primary industrial packaging also banned by the Gazette Notice?**

**Answer:** No, plastic bags used for industrial packaging are exempted so long as they are used for industrial primary packaging at the source of the product and are not available on sale at the counter or given freely outside the industrial setting. Furthermore, the bags must be labelled clearly by the industry manufacturing the product.

**Question 6: When are manufacturers and importers required to stop providing plastic single-use carrier bags to customers?**

**Answer:** By August 28th, 2017. Furthermore all manufacturers and importers shall declare all their remaining stocks by the due date to the National Environment Management Authority for necessary action.

**Question 7: Will exporters of plastic single-use carrier bags continue to manufacture the bags?**

**Answer:** NO. The manufacturing of all plastic carrier bags shall cease by 28th August 2017.

**Question 8: Will there be a “grace period” for retailers to comply?**

**Answer:** The Gazette Notice was published on 28th February, 2017, allowing six (6) months grace period for necessary adjustments and compliance.

**Question 9: Are retailers allowed to use up existing stocks of plastic bags after August 28th 2017?**

**Answer:** No, retailers are required to clear stocks within the grace period. Furthermore, all retailers shall declare all the remaining stocks by the due date to the National Environment Management Authority for necessary action.

**Question 10: Can retailers provide paper bags as an alternative to plastic carrier bags?**

**Answer:** Yes.

**Question 11: What are the alternatives to plastic carrier bags?**

**Answer:**

1. All bags made of non-plastic materials e.g. jute/sisal bags, cloth bags, papyrus bags, canvas bags and buyers/shoppers own shopping bags.
2. Woven Polypropylene plastic bags (gunny bags)
3. Non-woven polypropylene plastic bags (cloth like bags)
4. Laminated polypropylene bags
5. Polyolefin fibre bags

**Question 12: Which retailers are affected?**

**Answer:** All Retailers

**Question 13: Are small retail businesses exempt?**

**Answer:** No.

**Question 14: Are bin liners exempted?**

**Answer:** Yes. Bin liners have been exempted for the following categories of waste;

1. Biomedical waste,
2. Hazardous waste
3. Garbage

On condition that they are legibly and permanently labelled the name of the industry manufacturing the product and the end-user (here being NEMA licensed waste handler/Transporter.

**Question 15: Is there an exemption for clothing stores?**

**Answer:** No. Exemptions apply to only primary industrial packaging which is in accordance with approved standards as indicated in 5 and 14 above.

**Question 16: Are duty free bags exempted?**

**Answer:** Yes. Duty free bags are not affected by the ban though they use is restricted within the Duty free shop and they should not be available for sale or use within the Kenyan market. Furthermore any traveller coming into Kenya with duty free bags shall be required to dispose the same at the entry points or in the aircrafts prior to disembarking their flights.



ISO 9001-2008 Certified



NemaKenya



National Environment Management Authority - Kenya



www.nema.go.ke

Report environmental incidences on: 0786 101 100, [incidence@nema.go.ke](mailto:incidence@nema.go.ke)



Our Environment, Our Life, Our Responsibility



A Quarterly Publication  
**nema** news  
The National Environment Management Authority

# Contents

## Editorial Team

Evans Nyabuto  
Judith Ochieno  
Agnes Kamiri  
Samwel Irungu

## Contributors

Samwel Irungu  
Joy Kivata  
Dorcas Kahuthu  
Anthony Saisi  
Edith Kyalo

## Photography

Anthony Mwangi  
Samwel Irungu  
Dorcas Kahuthu  
Antony Saisi

## Printed by:

Segu Publications- Nairobi

## Published by:

National Environment Management Authority, Popo Road, South C, off Mombasa Road  
P.O. BOX 67839-00200, Nairobi.  
Kenya | Mobile: 0724 253398, 0735 013046.  
Email: dgnema@nema.go.ke

4 | Editorial

12 | Kajulu quarry Rehabilitation

5 | CS pays courtesy call to NEMA

7 | NEMA plants 1000 trees

13 | Pictorial

8 | DG NEMA visits Wetlands International

16 | Lake Chala in Taveta

9 | NEMA Mop up plastic bottles

18 | Lake Ol Bolossat gazetted

10 | DG tours Muthurwa and Wakulima markets

20 | NEMA acts on noise polluting clubs

11 | Training on Ozone and Climate coolers

21 | Plastic bags crackdown enhanced

26 | DG, Chairman visit to Green Park



## Editorial

# In the quest to provide a clean environment

The appointment of the new Cabinet Secretary for Environment and Forestry, Mr. Keriako Tobiko during the quarter came as a blessing for the Authority. His first point of call was NEMA, a day after he officially took over the docket. During his courtesy call, the CS noted the successes that have been achieved in the environment sector. He assured the Director General of his absolute support to enable the Authority effectively discharge its mandate of providing a clean and healthy environment for All.

This year, World Wetlands Day (WWD) 2018 had a remarkable achievement to the residents of Nyandarua County as the only fresh water lake in central region, Lake Ol Bolossat was declared a protected wetland area effective January 24th 2018 by the then CS for Environment Prof. Judi Wakhungu. Following this vital declaration, the National Lands Commission Chairman, Mohammed Swazuri moved in to declare all title deeds

for the land within and near the lake dissolved.

The implementation of the ban on plastic bags continued to gain momentum across the 47 Counties. The Authority focused on enforcement and compliance with the ban where several culprits found using, importing and manufacturing the banned plastic bags across the country were arrested and prosecuted in the court of law. In implementing the ban, the Authority received enormous support from various quarters especially from the ministry of Environment and Forestry. During the quarter, the Authority also embarked on working on a take back scheme for plastic bottles in liason with other stakeholders such as Kenya Association of Manufacturers (KAM) and the parent ministry.

The Authority also joined the rest of Kenyans in tree planting throughout the country. As such, the Authority played an active role

in planting of trees in the Counties. For instance, the Authority marshalled all her staff during the tree planting in Ngong Forest as well as during the launch of tree planting season by the President. The Clean-up of Nairobi River and its environs has also been a major undertaking for the Authority where action has been taken against those polluting the river including demolition of premises within the riparian reserves.

Despite the fact that noise pollution was devolved in 2013, the Authority moved in to stamp her Authority by closing several noise-nuisance clubs that lacked recommended sound proof systems hence causing extreme loud noises. The clubs were demanded to immediately close until they satisfactorily comply with the law provisions on noise pollution.

The Authority achieved much within the third quarter as captured in the stories herein.

Enjoy the read!

*Evans Nyabuto,*

**Chief Corporate Communications  
Manager**



# CS pays courtesy call to NEMA

By Samwel Irungu

*DG with CS Keriako Tobiko during the Carbon forum*

Cabinet Secretary Ministry of Environment and Forestry, Mr. Keriako Tobiko paid a courtesy call to NEMA headquarters on 20<sup>th</sup> February 2018. The CS was received by NEMA Director General Prof Geoffrey Wahungu. The CS visited the Authority just a day after he officially took over the docket from the outgoing CS Prof Judi Wakhungu. The CS noted the successes that have been achieved in the environmental sector spearheaded by NEMA.



**Environment and Forestry CS, Mr. Keriako Tobiko is received by NEMA Chairman, Mr. John Konchellah and NEMA DG, Prof. Geoffrey Wahungu at NEMA [PHOTO: S. IRUNGU/NEMA]**



**CS Environment and Forestry Mr. Keriako holds talks with NEMA Director General Prof. Geoffrey Wahungu during the courtesy call [PHOTO: S. IRUNGU/NEMA]**

He promised to offer his absolute support to enable the Authority achieve its mandate. “I thought as important to make this the first point of call to emphasize the centrality of your organization and as an assurance of very high esteem which I hold you and your organization,” the CS said.

He assured the Director General of his support but stressed on the need for the Authority to do its job and do it effectively. He further stressed on the need to continue with the crackdown on the banned plastic bags. “We made the decision to ban plastic bags and there is no going back,” he stated.

He asserted that the crackdown on the banned plastic bags must be sustained to achieve the desired results. He assured the DG that he will support the ongoing discussions on the plastic bottles.

The Director General thanked the CS for making NEMA his first point of call. He assured him that the Authority will continue discharging its mandate effectively. The CS also held a meeting with the NEMA management team where he reaffirmed his support for the Authority going forward in achieving its mandate.

The CS held a meeting with the NEMA board of management where salient environmental issues facing the country were discussed.



**CS for Environment and Forestry, Mr. Keriako holds a meeting with the NEMA management team during the visit [PHOTO: S. IRUNGU/NEMA]**



**The meeting in progress at NEMA headquarters [PHOTO: Dorcas Kahuthu/NEMA]**

*The writer is NEMA’s Corporate Communications Officer)*



# NEMA plants 1000 trees

By Dorcas Kahuthu

**NEMA DG Prof Geoffrey Wahungu, Deputy Director Environmental Services, Mamo Boru assists CS Environment Keriako Tobiko plant a tree at Ngong forest [PHOTO: A. MWANGI/NEMA]**

NEMA planted 1000 trees during the launch of national tree planting campaign in Ngong forest on 7<sup>th</sup> March 2018. The Campaign was launched by Environment and forestry, Cabinet Secretary, Mr. Keriako Tobiko. The Authority's staff were assigned a section within Ngong forest where they to plant trees, zone it and ensure they grow.

The exercise was led by NEMA Director General Prof Geoffrey Wahungu who was joined by board members who also participated in the tree planting. The government launched the initiative aimed at surpassing the mandatory 10 percent forests cover envisioned in 2030 by five percent. This target hopes to be achieved by 2022.

During the launch, Mr. Keriako stated that the exercise will see the ministry agencies plant and commit to adopt thousands of trees to celebrate the national tree planting campaign. Speaking at Ngong Road Forest Block 5 along the Southern bypass, he said the ministry is drafting a strategy to set aside a National Tree Planting Day to be commemorated annually. He added that each county will be required to plant a minimum of a million tree seedlings every year to ensure the target is made.

"This development is partly in line with the Forest Resource Management and Logging Activities Task Force, which was set up by the Deputy President William Ruto to protect forests and water catchment

areas from degradation. Kenyans are encouraged to go out and plant as many trees as possible this year to help reverse environmental degradation and double our forest cover," said the CS. He noted that as the national tree planting campaign kicks off, corporates, schools, disciplined forces and individuals among others should join hands to ensure a sustainable adoption of a tree planting and nurturing culture in the country.

During the launch, a total of 10,000 trees seedling was planted in Ngong forest. Several government and non-governmental organizations took place including NEMA, Kenya Forest Service, Kenya Forest Research Institute, Kenya Metrological Department, Kenya Water Tower Agency and the Red Cross.



**NEMA planting trees at Ngong forest**

*(The writer is an Intern at Corporate Communications Section)*

# DG NEMA visits Wetlands international

By Joy Kivata

National Environment Management Authority Director General Prof. Geoffrey Wahungu has lauded Wetlands International for its great efforts towards the conservation of wetlands in the country, which feeds into the ongoing government efforts to afforest, secure and conserve national water towers and wetlands. The DG pledged his support in implementing the wetlands agenda for this country through wetlands conservation and management.

The DG said this when he made a courtesy call to Wetlands International regional office on Wednesday 14th March 2018, where he held a meeting with the Regional head, Mrs. Julie Mulonga and NEMA Deputy Director, ecosystems Mr. Stephen Katua. "I have come here to assure you of my support in implementing the wetlands agenda in this country through conservation and management," he said this pledging to support Wetlands International achieve its vision and conservation objectives.

During the meeting, Mrs. Mulonga assured the DG of the organizations support in his great plans to streamline environmental conservation initiatives and thanked him for the visit.

She enumerated the successes achieved by Wetlands International in its various project areas, working with NEMA and looks forward for more collaborations and partnerships that will enhance the conservation of wetlands in the country.

Other issues discussed was building partnerships for conservation and management of wetlands in the country and how the conservation and management of coastal wetlands and mangroves can improve the coverage of coastal forests in Kenya.



**DG NEMA Prof Geoffrey Wahungu with Wetlands International Regional head, Mrs. Julie Mulonga during the courtesy call** [PHOTO: COURTESY]

.....  
Last year, Wetlands International Kenya and NEMA Kenya signed a Memorandum of Understanding (MoU) that provides for collaboration in the implementation of actions towards sustainable management and promotion of "wise use" of wetlands in Kenya.

Currently we are in the process of reviewing the Wetlands, River banks, Lake Shores and Seashore Management Regulations, 2009 to align with the Constitution of Kenya 2010 and the Amended EMCA Cap 387 to provide for the conservation and sustainable use of wetlands and their resources while promoting integration of wetlands resource use into local and national management aspirations.



**From R\_ NEMA DG. Prof. Geoffrey Wahungu, CEO Wetlands International, Julie Mulonga, NEMA Director, Stephen Katua and Joy Kivata** [PHOTO: COURTESY]

.....  
*(The writer works for Wetlands International EA)*

# NEMA urges counties to mop up plastic bottles

By Samwel Irungu



**NEMA DG. Prof Geoffrey Wahungu speaking to the media during the press briefing at Kirichwa Kubwa River, Nairobi**  
[PHOTO: S. IRUNGU/NEMA]

The NEMA Director General, Prof Geoffrey Wahungu has advised Kenyans to stay vigilant as the country continues to experience heavy rains and floods. Prof. Wahungu was speaking on 15<sup>th</sup> March 2018 while visiting a section of Nairobi River at the Kirichwa Kubwa River along St. Mary's Primary School, where large amounts of plastic bottles had been washed by floods.

Prof. Wahungu stated that naturally, floods clean up the environment and plastics and debris being witnessed in several parts of the country following



**Kirichwa Kubwa River in Nairobi where it was overflowing on the Road**

heavy rains should heighten efforts to fight pollution from plastic bottles. He urged counties to mop up plastic bottles that have contributed to the blockage of drainages leading to overflowing in major areas in Nairobi and other parts of the country.

Prof. Wahungu added that plastic bag ban that is under implementation has successfully resulted in cleaning of the environment. He added that the Authority is in talks with stakeholders to ensure that the take back scheme of plastic bottles is in place by April 1<sup>st</sup>.

*The writer is NEMA's Corporate Communications Officer)*

# DG tours Muthurwa and Wakulima markets

By Samwel Irungu



**NEMA DG Prof. Geoffrey Wahungu receives bananas from a trader in Wakulima market** [PHOTO: S. IRUNGU/NEMA]

The NEMA Director General Prof Geoffrey Wahungu on 6<sup>th</sup> March 2018 toured Wakulima and Muthurwa markets to assess the level of compliance with the plastic bags ban. The Director General was particularly impressed by the level of compliance in the two markets where he called on other markets in the country to emulate them.

“Today, we came here not to carryout inspections or enforcement. We have come here to assess the level of compliance and create awareness on the plastic bags ban”, Prof Wahungu said. He added that the Authority has engaged the chairman’s of the market and the sector leaders who we have engaged and have taken the role of ensuring that no plastic bags are being used in the market. He urged traders of the markets to continue complying with the ban and examples to other markets who are still using plastic bags.

Prof Wahungu encouraged the traders to practice voluntary compliance with the plastic bags ban. The Director General was accompanied by Nairobi County CEC for Trade.



**NEMA DG Prof. Geoffrey Wahungu sensitizes traders at Muthurwa market on plastic bags** [PHOTO: S. IRUNGU/NEMA]

*(The writer is NEMA’s Corporate Communications Officer)*

# Government gives training institutions Ozone and Climate coolers

By Dorcas Kahuthu

The government under the Ministry of Environment and Forestry led by the PS Charles Sunkuli in partnership with GIZ on 13<sup>th</sup> March 2018 handed over modern cooling and ozone and climate friendly equipment carbon to five training institutions worth 3M. The event took place at Nema headquarters.

In attendance was Nema Director General, Geoffrey Wahungu, Director General Nita Paul Kosgei, Director MEA's, Richard Mwendandu, GIZ Prokiime Project Manager, Neeta Sharma, National Ozone Unit Coordinator Kirui, Director of Administration in the ministry Charity Chepkonga among others.

The equipment is ozone and climate friendly hence will help the ministry join the world in fighting global warming. The Ministry is assisting the training institutions in capacity building towards conserving the environment. The equipment is environmental friendly, cheap, produced locally (thus creating

employment) and have a low global warming potential.

The beneficiaries included Technical University of Mombasa, Technical University of Kenya, National Industrial Training Institute (NITA) of Mombasa and Kisumu and Nairobi Technical Training Institute who received one set each.

The Ministry through the National Ozone Unit in collaboration with GIZ Prokiime of the German government partnered with Frigoglass Company to acquire the modern cooling and ozone and climate friendly equipment. The equipment is one of the refrigerators being adopted in the world to replace ozone depleting substances and substances with negative impact on climate.

*(The writer is NEMA's Intern at Communications Section)*



The meeting in progress at NEMA headquarters [PHOTO: Dorcas Kahuthu/NEMA]

# Rehabilitation of Kajulu quarry ongoing

By Saisi Aura Antony

The Director General NEMA Prof. Geoffrey Wahungu visited Kisumu County on 27<sup>th</sup> February, 2018. The visit was to assess and monitor the progress of the ongoing rehabilitation of the Kisumu Concrete Products Limited quarry in Kajulu.

The ongoing project involves the use of semi-inert material from Kachok dumpsite, in quarry rehabilitation. The project commenced two weeks ago after the proponent, Kisumu Concrete Products Limited (KCPL) was issued with an EIA license from the National Environment Management Authority (NEMA).

During the visit the Director General was accompanied by Dr. Phillip Mwabe who is a Waste Management Expert. The County Director of Environment (CDE) for Kisumu County, Mr. Saisi Aura joined the Director General NEMA and the entourage in the monitoring activity

The Director General was able to witness the loading of the semi-inert material, the onsite treatment to reduce the attraction of flies and rodents, recording of data and the workers use of Personal Protective Equipment (PPE) at the Kachok dumpsite.

While onsite, the Director General also met the

City Management Team under the leadership of City Manager, Mrs Ombara. She informed the Director General that their dream is to have better management of waste after they have cleared Kachok and also having it rehabilitated. The Director General thanked the team and generally the County Government of Kisumu for the move and efforts in ensuring that they have better practices and technologies of waste management.

The Director General and his team later on moved to Kajulu where the rehabilitation is being carried out by Naya Holdings Limited. He was able to witness the ongoing rehabilitation where the liner and leachate management had been taken care of. He also saw the use of the quarry dust in reinforcing the embankment and in the backfilling process.

The Director General appreciated the ongoing works and even asked the proponent to do proper documentation as this could be a case study for the country. He insisted on strict supervision and monitoring of the boreholes within the vicinity to reduce any underground pollution.

*(The writer is NEMA's CDE Kisumu County)*



Kajulu quarry

# NEAP Stakeholders validation workshop held

By Samwel Irungu



**NEMA Staff and stakeholders during the NEAP validation workshop at Weston Hotel, Nairobi [PHOTO: S. IRUNGU/NEMA]**

NEMA invited stakeholders to a validation workshop for the National Environmental Action Plan (NEAP) at Weston Hotel on 27<sup>th</sup> March 2018.

The workshop was opened by Deputy Director Research and Planning, Dr. Charles Lange who highlighted the importance of NEAP in integrating environmental concerns into the social and economic development planning process of the country with particular reference to the government agenda on the 'big four'

Stakeholders gave their input from their respective sectors which will inform the completion of the Action Plans. The NEAP will be critical tool in addressing environmental concerns at the county and national level.



**NEMA Deputy Director Environmental Planning and Research Coordination, Dr. Charles Lange speaking during the workshop at Weston Hotel, Nairobi [PHOTO: S. IRUNGU/NEMA]**

*(The writer is NEMA's Communications Officer)*

# Pictorial



DG NEMA Prof. Geoffrey Wahungu during the inspection of plastic bags at Muthurwa Market, Nairobi



DG NEMA, Prof. Geoffrey Wahungu plants a tree during the tree planting at Ngong forest



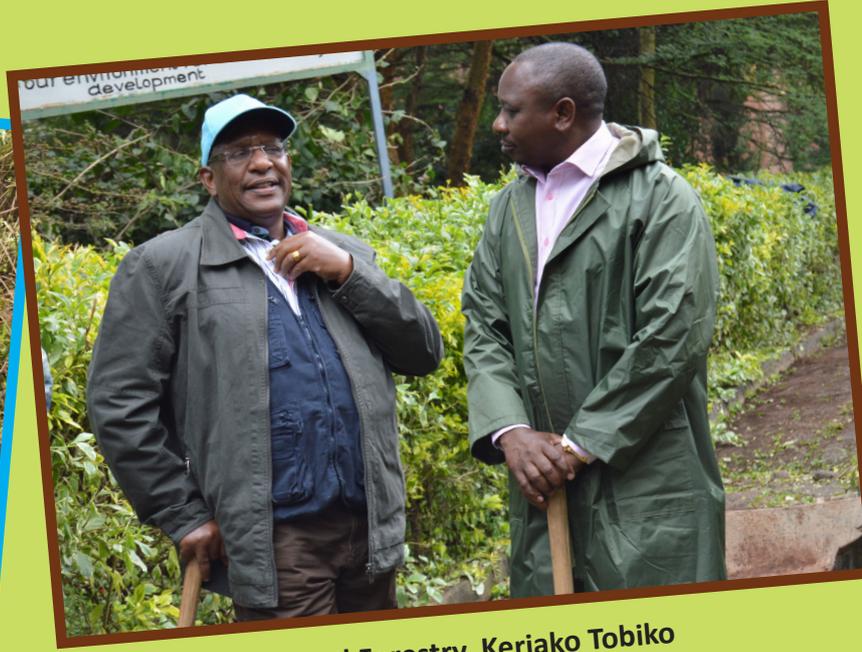
CS Environment and Forestry, Keriako Tobiko inspects tree planting at Ngong Forest



NEMA staff (FROM L)-Dr. Catherine Mbaisi, Evans Nyabuto, Mamo Boru and Anne Owino at the NEMA booth during the presidential launch of tree planting season at Moi Forces Academy



Board members Prof. Bernabas Mitaru (R) and Charles Oluchina chats with DG NEMA Prof. Geoffrey Wahungu (L) during tree planting in Ngong Forest



CS Environment and Forestry, Keriako Tobiko chats with DG NEMA Prof. Geoffrey Wahungu during the launch of Nairobi River Cleanup



Government delegation pays a courtesy call to the Governor's office Nyandarua County during the WWD celebrations.



# LAKE CHALA IN TAVETA

*By Edith Kalo*

## History

Lake Chala, also known as Dschalla is an ancient caldera lake, on the borders of Kenya and Tanzania on the eastern edge of Mount Kilimanjaro, 8km north of Taveta and 55 kms from the town of Moshi, and is said to be over 2.5 miles deep at its deepest point. A four-square-kilometre crater lake north of Taveta, Lake Chala has one shore in Kenya and the other in Tanzania. It is believed to be the caldera of the first volcanic eruption some three-quarters of a million years ago.

Lake Chala is the remnant of a mountain destroyed in an eruption at that time. The vast eruptions that caused the Great Rift a giant fault in the earth's crust that runs through East Africa, was the cause of what is now the Kilimanjaro massif. With molten lava bursting through the fractured surface of the land, the huge

pressures behind this eruption pushed part of the Earth's crust skywards, creating the Shira volcano, the oldest of the volcanoes forming the Kilimanjaro massif. Soon after Shira's extinction, Mawenzi started to form following a further eruption within the Shira caldera. Mawenzi has kept some of its volcanic shape to this day. A further huge eruption 100,000 years later led to the formation of Kilimanjaro's characteristic shiny black stone, this spilled over from Kibo's crater into the Shira caldera forming the so-called 'Saddle'.

Later eruptions created a series of distinctive mini-cones, or parasitic craters that run in a chain south-east and north-west across the mountain, as seen in the area around Chala. Lake Chala, is fed entirely by underground streams from Kilimanjaro with a rate of about 10 million m<sup>3</sup> / year, hence the normally clear waters. Chala in turn feeds the waters of Lake Jipe, some 30 kms distant as the crow flies, through



more underground systems. Water levels have been dropping over the last few years, and there is concern that one of the caves in the system may have collapsed, or maybe the waters from Kilimanjaro no longer soak down so strongly with the melting of the glaciers. Its level had dropped in the last 6 years, by 2.4 metres, at the start of 2011 the water level has risen again by over 1 metre.

Depending on the time of year, it ranges in colour from deep blue to turquoise and green, it is surrounded by a 100 metres high crater rim.

## Fauna and flora

According to the time of year there are hundreds of species of butterflies and birds, including spectacular birds of prey. The African Fish Eagle, with its haunting techniques, Verreaux's Eagle, Augur Buzzards and

many other species of birds can be seen around the crater walls. Wild mammals do vary including Blue Monkeys, Colobus Monkeys, baboons, dik-dik, kudu and elephant.

The Lake Chala Tilapia (*Oreochromis hunteri*) is a species of fish of the Cichlidae family, subfamily Pseudocrenilabrinae that is endemic to Kenya mainly found in Lake Chala. This species is critically endangered. Its natural habitat is freshwater lakes. It is found mainly in the tropical climate and grows to a maximum size of 30.0 cm SL (male/unsexed; Ref. 4967). Although the fish is unknown and its prices not yet categorized, it plays a major role in fisheries industry. In Africa it is.

Lake Chala is also home to one of the less known but important Aloe *Penduliflora Baker* (Liliaceae/Aloaceae). This is a species with long pendulous stems, occurring on the steep cliffs around Lake Chala. A recent suggestion that the poorly known Aloe *Penduliflora Baker* is identical with Aloe *Confusa Engler* is refuted. Living material collected in southeast Kenya has shown to be a closer match with all that is known of *A. penduliflora*. An amplified description of *A. penduliflora* is provided, and *A. confusa* is considered as a separate taxon. Lake Chala is rich in bird life and it is one of the areas with high population density of crocodiles in the country.

## Hydrogeochemical analysis

The major economic activities in this area are agriculture, horticulture and animal husbandry which account for about 75-80% of household income. Due reliance on rain fed agriculture, water scarcity has often had negative impact on the people and there is need to tap the lake water for irrigation purposes.

The type of water that predominates in the area is Ca-Mg-HCO<sub>3</sub> type, while one water from a shallow well is a Ca-Mg-chloride type based on hydro-chemical facies. The suitability of water for irrigation has been evaluated based on sodium percent, residual sodium carbonate, sodium adsorption ratio and salinity hazard and is therefore suitable for irrigation purposes.

.....  
*(The writer is NEMA County Director of Environment, Taita Taveta)*



# Lake Ol Bolossat gazetted

*By Samwel Irungu*

Dignitaries present during the WWD celebrations at Nyandarua County: R-L. Governor Tharaka Nithi Muthomi Njuki, CS Environment Prof Judi Wakhungu, CS health Sicily Kariuki, CS tourism, Najib Balala, Governor Nyandarua, Francis Kimemia and PS Natural Resources Margaret Mwakima [PHOTO: S. IRUNGU/NEMA]



**NEMA Chairman, Mr. John Konchellah making his remarks during the event** [PHOTO: A. MWANGI/NEMA]

**N**estled between the Aberdare ranges and Dondori ridge in Ol Joro Orok in Nyandarua County, Lake Ol Bolossat is the most vital lake in central Kenya. The lake is classified as an important bird area and source of Ewaso Nyiro River that supports livelihoods downstream.

Lake Ol Bolossat was gazetted as a protective wetland area effective from January 24<sup>th</sup> 2018 as declared by the Cabinet secretary ministry of Environment and Natural Resources, Prof Judi Wakhungu during the World Wetlands Day 2018 in Nyandarua County on 2nd February 2018 held at Kichakani grounds on the shores of the lake.

“The documents are now with the Attorney General but the effective date of Lake Ol Bolossat gazettment was January 24 and the lake stands as a protective wetlands area,” the CS said.

Following this vital declaration, the National Lands Commission chairman, Mohammed Swazuri stated that all the title deeds for the land stood dissolved. He noted that according to Sections 10, 11 and 12

of Lands Act 2012, the issuance of a gazette notice means the title deed of the land in question and any others prior to the notice cease.

The theme for this year’s World Wetlands Day was “Wetlands for a sustainable urban future and the domesticated slogan was “Healthy Wetlands, Clean Towns”.

During the fete that was hosted by Nyandarua County government, various dignitaries were present including Cabinet Secretary for tourism Najib Balala who represented the president, the incoming health Cabinet Secretary, Sicily Kariuki and Prof Judi Wakhungu, the outgoing environment cabinet secretary.

The guests were hosted by Nyandarua governor Hon. Francis Kimemia. The event was also

attended by Laikipia governor Hon. Ndiritu Muriithi and his Tharaka Nithi counterpart Hon. Muthomi Njuki. Members of parliament, County Executive Members, NEMA Board and management also graced the event.

While making his remarks, NEMA board of management chairman, Mr. John Konchellah assured the County of continued support to review, develop and implement various tools and instruments to ensure wetlands are well managed in the entire country. "NEMA board of management commits to continue promoting restoration and rehabilitation efforts aimed at conserving and managing wetland resources in the country," Mr. Konchellah said.

On his part, NEMA Director General Prof Geoffrey Wahungu reiterated the importance of wetlands in aiding human survival and protection from environmental disasters. He acknowledged that wetlands continues to face unprecedented threats that have led to their deteriorating and disappearance over the years.

## The Community Forum

The event was preceded by a community forum at Kasuku grounds in Nyandarua county on 30th January 2018 which was steered group of panelists drawn the community organizations dealing with conservation of the lake and some from the county. The event attracted more 300 participants and 10 panelists. It was a Q and A session where panelists presented their points of views towards projects and activities regarding the conservation of the lake. Some of the panelists included; Lake Ol Bolossat Environmental Conservation Network, Kirima Men Lake View CBO, NEMA, Laikipia University, Nyandarua County Government and Kenya Wildlife Services (KWS), Kenya Forest Service (KFS) and Water Resources Authority (WRA). The event was spearheaded by Wetlands International and NEMA.

## The Clean up

The clean took place at Kasuku market on 31<sup>st</sup>



**Cabinet Secretary for Tourism, Najib Balala awards one of the winners in the arts competition during the celebrations** [PHOTO: A. MWANGI/NEMA]



**The procession at Kasuku market in Nyandarua county** [PHOTO: A. MWANGI/NEMA]

January 2017 as a build up towards World Wetlands Day. The event was presided over by Nyandarua County First lady, H.E Anne Kimemia flagged by the County of Nyandarua Deputy Governor H.E Cecilia Mbutia. The participants included University of Nairobi, Kenya Red Cross,

Wetlands International, Nyandarua County government, Kenya Wildlife Services, Kenya Forest Service among others.

Speaking during the flagging off, the county first lady praised NEMA for banning the plastic carrier bags and enforcing it. "I support the ban on plastic paper bags as they used to be a nuisance to our towns. I will support the women in the county who come up with initiatives such as basketry to earn a living," she said to an ecstatic crowd.



**NEMA's Anne Owino speaks to dignitaries at the NEMA booth during the WWD 2018** [PHOTO: A. MWANGI/NEMA]



**NEMA's CDE Nyandarua County, Nancy Muui speaking during the WWD community forum at Kasuku town** [PHOTO: S. IRUNGU/NEMA]



**H.E First Lady Nyandarua County Anne Kimemia and Deputy Governor Nyandarua County Phylis Mbutia launching the Cleanup exercise at Kasuku town** [PHOTO: S. IRUNGU/NEMA]

*(The writer is NEMA's Corporate Communications Officer)*

# NEMA acts on noise polluting clubs

By Samwel Irungu

Despite the devolution of noise pollution function, NEMA remains the principle government instrument for the implementation of all policies relating to environment. With this mandate, the Authority has closed various clubs in Nairobi following numerous complaints from residents about excessive noise emanating from the clubs.

The clubs closed included Kiza Lounge, Space Lounge bar and Grill, Tavern and B-club. The clubs lacked recommended sound proof systems hence causing extreme loud noises. The clubs were demanded to immediately close until they satisfactorily comply with the law provisions on noise pollution.

In a press release to the media, NEMA Director General, Prof. Geoffrey Wahungu stated that the Authority had received numerous complaints from members of the public caused by extreme loud music

from the clubs that interfered with the comfort, health and safety of the residents contrary to provisions of Environmental Management Coordination Act, CAP 387 and the Noise and Excessive Vibrations Pollution Control regulations 2009.

The Director General added that, "Ideally, if you have to use a sound amplifying equipment, you must have a soundproof but there is no evidence of such measures in the clubs that have been closed.

NEMA Nairobi County Director of Environment, Njoki Mukiri who led other NEMA inspectors and police stated that the Authority had been compelled to serve the clubs with closure notices until the clubs satisfactorily meet the compliant levels set by the Authority.

.....  
(The writer is NEMA's Communications Officer)



# Plastic bags crackdown enhanced

By Dorcas Kahuthu & Samwel Irungu



**NEMA Deputy Director Compliance, Salome Machua speaks with Kamukunji MP Yusuf Hassan during the closure of Burma market** [PHOTO: D. KAHUTHU]

## Closure of Burma market

NEMA on Thursday 22<sup>nd</sup> February 2018 ordered the closure of Burma market in Nairobi for failure of the traders to comply with the plastic bags ban. In a letter signed by the Director General Geoffrey Wahungu and sent to acting Nairobi County Secretary Leboo Ole Morintat, NEMA said that the market will remain closed until the County demonstrates full compliance with the plastic bags ban. The ban on plastics was effected on August 2017.

Ground inspection by the Authority had established that traders at Burma market were using the banned plastic bags. 'The authority hereby orders the closure of Burma market immediately and within 24 hours after the receipt of this order,' read the letter. Nema had consulted with all law enforcement agencies in Nairobi, including the county police commander and his team and county askaris, all who will ensure the shutdown is enforced.

But on Friday 24<sup>th</sup> Feb 2018, NEMA officials, Burma Market Committee Members and the area MP held a meeting which aimed to come up with long term solutions to the problem. Led by the committee chairman the members said that the traders at Burma market had agreed to comply and stop the use of plastic bags and surrendered all that they had in store. More than 500 tonnes of plastic bags were surrendered by the traders.

The area MP Yusuf Hassan said "I have no argument in favor of plastics because they were banned, and during the talks I held with the traders this morning we came into an agreement to stop using the banned plastic bags and respect the law." He assured Nema that no more plastic bags will be used in the market and said he will work hand in hand with the traders and the county government to ensure the markets especially in his area will be plastic free zones.

Speaking to the press after the meeting, Nema deputy

director Enforcement Salome Machua said that they have gone around the market and have seen a high level of compliance by the traders and assured them that she will talk to the Director General so that he can pull down the closure but told the traders the closure is still on until the DG approves its re-opening. She warned those traders who will be found using plastic bags that their stalls will be closed down and those involved will be charged in a court of law. She told the traders to be a good example to other markets in Nairobi and the country at large by being a plastic free zone.

Markets are ganging up to resist the enforcement of the ban. But I promise you we will enforce. We will close the markets violating the law. Suspects will be arrested and arraigned to court. Prof Wahungu said in January this year.

### Plastic bags crackdown in Mlolongo

NEMA conducted an inspection on the banned plastic carrier bags on 22<sup>nd</sup> February 2018. The environmental inspectors and police from NEMA and Mlolongo police station were led County Director of Environment in



**NEMA CDE Machakos, Titus Simiyu and Grace Maina speaking with a worker at a Godown in Mlolongo Machakos County** [PHOTO: S. IRUNGU/NEMA]

Machakos, Mr. Titus Simiyu. The operation led to a Godown in Mlolongo after being tipped that it was in possession of the banned plastic carrier bags.

During the raid, several bags of plastic carrier bags were discovered. Although the company had been licensed by NEMA to recycle plastic bags, it had not

declared to the Authority the plastic bags in their possession. Mr. Simiyu said that a decision had been reached to destroy the plastics on site under the supervision of NEMA officials and the police.

### Inspections in Narok, Bomet and Kisii Counties

Over the weekend of 24<sup>th</sup> and 25<sup>th</sup> February 2018, NEMA conducted massive crack in Narok, Bomet and Kisii Counties.

A team from Nairobi headquarters joined officers from each of the counties where crackdown on plastic bags was carried out. The team was led by NEMA Deputy Director for compliance, Mr. Zephania Ouma.

Speaking in Kisii during the inspection, Mr. Ouma stated that the inspectors were targeting small-scale traders who have continued to wrap foodstuffs in plastic bags in small quantities for sale. Mr. said they were out to ensure that the sellers of plastic bags across the country had no market since most Kenyans had embraced other forms of carrying their goods.



**NEMA Deputy Director Compliance inspecting a butchery in Keroka, Kisii county on the banned plastic bags** [PHOTO: S. IRUNGU/NEMA]

*(The writer is an intern and Communications officer at Corporate Communications Section)*

# Traders disobeying plastics ban warned

By Samwel Irungu



**NEMA Chairman, Mr. John Konchellah and Director General, Prof Geoffrey Wahungu during a press at NEMA HQ [PHOTO: S. IRUNGU/NEMA]**



**A section of NEMA board members and management during the press briefing at NEMA headquarters [PHOTO: S. IRUNGU/NEMA]**

NEMA and police will now work jointly to ensure compliance with various environmental laws. This was announced by the NEMA Chairman and Director General during a press conference on 25<sup>th</sup> January 2018 at NEMA Headquarters.

The Authority plans to ban the use and manufacture of plastic bottles in three month's time. The ban will be effected if manufacturers of plastic bottles will not have come up with a plan on how to recycle the bottles.

NEMA Board Chairman, John Konchellah said the authority is in the process of drafting a gazette notice that will see the ban effected by April 30<sup>th</sup>.

"The board has been engaging stakeholders in the manufacturing industry who have promised to start up recycling companies to deal with the waste. But if they will not have taken the adequate measures as discussed with NEMA, the ban will be affected," Mr. Konchellah said.

Mr. Konchellah said the meetings with stakeholders have been ongoing for the last two months. He stated, "Plastic bottles have been forming a huge percentage of solid waste scattered in the environment.

On his part, NEMA Director General Prof Geoffrey Wahungu said the Authority will work with other agencies to close markets where traders are flouting the plastic bags ban that was effected in August 2017. Prof Wahungu said although the ban was successfully implemented, there are cartels working along borders to import plastic bags into the country.

Prof Wahungu warned chairpersons of markets who are assisting traders to smuggle plastic bags from other countries and resisting arrest. These markets includes; Gikomba, City market, Lower Kabete, Ngara, Mlolongo and City Park.

He categorically stated that unlike in the past where NEMA was not working with police officers and county enforcement authorities to arrest those found using plastic bags, the arrests will be effected.

"From now onwards, police and county enforcement officers are allowed to stop vehicles, inspect and arrest anyone found using plastic bags," he said.

*(The writer is NEMA's Communications Officer)*



NEMA Director General, Prof. Geoffrey Wahungu speaking to the media at Green Park Estate [PHOTO: A. MWANGI]

# DG, Chairman visit to Green Park

By Samwel Irungu

Following the recent flooding in the country and in particular Green Park estate in Nairobi, NEMA Chairman and Director General visited the premises to assess the level of damage caused by the floods.

Speaking at the site, NEMA Director General, Prof. Geoffrey Wahungu stated that the section of the upmarket Green-Park Estate in Athi River that was flooded after Stoni Athi River burst its banks does not lie on riparian land. The reason for flooding was because the development is located in a low-lying zone.

“Athi Plains, River Athi and surroundings are low-lying and some even below river flow level. Because of unpredictable rains, lots of silt and debris, the river overshot its bank by over 100 metres causing serious damage to property owners at the estate,” he stated.

Prof. Wahungu rubbished claims of corruption at the agency adding that the law was followed before the project was approved. “The property has observed the riparian space according to law as per the licence condition,” he said. The development sits on 10,000 acres formerly owned by the East African Portland Cement company.

The investor has so far constructed and sold 700 houses on 136 acres. The homes are in five phases which were sold at between Sh9 million and Sh18 million. The 10 affected houses lie in phase one of the project.

*The writer is NEMA’s Corporate Communications Officer)*

## Core Services

The Authority core 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

## *Our Vision*

To be a World-class Environmental Management Authority

## *Our Mission*

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 Environmental Incidents through:

Cell: 0786 101 100 or 0741 101 100

Email: [incidence@nema.go.ke](mailto:incidence@nema.go.ke)

## CONTACT

National Environment Management Authority  
Eland House, Popo Road, Off Mombasa Road, South C  
P. O. Box 67839 - 00200, Nairobi.

**Tel:** +254 (020) 218 3718 **Mobile:** +254 724 253 398, 723 363 010

**Email:** [dgnema@nema.go.ke](mailto:dgnema@nema.go.ke)

[www.nema.go.ke](http://www.nema.go.ke)



Twitter: @NemaKenya



National Environment Management Authority-Kenya



NemaKenya



[www.nema.go.ke](http://www.nema.go.ke)