

Annual Report & Financial Statement 2013 - 2014

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## **ABBREVIATIONS**

- AMCEN African Ministerial Conference on Environment
- ASK Agricultural Society of Kenya
- BEC Basic Enforcement Course
- CBD Convention on Biological Diversity
- CSO Civil society organizations
- EIA Environmental Impact Assessment
- EMCA Environmental Management and Coordination Act
- ESD Education for Sustainable Development
- GEF Global Environmental Fund
- ICZM Integrated Coastal Zone Management
- JKUAT Jomo Kenyatta University of Agriculture and Technology
- KIE Kenya Institute of Education
- KRA Kenya Revenue Authority
- MEAs Multilateral Environmental Agreements
- NGOs Non-Governmental Organizations
- NIE National implementation Entity
- ODS Ozone Depleting Substances
- POPs Persistent Organic Pollutants
- REDD Reducing Emissions from Deforestation Degradation
- RCE Regional Centers of Expertise
- SEA Strategic Environmental Assessment
- UN United Nations
- UNCCD United Nations Convention to Combat Desertification
- UNDP United Nations Development Programme
- UNEP United Nation Environment Programme.
- UNFCCC United Nations Framework Convention on Climate Change
- WARMA Water Resources Management Authority
- WDCD World Day to Combat Desertification
- WED World Environment Day
- WOD World Oceans Day
- WWD World Wetlands Day

# **INTRODUCTION**

he National Environment Management authority was established under the environment Management and Coordination Act (no. 8) of 1999 as the principal instrument of Government for the implementation of all policies relating to the Environment.

NEMA's administrative and operational structures are at the headquarters, provinces and districts. The offices at the provincial level are manned by Provincial Directors of Environment (PDEs), while the districts are under district environment officers (DEOs).

#### **Our Vision**

To be a world class environmental management authority that ensures a clean, healthy, secure and sustainably managed environment for all.

#### **Our Mission**

To safeguard, restore and enhance the quality of the environment through supervision and coordination of all matters relating to environmental activities in Kenya.

#### **Core Values**

- Team work and partnership building;
- Efficiency and effectiveness;
- Accountability and transparency;
- Excellence and professionalism;
- Creativity and innovation;
- Courage of conviction;
- Sensitivity and responsiveness; and
- Result oriented.

#### **Our Motto**

Our Environment, Our life, Our Responsibility – Mazingira Yetu, Uhai Wetu, Wajibu Wetu

### **Core functions**

The core functions of the Authority include: -

- Coordinating the various environmental management activities being undertaken by lead agencies.
- Promote the integration of environmental considerations into development policies, plans, programmes and projects, with a view to ensuring the proper management and rational utilization of environmental resources, on sustainable yield basis, for the improvement of the quality of life in Kenya.
- To take stock of the natural resources in Kenya and their utilization and conservation.
- To establish and review land use guidelines.
- Examine land use patterns to determine their impact on the quality and quantity of the natural resources.
- Carry out surveys, which will assist in the proper management and conservation of the environment.
- Advise the government on the legislative and other measures for the management of the environment or the implementation of relevant international conventions, treaties and agreements.

- Advise the Government on regional and international conventional, treaties and agreements to which Kenya is or should be a party and follow up their implementation of such agreement.
- Undertake and coordinate research, investigation and surveys, collect, collate and disseminate information on the findings of such research, investigations or surveys.
- Mobilize and monitor the use of financial and human resources for environmental assessment and monitoring under Act.
- Initiate and evolve procedures and safeguard for the prevention of accidents, which may cause environmental degradation and evolve remedial measures where accidents occur e.g. floods, landslides and oilspills.
- Monitor and assess activities, being carried out by relevant lead agencies, in order to ensure that the environment is not degraded by such activities. Management objectives must be adhered to and adequate early warning on impending environmental emergencies is given.
- Undertake in cooperation with relevant lead agencies, programmes intended to enhance environmental education and public awareness, about the need for sound environmental management, as well as for enlisting public support and encouraging the effort made by other entities in that regard.
- Publish and disseminate manual codes or guidelines relating to environmental management and prevention or abatement of environmental degradation.
- Render advice and technical support where possible, to entities engaged in natural resources management and environmental protection, so as to enable them to carry out their responsibilities satisfactorily.
- Prepare and issue an annual report on the State of Environment in Kenya and in this regard, may direct any lead agency to prepare and submit to it a report on the state of the sector of the environment under the administration of that lead agency.

#### **NEMA's Core Services**

The Core services of the Authority include:-

- Registrations and Licensing of Environmental Impact Assessment (EIA) and Environmental Audit (EA) Experts;
- 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.



# **EXECUTIVE SUMMARY**

he National Environment Management Authority was established in 2002 under Environmental Management and Coordination Act, 1999. Since then, the Authority has made tremendous achievements in the management of the environment through formulation of legal and institutional frameworks with the aim of strengthening its structures. During the year under review, the Authority received Ksh 741.1 million from Government of Kenya and development partners to undertake planned activities as guided by the annual work plan 2013/2014 financial year.

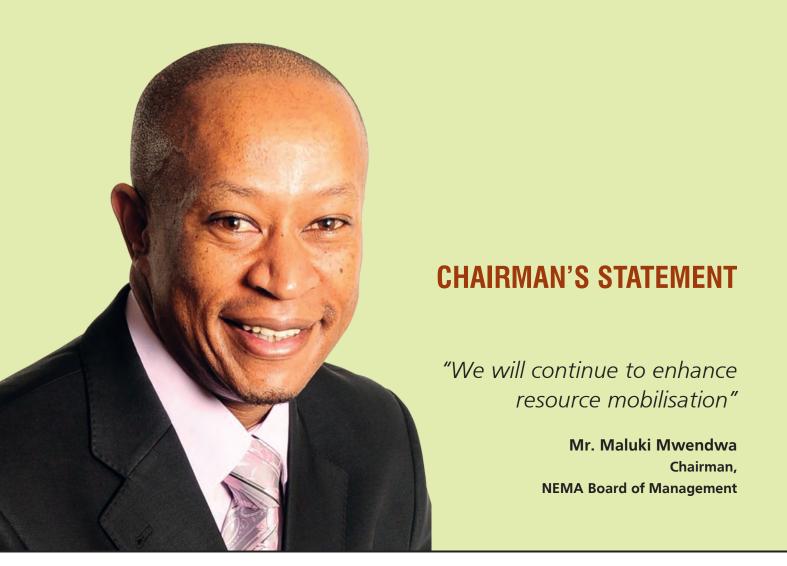
During the financial year 2013 – 2014, the Authority registered various milestones which were guided by the strategic objectives of the current Strategic Plan 2013-2018.

- In order to create synergies in the management of environment, the Authority coordinated stakeholders and lead agencies in undertaking education and awareness promotion activities in financial year 2013/2014. Among activities undertaken, NEMA in collaboration with the RCE Greater Nairobi successfully hosted the 8<sup>th</sup> RCE Global conference held at the United Nations complex in Gigiri. This conference provided a unique opportunity for reflection, sharing lessons and developing new strategies on ESD beyond 2014. In collaboration with the Department of Geography and Environmental Studies, University of Nairobi NEMA organized and hosted the first national scientific conference on climate change whose aim was to highlight the challenges of climate change in Tana River County and propose solutions to these challenges.
  - The Authority also established and launched Green Points to mainstream green growth into programme and activities such as energy efficiency, waste reduction, water management (harvesting).
  - Under stakeholder engagement, the Authority mobilized the public and private sector and stakeholders to participate in environmental conservation activities through partnerships. It also documented and disseminated policy documents as well as general environmental education and awareness materials. These were disseminated during public engagement such as the ASK shows and Trade Fairs, environment days, exhibitions among others. The Authority also spearheaded commemoration of national and international environmental days as well as administering the Environmental Award Scheme.
- To ensure compliance with environmental legislation and policies in order to maintain a clean, healthy and sustainable environment, the Authority ensured that country's environment is protected through issuance of licenses, monitoring of compliance through regular inspections to ensure adherence to regulations. During the period, the Authority also prosecuted several environmental crimes.
- To develop and strengthen institutional capacity for effective and efficient management of the environment, the Authority enhanced improved service delivery to the internal and external clientele by recruiting additional staff as well as building staff competencies through training. The Authority revised the Human Resources procedures manual and career guidelines to reflect the interest of staff.
- To build and nurture strategic partnerships aimed at enhancing sustainable management of environment, the Authority nurtured a number of strategic partnerships with various stakeholders including the Kenya



National Library Services and other key partners to enhance access to environmental information. The Authority worked also with a number of RCEs to promote education for Sustainable development (ESD).

• To enhance the use of communication as a tool to achieve the Authority's performance objectives, media campaigns were undertaken focusing on various themes where members of the public were rallied to take actions aimed at contributing to a clean and healthy environment. The public was also engaged through awareness campaigns and trainings. The Authority also transformed the effectiveness of business processes in order to ensure improved service delivery by automating certain processes. These included improved internet access in Field Offices, modernization of backup and recovery, adapt to data growth and virtualization and procurement and installation of Power Backup System to ensure uptime during critical systems.



he NEMA Board of Management is happy to bring to you another annual report for the year ended 2013/2014. The Authority has endeavoured to provide to Kenyans a clean and healthy environment for a sustainable growth. My board has continued to support the NEMA management so as to create synergies in the management of environment. This has enabled the Authority to undertake critical activities for the benefit of all Kenyans.

I'm happy to note that the Authority, over the last one year has maintained stability in delivering services to the Kenyan citizens according to its mandate. Under the stewardship of the Director General the Authority has continued with its decentralisation policy to ensure that NEMA is felt more at the grassroots level than ever before. This we know is a tall order but my board is committed to ensure it happens successfully. The Authority has been able to engage stakeholders more by engaging in global initiatives such as hosting the 8th Global Regional Centres of Expertise Conference, sensitisation of local stakeholders including the Land and Environment Court judges. I am happy to report that the Authority launched its first Green Point at Taita Taveta and many more are to follow in the coming years. The Authority has planned the building of these centres with the help of the Government of Denmark through DANIDA.

My Board is happy to note the Authority has endeavoured to bring into compliance many institutions and I'm proud to report that more institutions and individuals are complying with environmental regulations this year that ever before.

Human capacity is critical to my Board and to date many staff of the Authority have been exposed to different types and levels of training within and outside the country. For an institution of the size and the mandate of NEMA, resources especially financial are never enough, my board will continue to lobby for more funds for the



Authority to enable it hire more staff and remunerate its staff well to ensure retention of such highly skilled staff. My Board will continue to invest heavily in staff development.

I wish to thank the Management and more importantly the NEMA staff led by the Director General for work well done in the year 2013/2014 and look forward to an even more productive year 2014/2015.

#### Mr. Maluki Mwendwa

Chairman, NEMA Board of Management



he 2013 / 2014 Annual Report marks yet another milestone for the Authority as we endeavour to fulfil our mandate of coordinating and supervising all matters of environment in Kenya. In this front we strove to build our corporate reputation by embracing integrity.

Kenya faces numerous environmental challenges, and as an Authority we have not shied away from confronting them. The Kenyan populace is highly aware of its environmental rights as enshrined in the constitution. As the Authority charged with the mandate of ensuring that every Kenyan enjoys this right, we remain committed to ensuring that this is achieved. We appreciate this huge mandate that the Kenya people have placed on us and with a lean workforce the Authority has undertaken to educate the public on good environmental practices, coordinate research and provide legal services in an effort to promote compliance with environmental standards. We have further decentralized into four regions in order to improve service delivery to the citizens of Kenya.

So as to improve waste management, the Authority has developed several draft strategies, regulations and guidelines. These are; the integrated solid waste management strategy, E-waste management regulations, waste tyre management regulations, the technical guidelines on the management of used oil, guidelines for safe management and disposal of asbestos.

The Authority has enhanced collaboration with key lead agencies to ensure that licensing procedures are fully supported for sustainable environmental management.



During the year, the Authority mapped high risk facilities to enhance monitoring for compliance. Some of the facilities mapped include; water quality status for River Kisat, evolution of dumpsites in Kisumu County, water quality mapping in Lake Victoria basin, pollution status of Lake Naivasha and Geo-coding of housing development in the Nairobi Metropolitan among others.

The Authority also declared a moratorium on the Amboseli ecosystem. This was in a bid to enhance compliance with environmental regulations and ensure that environmental conservation is observed. On the same, the review of the Environmental Management and Coordination Act (EMCA), 1999 was fast-tracked to harmonize it with changes in environmental policies and laws in line with the Kenyan constitution 2010.

Following the introduction of the environmental sustainability performance target by the government, the Authority was mandated to receive and evaluate all state agencies (Ministries, Departments and Agencies MDAs) on their environmental performance. In this reporting period, NEMA trained 15 MDAs on how to mainstream environmental concerns in work places.

On behalf of the African Continent, Kenya was honoured to host the 8th Global Regional Centres of Expertise (RCE) Conference in November, 2013. The theme of the conference was "Promoting Sustainability through Collaboration and Diversity". The Authority successfully co-hosted the conference in collaboration with RCE Greater Nairobi and United Nations University (UNU) at United Nations complex Gigiri.

In line with the green economy concept, in this reporting period, the Authority initiated a Green Points Projects. These are centres which will act as platforms for NEMA to inter-face with county governments, communities and private sector. The Green points will also provide room for the local community to exhibit their innovation and serve as incubation centres for new ideas and innovations. In this reporting year, construction is on-going in Taita Taveta and Homa Bay while two new sites of Isiolo and Embu have been identified.

I sincerely wish to thank the Board of Management, development partners who have stood with us and NEMA staff for their unwavering dedication in ensuring that we perform our mandate of supervising and coordinating all matters environment for the benefit of the current and future generations.

Prof. Geoffrey Wahungu Director General

# **STAKEHOLDER PARTNERSHIPS AND OUTREACH**

In order to create synergies in the management of environment, the Authority in its stakeholder partnerships and outreach undertook the following activities in financial year 2013/2014.

#### **Education and awareness promotion**

#### NEMA Hosts the 8th RCE Global Conference

The Regional Centres of Expertise (RCE) is one of the strategies put in place by all UN Member countries for the implementation of Education for Sustainable Development (ESD). It is a concept initiated by the United Nations University in 2005 to achieve the goals of the DESD by translating its global objectives into the context of the local communities in which they operate.

An RCE is therefore a network of institutions brought together to address sustainable development challenges in a particular area by exploiting opportunities within their respective mandates. They build innovative platforms to share information and experiences and promote dialogue among stakeholders through partnerships for sustainable development. RCEs are aimed at promoting long-term goals of ESD, such as environmental stewardship, social justice, and improvement of the quality of life.

NEMA spearheaded the RCE movement which has seen the establishment of nine RCEs five of which have been fully recognized by the United Nations University (UNU), the highest number in Africa. These include, RCE Greater Nairobi Region, RCE Greater Pwani, RCE North Rift, RCE Central, RCE South Rift, RCE Kakamega Western, RCE Nyanza, RCE Mount Kenya East and RCE Mau Complex Ecosystem.

In the year 2013/14 NEMA in collaboration with the RCE Greater Nairobi successfully hosted the 8th RCE Global conference. This was the first of such a conference to be held in Kenya and the African continent. The conference was held at the United Nations complex in Gigiri from 26th – 29th November 2013. The conference was officially opened by the Cabinet secretary, Ministry of Environment, water and natural resources Prof. Judi Wakhungu.

The objective of the conference was to bring together all global RCEs take stock of their achievements as they planned on scaling up of the Global Action Programme within the context of the post 2014. This conference provided a unique opportunity for reflection, sharing lessons and RCE actions.

This conference provided a unique opportunity for reflection, sharing lessons and developing new strategies on ESD beyond 2014.

At this conference several RCEs were recognized for the good works they have been involved in which included RCE Mau Complex Ecosystem on Mau Forest rehabilitation and RCE Kakamega' Buma Fish farm. Kenya was cited a good model where RCEs are formally recognized as instruments of change with the national government promoting and mentoring RCEs in the country. Several books were launched and Kenya through NEMA was honoured with the presidency of the African Regional Centres of Expertise.

The outcomes of the 8th RCE Global conference in Nairobi would feed into the 9th RCE Global conference in Okayama Japan the following year.



The 8<sup>th</sup> Global RCE Conference, held in Nairobi, the first African host to a global RCE event.

#### Launch of Green Point

A green point is a centre that has been conceptualized in order to practically interpret the green economy concept. The design and function is meant to lead to as small an ecological footprint as possible. This includes rainwater harvesting, waste water recycling technologies, low energy consumption, among other features.

These green points serve as Exhibitions centres for appropriate green technologies/innovations by the local business community, host academic visits, act as an environmental information resource centres as well as other advisory functions to county government, business people, and the wider community.

The Authority developed and launched its first Green point in Kenya in Mwatate - Taita Taveta County on 12th June 2014. The Launch was graced by the Danish Ambassador to Kenya H.E. Geert Aagaard Andersen.

The centre will promote Public/Private partnerships. Therefore, it is expected that the local community in Mwatate will take advantage of the centre to showcase and exhibit their green innovations and promote wider uptake. Demonstration in these centres will include reduction of waste and reduction of energy use.

It is expected that mainstreaming of green growth into programme and activities such as energy efficiency, waste reduction, water management (harvesting) shall be demonstrated at the Green Point.

#### 1<sup>st</sup> National Scientific Conference on Climate Change

NEMA in collaboration with the Department of Geography and Environmental Studies, University of Nairobi organized and hosted the first national scientific conference on climate change. The conference whose theme was "The Impacts of Climate Change on Natural Resources and Human Activities in Tana River County" attracted participants from academia, research organizations, government and non-state actors.

The purpose of the conference was to highlight the challenges of climate change in Tana River County and propose solutions to these challenges.

# **STAKEHOLDER ENGAGEMENTS**

The Authority undertakes environmental education and creates awareness on activities and programmes of the Authority as well as existing environmental legislation and provides outreach services for the Authority. It mobilizes the public to participate in environmental conservation activities through partnerships in environmental management programs. It also documents and disseminates environmental education and awareness materials such as posters, brochures, booklets, magazines and stickers. These materials are disseminated during public engagement such as the ASK shows and Trade Fairs, environment days, exhibitions among others. The Authority also spearheads commemoration of national and international environmental days as well as administering the Environmental Award Scheme.

Some of the notable major milestones for the Authority during the year under review included:

### Participation in ASK shows

Agricultural Society of Kenya (ASK) shows provide the best forum for dissemination of information. The society partners with stakeholders in organizing exhibitions to promote technology, innovation, research and development. The main objectives are to promote excellence in agriculture, provide forums for the exchange of agricultural and agribusiness information, embrace innovation, research and technology transfer. The theme for 2013 was: "Enhancing Technology in Agriculture and Industry for food security and National Growth". The Authority uses this forum to exhibit and create awareness on environmental issues touching on the operations of agricultural sector being the backbone of Kenya's economy. During the year, the Authority prepared and participated in Nakuru, Kisumu, Mombasa and Nairobi International Trade Fair (NITF) to showcase best environmental practices, its services and how it contributes to the theme. Several environmental awareness and information materials were disseminated to the public.

### Sensitization for Water & Sewerage Companies

The Water and Sewerage companies are mandated to provide reliable quality water and sewerage services in an environmentally friendly manner that delights customers within Counties. The Authority organized sensitization forums for Water and Sewerage Companies and their respective Water Service Boards throughout the country on the role they are supposed to play in compliance with EMCA 1999. Topical areas highlighted the provisions of EMCA 1999 and gazetted Regulations related to their mandate. It was recommended that a comprehensive and regular monitoring and surveillance of sewerage systems infrastructure to detect any incidences of leakages to improved service delivery, securing the way leaves to avoid encroachment, establish an emergency response system as well as spearheading an annual awards scheme on the best compliant company to recognize their efforts.

### Sensitization for the hospitality industry

Hotels and Lodges in this country play a critical role in the hospitality industry that generates foreign exchange. For this industry to meet environmental quality standards to attract more visitors, NEMA provides guidelines on environmental safe operating procedures and standards. The Authority organized sensitization forums for stakeholders in the Hotels and Lodges industry in Nyanza (Kisumu County) and Maasai Mara Ecosystem (Narok County) being the critical tourism destination regions that drive this country's economy. The issues that were brought to their attention were; compliance to environmental legislation and in particular waste water treatment technologies, overview on existing technologies in waste water treatment and challenges faced in attaining compliance to the set standards. This interactive platform between NEMA and the hospitality industry shared a lot of experiences and lessons leant on diverse conservation strategies among the stakeholders.

#### Sensitization for Senior Police Officers

Sensitization workshops for Senior Police in Nyanza and South Rift Regions were held. Participants were taken through an overview of the environmental legislations including Environmental Management & Coordination Act No 8 of 1999, gazetted Regulations and the Constitution to enhance understanding of police officers on environmental offences, their resultant adverse effects to the environment and the commensurate penalties for the same. They were also sensitized on available legal instruments provided by environmental regulations that support handling of environmental offences. The aim of the sensitization was to explore modalities for creating synergy and strengthening partnership between NEMA and the Kenya Police in the enforcement of environmental regulations alongside other laws in the country.

#### Sensitization for Petroleum Sector

Kenya's importation of oil comprises 30 per cent refined and 70 per cent crude. The crude oil when refined produces petroleum products. However, the distillation, processing and blending of crude oil results in the formation of petroleum residues in form of sludge and waste gas.

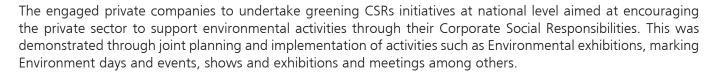
The petroleum by-products released into the environment undergo weathering processes, chemical oxidation and microbial degradation thus polluting the environment. Although weathering processes may not be detectable for years, inherent risks to human health and environment continue to manifest over time. Most petroleum based products have the potential to cause cancer hence the need to limit human exposure to the by-products. Although sludge is mainly used to process furnace oil, in Kenya there is no proper handling of sludge thus polluting the environment. It is therefore important to manage the risks to human health and prevent contamination to soil, water systems and air by ensuring adequate facilities to manage petroleum by-products. During the year, the Authority sensitized target stakeholders across the country including stakeholders from the Petroleum Industry on the provisions of EMCA 1999 and gazetted Regulations and in particular the Water Quality Regulations, 2006. The Authority advised Companies on installing functional and licensed treatment facilities to ensure full treatment of petroleum waste water before discharge into the environment as well as eco-friendly technologies for the treatment of waste water from the petroleum sector.

#### The Environment and Land Court Judges' Sensitization Forum

The Authority identified the Judiciary as one of the key lead agencies in environmental governance. Judges are key stakeholders in the environmental sector because they have capacity to make and or influence the making of proper environmental laws through precedent (binding judicial decisions). They are also strategically placed to create and advance jurisprudence in environmental law and related issues. They also provide an avenue through which aggrieved parties can access environmental justice and hence their contribution to environmental governance is critical to all. It is for this reason that the Authority made a deliberate effort to partner with the Judiciary through the Judiciary Training Institute (JTI) in organizing the sensitization forum for Judges, Magistrates and Court Researchers. The expected outcome was that stronger, more coordinated partnerships will be enhanced and that NEMA and Judiciary shall be speaking in one voice: the voice of protection and conservation of the environment for the benefit of present and future generations.

### Private Sector Engagement

The Private sector impacts both positively and negatively to the environment in its operations. NEMA regulates activities being undertaken by this sector to ensure sustainable development. During the year, the Authority engaged the private sector in dialogue to address some of the environmental challenges and how they can participate in conservation initiatives. The aim of this was to build and nurture strategic partnerships, promote networking amongst various institutions aimed at sustainable environmental management, guide institutions in key areas of focus as well as inculcate a culture of self-regulation to achieve excellence in environmental management.



### Environmental Awards

The NEMA Green List Award scheme was established in the year 2010 as an awareness strategy for recognizing and awarding most compliant facilities (companies/firms) to environmental standards within the specific calendar year. The Authority through Compliance & Enforcement (C&E) proposes the relevant sectors to be evaluated for environmental compliance through self-regulation efforts as contained in their annual audit reports. The sectors selected comprise those that have a high potential to pollute the environment through their operations. During the year, through a rigorous evaluation process, the Authority awarded the health sector during World Environment Day 2014 celebrations. The winners who received the awards included Moi Teaching and Referral Hospital (Position 1 for Level 6 hospitals) and Thika Hospital (Position 1 for Level 5) among others.

#### **Overview of Environmental Mainstreaming in MDAs**

Environmental Sustainability involves making responsible decisions that reduce your business' or activities' negative impact on the environment. Environmental sustainability forces organizations to look beyond making short term gains and look at the long term impact they are having on the Environment.

The government of Kenya realized that the achievement of sustainable development, and by extension, the aspirations of vision 2030 is only feasible through the contributions of all government Ministries, Departments and Agencies (MDAs). It is this regard that environmental targets were incorporated as part of the performance contracting requirements for MDAs. The targets were to help them to maintain factors and practices that contribute to the quality of environment on a long term basis in their operations.

NEMA Provided PC guidelines on environmental sustainability and posted on NEMA website www.nema.go.ke. The Authority established a committee to review reports submitted by MDAs and provide feedback to the agencies on a quarterly basis. Capacity building on ES was given to MDAs by way of staff sensitization of MDAs on demand and provision of awareness materials on ES mainstreaming

Eight thematic areas were highlighted from which each MDA was to identify four areas to implement. The eight areas included

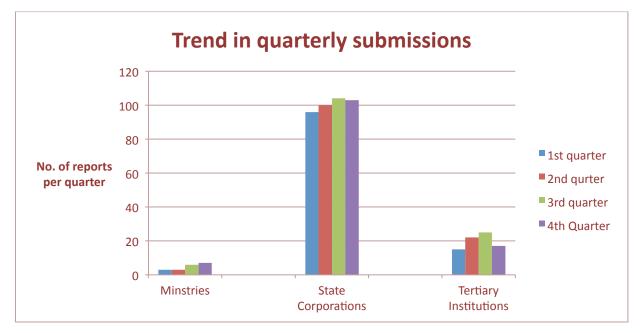
- 1. Domesticating the Environmental Policy at the workplace
- 2. Developing and implementing environmental awareness creation

programmes Waste management initiatives that include

- 3. Waste management initiatives that include
- 4. Measures to mitigate against all forms of pollution (water, air, noise)
- 5. Developing and implementing climate change adaptation and mitigation initiatives
- 6. Tree planting
- 7. Protection of riverbanks by enforcing riparian regulations-
- 8. Promoting environmental protection and conservation through partnerships with stakeholders

#### Achievements

Over 150 MDAs implemented and reported on the Environmental Sustainability targets. Some of the achievements recorded included.



#### **Detailed achievements included:**

- Development of internal environment policies
- Establishment of facilitated environment committees
- Sensitization of staff/public on environmental conservation measures
- Installation of waste bins and segregation of waste Use of Waste collectors licensed by NEMA



Waste segregation at NEMA office

- -Procurement of goods and services that are environmentally friendly (Green product purchase)
- Application and renewal of relevant licenses under Environmental Management and Coordination Act -1999 (EMCA) and other regulation there in
- Submission of Annual Environmental Audit reports to NEMA
- Submission of EIA reports for new projects
- Review and submission of comments to NEMA on Environmental impact assessment (EIAs) reports
- Water Harvesting



Water harvesting at NEMA headquarters

• Clean-ups with the public

#### Challenges faced by MDAs in implementing environmental sustainability targets

- Inadequate internal awareness/ education on environmental issues
- Budgetary constraints (inadequate resource allocation)
- Inadequate skills to enable development of institutional environment policy
- Late submission of reports (we need to adopt reporting within two weeks after end of quarter to enable early review and feedback)

# **COMMEMORATION OF ENVIRONMENTAL DAYS AND EVENTS**

The Authority organized and commemorated five very important environmental events that mobilized the public to participate in various conservation efforts to address common environmental challenges faced by communities.

### **Clean Up the World Day**

Clean up the World is a community-based, environmental campaign that inspires and empowers communities around the globe to clean up, fix up and conserve their environment. The campaign's flagship event is Clean up the World Weekend, celebrated globally on the 3rd weekend in September each year. Clean up the World encourages and supports groups to undertake activities throughout the year. The department spearheaded the campaign by cascading the activities to the regions to create awareness on the need for sound environmental management. The National Clean-up the World Day 2013 event was held in Nakuru County on 21st September, 2013. The theme was: "Our Place... Our Planet... Our Responsibility" and aimed at calling on how local action can be taken by every community and volunteer in clean-up activities to create a positive global impact in the environment.

#### World Wetlands Day Celebrations (WWD)

To create awareness on the conservation and wise use of wetlands, NEMA spearheaded the commemoration of WWD 2014 at Busende Primary school in Busia County. Under the theme 'Wetlands and Agriculture' and the rallying slogan of "Wetlands and Agriculture: Partners for Growth", WWD 2014 was meant to highlight the intimate though delicate linkage between wetlands and food production/ agriculture. Several build-up activities were undertaken prior to the event to create awareness on sustainable management of wetlands and other aquatic resources.

#### World Environment Day 2014 (WED)

World Environment Day (WED) is celebrated every year on June 5th to raise global awareness to take positive environmental action to protect nature and planet earth. During the year, the event was commemorated in Ngomeni Village of Kilifi County whose theme was "Raise Your Voice, Not the Sea Level". This was aimed at creating awareness to the public and communities in Kilifi County and environs on the effects and causes of rising sea-level and the urgent need to minimize the actions that enhance carbon emissions hence causing subsequent global warming.

The forum through the speeches and exhibition created a platform where the public was informed that Kenya is not an exception to effects of rising sea-level and associated wave erosion with the effects having manifested largely in the North-Coast region of Watamu and Ngomeni.

Some visible signs and sites of wave erosion and submergence of the shoreline are observed especially at the Navy Base and Fisheries Department where they have lost part of their land and facilities to wave erosion and submergence. Other homes and hotel facilities built on the beach areas had cracked due to wave erosion and storm surges. Low-lying coastal areas such as Tana River and Lamu are also vulnerable to flooding and landward intrusion of saline water.

In addition, respective County WED events were held throughout the Country spearheaded by Regional Coordinators of Environment and County Directors of Environment.

#### World Ocean Day celebrations

Under the theme 'Together We Have the Power to Protect the Ocean' World Ocean Day 2014 was marked on 8th June 2014 at Mama Ngina Grounds in Mombasa County. The celebrations brought together participants from various circles, including government, NGOs, CBOs and schools to drum up support on the need to protect the

ocean from anthropogenic impacts. This day highlights the importance of ocean and the associated resources in shaping up the national economy and support livelihoods of communities through the establishment of shipping, port infrastructure and tourism industries.

#### World Day to Combat Desertification (WDCD)

The World Day to Combat Desertification is a global event normally commemorated on 17th June every year. During the year NEMA coordinated the national celebrations at Mwea, Kirinyaga County. The theme of the year's event was ecosystem-based adaptation while the adopted slogan for the occasion was "Land Belongs to the Future, Let's Climate Proof It". The event was meant to create awareness on the potential of ecosystem-based adaptation as a strategy for coping with the impacts of climate change, especially in the dry lands.

The occasion was crowned with the recognition of dryland champions through the Equator Prize for Sustainable Land Management in Sub-Saharan Africa award ceremony at Safari Park Hotel in Nairobi Twenty-four representatives from twelve winning initiatives were celebrated for their remarkable achievements promoting best sustainable land management practices in dryland ecosystems in sub-Saharan Africa.

### Training of ICZM committee on ICZM Policy formulation and action planning

The IZCM steering committee was trained on policy formulation and action planning. Being the committee charged with overall supervision of the implementation of the ICZM action plan, the training was key to enable the committee members understand what is required of them so as to enhance their work in the coastal region. The training saw a total of 23 members of the committee as well as other interested participants trained on the same.



NEMA Board of Management Chairman Mr Maluki Mwendwa planting a mangrove seedling in Ngomeni, Kilifi County during WED 2014.

# **INFORMATION, DOCUMENTATION AND DISSEMINATION**

he Authority is mandated by EMCA to prepare national policy documents to guide mainstreaming of environmental concerns into national planning and decision making process. These include Environmental Action Plans, State of Environment reports, Ecosystem management Plans, National Biodiversity Strategies and Action Plans, National Action Programmes under the UNCCD among others. The following was achieved during the reporting period.

#### Preparation of the National Environment Action Plan (NEAP)

During the reporting period, the authority initiated the process of developing the National Environment Action Plan (2013-2018). Three workshops were held with stakeholders from various sectors to document and prioritize areas of intervention to protect the environment. Some 35 counties spread across the nation were also facilitated to initiate the County Environmental Action Planning process. This is addition to the 12 Counties that had been facilitated during the previous year.

#### **Development of wetlands management plans**

The Authority completed development of integrated management plans for wetland ecosystems in the L. Victoria basin. This activity was funded by World Bank through Lake Victoria Management Programme II (LVEMP II). The management plans developed were for;

- Kingwal swamp in Nandi County
- Kibirong swamp in Nandi County
- Ombeyi wetland in Kisumu County
- Tionosoyiet wetland in Kericho County

The management plans were meant to promote best practices in the utilization and management of these wetlands. Development of these management plans took a rigorous stakeholder consultation process as well as expert input.

Draft management plans for Yala swamp and Tana delta were also developed during the year under review.

#### **Finalization of ICZM and wetlands Policies**

The authority coordinated the finalization of the Integrated coastal zone management and the wetlands policies during the period.

The two policies were finalized and aligned to the constitution as well as other emerging issues such as oil and gas exploration. Through the guidance of the department, stakeholders gave their input into the policies at various stages necessitating their finalization. The Policies have since been approved by the cabinet and are ready for gazettement.

#### State of environment reporting

The authority coordinated lead agencies and key stakeholders in the preparation of the annual State of Environment Reports for the year 2012 and 2013. The reports detail key issues on the environment for the respective years in review. The document also highlights key policies that need to be enacted in various sectors in order to safeguard the environment.

The authority also facilitated some 35 counties to prepare their state of environment reports for 2012 and 2013. This was preceded by a countrywide training of county environment officers and other lead agencies at that level.

### Kenya Environment Information Network (KEIN)

During the reporting period, the authority finalized the KEIN policy.

Kenya Environmental Information Network is a project initiated by United Nations Environment Programme (UNEP) together with the NEMA. KEIN initiative brings together Kenyan institutions that generate environmental data. The network will create a framework for cooperation and coordination amongst various stakeholders to open access to environmental data and information.

#### Alignment of the national action programme under the UNCCD

The Government of Kenya is a signatory to the United Nations Convention to Combat Desertification (UNCCD) and is obliged to implement all activities aimed at preventing and reducing Desertification, Land Degradation and Drought (DLDD).

In fulfilment of this obligation, the Authority coordinated national level, stakeholders to develop the 2nd National Action Programme (NAP) in line with the UNCCD Ten (10) Year Strategy as per the Conference of Parties (COP) 8 decision 3. The alignment process also incorporated the changes at the national level namely the promulgation of the Constitution in 2010 and the development blue print Vision 2030.

The NAP focuses on the areas of Policy and institution framework, advocacy, awareness raising and Education, Capacity building, Science and Technology, financial Mechanism and gender mainstreaming in the country. It has identified key strategic objectives meant to drive the Nation towards achieving a secure environment and sustainable livelihoods for people living in Arid and Semi-arid Areas.

With Climate Change being one of the leading drivers to changes in the ASALs, the NAP mainstreams aspects of the National Climate Change Response Strategy (NCCRS) with intent to stimulate adaptation to climate change in the affected areas. This is driven by the fact that over 50 per cent of our livestock and 70 per cent of Kenyan wildlife is found in the dry lands indicating the importance of the drylands in the national economy.

Through implementation of the activities identified and documented in this National Action Programme, it is hoped that all sectors will play their rightful role in combating desertification, land degradation and drought thus ensuring sustainable development and securing the livelihoods of millions threatened by desertification and drought.

#### National Biodiversity Strategy and Action Plan (NBSAP)

The Authority and the MEWNR, with support from the UN-backed Global environment facility (GEF) coordinated key stakeholders from various sectors, institutions and biodiversity resource users to develop Kenya's National Biodiversity Strategy and Action Plan (NBSAP) 2011-2020. This is in fulfilment of Article 6 of the Convention on Biological Diversity (CBD) to which Kenya is a signatory. Every signatory to the convention is required to prepare a National Biodiversity Strategy and Action Plan (NBSAP)

It is noteworthy that the first NBSAB prepared in 2000 was instrumental in the establishment of NEMA, the National Biosafety Authority, the enactment of Conservation of Biodiversity and access to Genetic Resources and Benefit Sharing Regulations of 2006 among other initiatives for biodiversity conservation.

The 2011-2020 NBSAB strategy will facilitate the achievement of the national vision and aspirations and describes issues that threaten biodiversity, what needs to be done, how it would be done, and the time-frame within which it should be done. The strategy flags out actions for biodiversity conservation within protected areas and in arid and semi-arid lands as well as in forests, and degraded ecosystems. It also provides strategies for addressing threatened and endangered species, alien invasive species, genetically modified organisms and management and utilization of indigenous knowledge systems



The NBSAP (2011-2020) will go a long way in ensuring attainment of the national objectives for the conservation and management of biodiversity for improved livelihoods and the economy as enshrined in the Kenya Vision 2030.

# Second National Communication on Climate Change to the United Nations Framework Convention on Climate Change (UNFCCC)

The enabling activities for preparation of the Second National Communication under United Nations Framework on Climate Change, is a project funded by Global Environment Facility through the United Nations Environment Programme (UNEP).

The project aims at preparing the Second National Communication report including national inventory of Green House Gas Emissions by sources and removal by sinks. The report is composed of five main chapters namely, National Circumstances, National Greenhouse gas Inventory; Vulnerability and Adaptation, Mitigation and other matters. During year 2014, a national consultant was hired to undertake the task and so far, the first and second chapters of the report have been submitted to NEMA and two national stakeholders' workshops held to validate the said chapters.

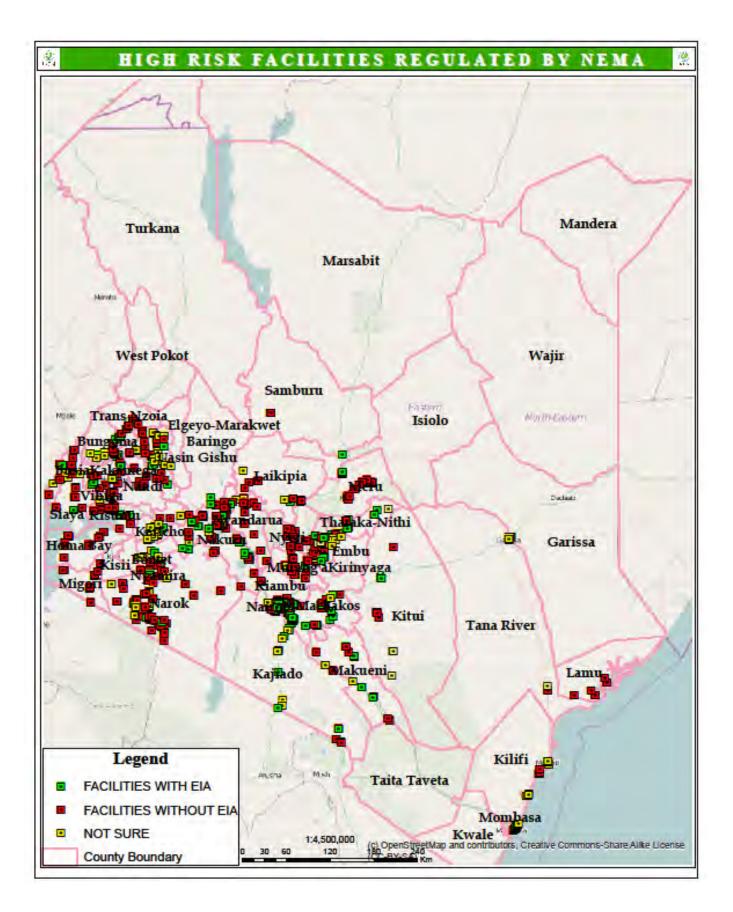
### **Mapping of High Risk Facilities**

During the year under review, the authority earmarked mapping of high risk facilities through GIS technology with the aim of establishing location of all NEMA facilities and their levels of compliance to environmental regulations. The focus was on energy, transport, mining and quarrying, sewerage, commerce, industries and the manufacturing sector. A total of 1793 facilities across 37 counties were mapped during the period. Mapping of high risk facilities is of essence to NEMA for purposes of Environmental planning in relation to emergency preparedness and response. The information will assist the authority to:-

- Bring all the regulated facilities under the licensing regime
- Integrate the information with existing licensing automation process
- Utilize the information in the archives to help with the screening process of the EIA's
- Constantly monitor the existence and expansion of these facilities
- Ensure that all regulated facilities operate in a sound environment
- Enforce regulations and enhance revenue generation.

#### Key areas Mapped and monitored during the period

- Water quality mapping of the status of River Kisat and dissemination of to the County Government of Kisumu.
- Mapping and modelling of the evolution of dumpsites in the City of Kisumu.
- Water quality mapping in Lake Victoria basin
- Pollution status evaluation of Lake Naivasha.
- Geo-coding of housing development in the Nairobi Metropolitan.



#### **Environmental Compliance and Enforcement**

Compliance and Enforcement is mandatory under EMCA Act No.8 of 1999, the National Environment Management Authority coordinates and ensures that country's environment is protected by developing and implementing regulations. The Authority issues licenses, monitors compliance and conducts inspections on adherence to gazetted regulations.

#### **Environmental Impact Assessment (EIA)**

Reviews of EIA/SEA reports inform processing of various licenses and permits which leads to enhanced compliance with environmental standards.

EIA Report Submissions for the Financial Year 2013/2014.

Activities	Sub-Activities	Achievements/Output	
Licenses and Permits	Process EIA Licenses	1473 EIA Licenses processed	
	Process SEA Licenses	5 SEA reports processed	
	Public Hearings/Meetings	5 public hearings held	
	Establishment of TAC	1 TAC meeting held	
Expert Registration and	Experts Registrations	698 certificates processed	
Licensing	Expert Licensing	1300 practicing licenses were issued	

#### **Management of Solid Waste**

Waste Management Regulations, 2006 provides for licensing and permitting of Waste Management activities. During the year under review, NEMA processed four hundred and eighteen (418) licenses and permits for various categories in waste handling. These included waste recycling, export permits, transfer stations, waste transportation; landfills, dumpsites, incinerators and compost operations.

In the 2013/14 financial year, the Authority finalized E-waste regulations, National Waste Management Strategy and developed used oil guidelines. Monitoring of ten (10) points as a basis of implementation of the strategy was also done in three municipalities namely; Kisumu, Nanyuki and Eldoret.



Monitoring of the ten minimum points for management of existing waste management facilities for Kisumu County government dumpsite.



#### **Biodiversity Conservation, Access to Genetic Resources and Benefit-Sharing**

Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing Regulations 2006 aims at regulating access to genetic resources and traditional knowledge associated with these genetic resources. During the financial year 2013/14, the Authority issued 18 access permits.

#### **Management of controlled Substances**

Ozone Depleting Substances (ODS) Regulations of 2007, provides for management of production, consumption, trade (imports and exports) of ODS. NEMA works closely with Customs department of Kenya Revenue Authority (KRA) and other licensing agencies to ensure control in illegal imports of hazardous materials. The authority processed eighteen licenses and permits for ODS during the period.



Offices of Bawa Systems at Kruger Arcade, Sosiani Street in Eldoret; note the hanging gas cylinder.

As part of strategies to phase out HCFCs and HFCs with high global warming potentials, the Ministry of Environment, Water and Natural Resources in collaboration with GIZ Proklima of the German Government trained over 200 refrigeration technicians on safe use of hydrocarbons refrigerants as substitutes to HFCs.



Factory Engineer in the refrigeration plant and ammonia gas (R717) pressure valve at the New KCC, Eldoret Plant.

Further, a good number of customs officers have been trained on control measures on imports and exports of Ozone Depleting Substances (ODS) and their blends, and that Customs Service of the Kenya Revenue Authority (KRA) and the National Environment Management Authority (NEMA) was provided with blend analysers for identifying refrigerants at the ports of entry. The blend analysers will greatly assist in monitoring illegal importation of ozone depleting refrigerants into the country in our efforts to be in compliance with sustaining the phase out of ODS.

#### **Regulation of water quality**

Pursuant to the provisions of Water Quality Regulations, 2006 the Authority regulates water quality through licensing and inspection of facilities. The water Quality Regulations apply to water used for domestic, industrial, agricultural and recreational purposes; water used in fisheries, wildlife and any other purpose. The regulations provide for the protection of lakes, rivers, streams, springs, wells and other water sources. Regulated facilities are required to submit quarterly analysis reports of effluent discharged into the environment.



Eldoret Water and Sewerage company (ELDOWAS) waste water treatment facility adjacent to the dumpsite.

In a bid to boost compliance levels of regulated facilities, the Authority engaged various stakeholders in an exercise that led to harmonization of effluent discharge license fees (under legal notice no. 85 of July, 23, 2012). The revision of the fees has increased compliance levels by regulated facilities.

During the year, 804 effluent discharge license were issued, licensed facilities inspected and monitored with license conditions for five sectors (flower farms, petroleum, tea, hotels and tanneries) reviewed. The following table gives a breakdown of the licenses processed.

NO.	SECTOR	NO. OF LICENSES ISSUED
1.	Sewerage services providers	37
2.	petroleum	365
3.	Hotels, camps and lodges	141
4.	Agro-based processing industries	114
5.	Slaughter houses	10
6.	Chemical Based processing industries	20
7.	Intensive chemical based industries	75
8.	others	42
Total		804



#### **Chemicals and Laboratories**

Draft Chemicals Regulations were finalized within the year awaiting gazettement and implementation. As well within the year, a total of fifteen (15 laboratories were monitored and evaluated in various counties namely; Mombasa, Kisumu, Kakamega, Nakuru, Eldoret and Kericho.

#### **Enforcement initiatives**

- i. Prosecutions
- ii. Environmental audit
- iii. Monitoring and inspection

#### **Prosecutions**

Prosecution of environmental crime cases within the year was done by in-house prosecutors to ensure improvement in quality of prosecutions as well increase the rate of conviction. In line with this, fifteen prosecutors were introduced to magistrate courts and local police in the counties. During the period, the Authority faced various categories of environmental crimes, however, fifteen cases were finalized and five cases are pending in court as depicted in the following table.

Environmental crime		Status	
		Finalized	Pending
Obstructing an Environmental Inspector C/SEC 137(a) of the Environment Management and Coordination Act. No 8 of 1999.	1	1	0
Failing to submit a Project report contrary to the requirement of SECT 58 of this Act contrary to SECTION 138 (A) of EMCA	1	0	1
Making a document without Authority C/Section 357(a) of The Penal Code	2	0	2
Signing a document in the name of another C/Section 347(d) (i) Penal code.	1	0	1
Implementing a project likely to have a negative Environmental Impact without Authority C/Reg 4(1) (a) EMCA.	7	7	0
Discharging effluent into aquatic environment contrary to section 142(2)(a) of EMCA No. 8 of 1999	1	1	0
Transporting of waste without following scheduled routes approved by NEMA C/Reg. 8(3) Waste Management	1	0	1
Making noise in excess of prescribed levels C/Reg. 6(5) as read with regulation 25 of EMCA	3	3	0
Discharging pollutants into the environment C/Sec 142 (1) (c) of EMCA No. 8 1999	2	2	0
Failing to manage hazardous waste and materials in accordance with the Act C/Sec. 141(a)of EMCA No. 8 of 1999	1	1	0
	20	15	5

#### **Environmental Audit and Inspection**

In the year 2013/2014, the Authority received and reviewed four hundred and eight six environmental audit reports for high risk facilities. Inspection was done in various Counties including; Thika level 5 hospital, Kenyatta National Hospital, Embu Provincial Hospital, Machakos level five hospital, Kisii level 5 hospital, Jaramogi Oginga Odinga referral Hospital, Isiolo referral hospital, Kenya Petroleum refinery, Rift Valley Provincial hospital, Coast General hospital, Kisumu Agha Khan hospital, Meru level 5 hospital and Baruti sand harvesting.



Baruti Sand Harvesting and Quarry site, Nakuru County

#### Monitoring and inspection of sensitive shoreline

The objective of the activity was to monitor and inspect shoreline developments and activities in the two sites for compliance with wetlands regulations. The shoreline environmental violations/issues monitored include: illegal construction of beach walls; encroachment on the beach by developments such as hotels; blockage of beach access points in Diani site and; monitoring compliance by the Mkwiro community seaweed farming project with NEMA license conditions. The monitoring exercise revealed that the Diani/Ukunda environment area is facing increasing threats from urban development occasioned by rapid population growth and commercial developments in the town and the surrounding environs. The beach and the shoreline areas are the most threatened mainly by hotels developments.

#### Strategic partnerships for sustainable development

In the reporting period, the Authority undertook a number of strategic partnerships with various stakeholders aimed at enhancing sustainable management of our environment.

#### • Review and approval of CDM projects

The Clean Development Mechanism is one of the arrangements developed under the Kyoto protocol of the United Nations Framework Convention on Climate Change with the aim to stimulate green investment and help Parties meet their emission targets in a cost-effective way. The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction targets.

A CDM project must provide emission reductions that are additional to what would otherwise have occurred. The projects must qualify through a rigorous and public registration and issuance process. Approval is given by NEMA which is the designated national authority.

During the year, UNFCCC registered CDM projects in Kenya went up to 20 and of these; two were issued/ paid for the Certified Emission Reductions. These two are Olkaria VI Geothermal Project and Re-development of the Tana Hydro Power Project both by KENGEN. Kenya has about 36 CDM projects in the pipeline.

#### • Partnership with KNLS

NEMA library has been partnering with Kenya National Library Service (KNLS) and other key partners to enhance access to environmental information. Branded shelves have been placed in eight KNLS branches in the country; Kisumu, Kakamega, Embu, Mombasa, Nyeri, Nakuru and Nairobi-both public and national libraries. Environmental materials have been displayed on these shelves for public access. We have also exchanged materials with other partners like KFS, KWS, and Wildlife clubs of Kenya, Universities, and UNEP among others.

#### Rehabilitation of abandoned degraded sites

In the reporting period, the Authority in its pursuant for a clean and healthy environment rehabilitated numerous abandoned degraded sites.

Some of the sites included Rehabilitation of degraded of Chepalungu in Bomet County, Lake Chem Chem Rehabilitation in Kilifi county where blocked channels feeding Lake Chem Chem successfully unblocked. Other areas included rehabilitation of Lake Kenyatta degraded site in Lamu County, Rehabilitation of Kiambogo Quarry Site in Meru County.

The Authority working closely with the Ministry of Environment, Water and Natural Resources as well as local stakeholders was involved in the rehabilitation of River Sosiani. The rehabilitation activities entailed cleaning of the river of waste and planting of tree seedlings within the river riparian as well as securing of a dumpsite that was along the river. River Sosiani which is within the Lake Basin draining system and traverses Uasin Gishu County is an important ecological habitat and supplies water for human activities such as irrigation.

The Authority also developed the Athi-Sabaki Pollution Prevention and Control Strategy aimed at reducing discharges into River Athi-Sabaki starting from the rivers' source up to their discharges into the Indian Ocean. The strategy was approved by the NEMA management and has been allocated Ksh 6 million to facilitate its implementation in the next financial year. The counties involved are Kiambu, Nairobi, Machakos, Makueni, Kitui, Taita Taveta and Kilifi counties.

#### Mentoring of RCEs towards UNU registration

In order for RCEs to become fully functional, it is important that they get formal recognition by the United Nations University in Japan. On the local front NEMA has been playing a mentorship role to assist RCEs gain recognition. This the reporting period the Authority worked with a number of RCEs to promote education for Sustainable development (ESD). One of the RCEs is Coast-based Pwani University. The Authority worked closely with the institution of higher learning to establish Pwani University Botanical Garden.

The botanical garden at the university was set up with a special focus to enabling the execution of biodiversity regulations that NEMA is enforcing and also to assist promote general environmental education. The garden is grounded on four pillars of education, research, recreation and conservation.

It is expected that once fully functional the garden will be a reservoir of the genetic resources at the coastal region of Kenya and will also enhance dialogue between the academics at the university and the herbalists and local communities who are the custodians of indigenous knowledge pertaining to the plant heritage in this region. To date NEMA has invested over Ksh 5million through the Natural Resource Management Programme (NRM) in this project. A partnership of this nature is of critical importance in raising the profile of NEMA as well as opening up other potential working arrangements with institutions of higher learning.

#### • ESD in learning institutions

As Kenya undertakes the various steps to attain the Vision 2030, various stakeholders must put in place strategies that will enable them to make their contribution to this achievement based on their mandate. Within the social



pillar, education plays a central role in determining the direction a country takes with regards to growth and development. More importantly, curriculum is crucial as it determines the extent to which learners can contribute to the achievement of the set out goals based on the ability, knowledge, skills and values acquired.

Education is recognized as a process by which human beings and societies can achieve their fullest potential. The design of relevant programmes requires dynamism and incorporation of different and new ideas as need arises. Both formal and informal education is indispensable to changing people's attitudes. Education is also instrumental in achieving environmental and ethical awareness, skills, values and attitudes that influence positive behaviour consistent with enhancing effective participation in decision making.

National Environment Management Authority (NEMA) worked with the Kenya Institute of Curriculum Development (KICD) and provided some of the apparatus and equipment the schools needed for the project. Since 2012 various activities have been undertaken by the schools such as establishing tree nurseries, the ecological gardens, management of waste and preparation of compost through various clubs. The aim of the project is to expose the learners and teachers to the concept of Education for Sustainable Development and how it can be integrated in primary and secondary education (curriculum).

This is to be done by engaging learners in outdoor and practical learning sessions where they can apply the concepts learnt in various subjects in real life situations. A number of city based schools in Nairobi such as Jamhuri Pry School and a host of many other city schools have been a beneficiary of NEMA's ESD programmes.

In realizing the important roles that County Education Board play in the establishment and entrenchment of Education at the County level, NEMA undertook to train the County Education Board on issues of ESD. This three days trainings session was held at the Kenya School of Government Embu for the Meru County Education Board. The training was hoped to mainstream ESD at the county level and enable County Education Board embrace issues of ESD. NEMA remains committed in engaging more County Education Boards in this endeavour.

#### • Solid waste management: Ngong Project

Solid waste management is a major problem in most towns in Kenya. County Governments, who are charged with the responsibility of waste management, are usually faced with a huge challenge. Most towns do not have designated or licensed dumpsites and are characterized by small dumpsites at every corner or street which eventually grow into big piles that are unmanageable.

It is also common to find animals such as cows, goats, chicken, and pigs feeding at these dumpsites. This poses health risk as disease causing organisms can easily be transferred from animals to humans through the food chain. Such sites are breeding grounds for disease causing organisms such as rodents and cockroaches. The dumpsites are also an eye sore apart from blocking drainage systems thus causing flooding in urban areas and breeding grounds for mosquitoes. All these are exacerbated by the rapid population increase as people migrate from the rural areas to towns to look for employment and also seek better social amenities. Increase in population gives rise to high waste generation turnover from domestic, agricultural and industrial sectors.

NEMA partnered with Nuru Youth Group based at the Ngong dumpsite and RCE Greater Nairobi to promote pilot waste segregation project and transform the site to an excellent centre in solid waste management.

The valuable products include plastics, glass, metals clothes and organic waste for feeding the pigs. The plastics and glass collected are sold to brokers who sell to other recyclers companies.

To manage the waste generated in Ngong and surrounding areas, NEMA has engaged the County Government of Kajiado who manages the dumpsite. The Authority also funded the construction of a sorting shade at the dumpsite.

The Authority has also built capacity for waste segregators and transporters operating at the dumpsite.

Fencing of the dumpsite has been done by the County Government of Kajiado to secure the place as per the ten minimum points.



The sorting shade constructed by NEMA at the Ngong dumpsite

### The Impacts of the project include:

• Reduced scattering of waste at the dumpsite



Improved road system and reduced waste at the dumpsite through material recovery

- Controlled access to the dumpsite by use of the fence
- Increased recovery of materials which is about 70 per cent of all the waste delivered at the site
- Controlled access to the dumpsite by use of the fence
- Increased recovery of materials which is about 70 per cent of all the waste delivered at the site



Recovered materials for recycling and an integrated big project by the group that utilizes organic waste

- Improved livelihoods of the segregators through better income
- Reduced cases of injuries and diseases
- Raised compliance levels to environmental laws/regulations

# **PUBLIC & MEDIA ENGAGEMENT**

he Authority seeks to promote a positive image through effective internal and external communication initiatives. The Authority undertakes regular media and public engagement in promotion of environmental conservation and streamlined information flow.

During the year under review, Media campaigns were undertaken which focused on various themes such as green economy, environmental awareness, waste management among others. Using radio, newspapers and TV broadcast, members of the public were rallied to take actions aimed at contributing to a clean and healthy environment.

#### **Media Engagement**

The Authority published awareness content on environmental conservation and infomercials for the launch of a Green Point in Mwatate, Kilifi.

Media interviews relating to the Authority's mandate on e-waste, compliance standards and on World Day to combat Desertification were organized by the Communication section for the Director General. These includes; interview between Director General and German TV, the Project Green on KTN for Director Compliance and Enforcement on compliance, and DG's interview on KTN morning express breakfast during the World Day to Combat Desertification (WDCD).

In addition the DG featured in Citizen TV breakfast show, he created awareness to Kenyans on NEMA's programmes and operations.



NEMA Director General, Prof Geoffrey Wahungu speaking during the Citizen's breakfast show where he created awareness to Kenyans on NEMA's programmes and operations

The media was invited to cover various launches done by the Authority namely, the Strategic Environmental Assessment (SEA) launch at Panafric Hotel graced by Prof. Judi Wakhungu and Green Point Launch officiated by Denmark's Ambassador to Kenya.

In addition, press conference on River Galana Pollution and the signing of NEMA- KARA MoU among other numerous press releases and press statements were sent to the media to ensure maximum coverage.

A media breakfast was also organized on Global Regional Centre of Expertise (RCE) conference. The Authority through the year was able to sponsor Annual Media Excellence Awards, Mazingira Award Category, and AMEA by the Kenya Alliance of Residents Association in December 2013,

#### **Public Engagement**

In the resolution of complaints as per the performance contracting guidelines, the section created awareness through publishing our existing complaints handling system in the third quarter magazine and also in the Ministry of Environment, Water and Natural Resources Activity planner 2014 and in the East African Government Handbook (pg.86)

The Authority addressed incidents and complaints reported within reasonable timelines as stipulated in the service charter. In recognizing the Authority's performance in handling complaints and incidents, the Commission on Administrative Justice (CAJ) also known as the Ombudsman gave the Authority a Compliance Certificate.



A scanned copy of the compliance certificate from the office of Ombudsman

Awareness campaigns and trainings for the general public were undertaken. This sensitization led to increased compliance as the regulated community has embraced environmental conservation. A customer satisfaction survey was undertaken by the Authority and gave a score index of 72.13 per cent. Based on the survey results, NEMA Management developed strategies to enhance customer satisfaction.

Corporate Social Responsibility (CSR) was developed so as to shape the Authority's function when it comes to giving back to the community. The CSR policy will help guide in evaluation of projects and proposals that meet desired goals of the Authority. and Similarly, the Social Media Policy was developed to improve service delivery and public engagement by enhancing interactivity with development partners and the general public. The policies are currently in the finalization process.

#### Implementation of NEMA service charter

Sensitization of NEMA service charter was undertaken during staff induction. The corporate communications section was able to sensitize staff from 28 counties. During the year NEMA service Charter was also translated into Kiswahili to ensure a wider audience is reached besides it being a national language. 51 snapper frames were printed where 19 were in Kiswahili and 32 in English.

# **INSTITUTIONAL CAPACITY ENHANCEMENT**

he Authority endeavours to transform the effectiveness of business processes in order to ensure improved service delivery. This transformation involves improvement of infrastructure or automation of certain processes.

The key achievements of the section in this regard in the FY 2013-2014 is as follows:

#### 1. Improved Internet Access in Field Offices

NEMA has endeared to expand its network access to all offices countrywide. This is key in ensuring automated systems are available in the networked areas. In the lapsed financial year, the Authority began an initiative to connect twelve (12) field offices through GSM due to their cost-effectiveness, and wide coverage of GSM network. The 12 offices are Makueni, Kilifi, Murang'a, Kwale, Migori, Kericho, Baringo, Kisii, Nyamira, Narok, Kiambu and Tharaka-Nithi.

#### 2. Review of ICT Policy and Strategy

The ICT Policy and Strategy are documents which guide the section in its day-to-day operations. In the last fiscal year 2013-2014, the section embarked on a review of the two (2) documents guided by the fact that they were initially drawn up for a specific time period which had expired i.e. 2010-2013 and to also capture emerging ICT issues. As at the end of the year, the two documents had been finalized awaiting management approval, printing and final roll-out.

#### 3. Modernize backup and recovery, adapt to data growth and virtualization

As the Authority keeps growing in terms of data, it is prudent that more effort is put in order to secure it in a modern and effective way. Growth in more day, does not necessarily involve purchase of more infrastructure; but rather introduction of newer technologies. In the lapsed financial year, NEMA purchased a data backup server with virtualization capabilities.

#### 4. Procured and installed Power Backup System to ensure uptime of critical systems

In recent years, power outages have become a key concern to firms. Therefore, as a section, we have put in place measures to ensure that this vital resource remains available throughout to ensure continued delivery of services to customers at all times. In the last financial year, NEMA procured and installed a power backup system which ensures that power is available all the times.

#### 5. Quarterly WAN & LAN Maintenance.

Routine maintenance of the network is crucial in ensuring that users are able to access crucial services continually. With the expansion of the LAN & WAN to 10 offices countrywide in the FY 2012-2013, ICT felt the need to pay close attention to their servicing to ensure optimal performance.

#### 6. Adoption and usage of Voice Over Internet Protocol (VOIP)

With increased network connectivity, it is prudent to take advantages of the numerous opportunities that come with it. One of these opportunities is the Voice over Internet Protocol (VoIP). VoIP is a technology which allows users to use the internet as the transmission medium for telephone calls. NEMA has not been left behind in this new technology and in the last fiscal year began roll out of this within HQs and Nairobi county office.

#### **Staff Training and Development**

After a successful recruitment process, the Authority prioritized the induction of the newly recruited staff into NEMA Operations to ensure effective integration and increased staff retention.

The induction training involved the Director General, the Directors, deputy directors and representatives of various departments.

The objectives of the induction training were to:

- 1. Outline key NEMA Operational procedures
- 2. Describe the main institutional policies
- 3. Describe NEMA institutional framework
- 4. List the authority's functions spelled out in the EMCA 1999
- 5. Understand NEMA culture and what is expected of them

#### **Recruitment and selection**

In an effort to enhance improved service delivery to the internal and external clientele, the section led in the recruitment of 31 new staff. Amongst the areas enhanced were Human Resource and administration, Procurement, Research and planning, Compliance & enforcement.

#### Work environment

Provision of green points for office space was a great motivation for the field officers; the refurbishment of the offices also greatly improved the work environment.



#### A view of Mwatate Green Point

The Authority put concerted efforts to revise the Human Resources procedures and guidelines manual to reflect the interest of staff and make it more user friendly. The career guidelines were also reviewed to encourage staff upward mobility and foster staff career growth.

#### **Risk management in Counties**

The Authority planned and carried out strategic internal audits combining compliance, financial and system audits on all NEMA offices. Consequently, the Authority has put in place internal controls to ensure that those controls are appropriately applied to identify and manage risks for the achievement of NEMA's objectives.

The above was achieved by embracing Enterprise Risk Management (ERM) practices on identified and emerging risks that the authority is exposed to. In addition high risk facilities were promptly visited by the audit team throughout the country. Activities included:

Activities included:

- 1. The Audit, Governance and Risk Management Committee Board members visited rehabilitation sites and other environmental significant areas in Eastern Region as part of their oversight role
- 2. The Authority conducted Risk assessments, Compliance with policies and procedures as well as a system audit in all the Regional and 44 County offices as well as donor funded projects namely; KCDP and UNIDO.

The Audit Governance and Risk Management Committee identified sites to be visited in order to check on the progress and confirm proper utilization of funds meant for the exercise. As part of the Program, the Audit Committee identified Eastern region and visited NEMA County Offices in Machakos, Kitui, Makueni, Embu, and Meru.

#### **Machakos County**

The dam was identified as Environmentally Significant Areas (ESAs) within the County, due to its ecological, social and economic value to both the communities and residents of Machakos Town and its environs. It is a major source of water for Machakos Town and its environs and it's anticipated to provide water for the proposed Machakos resort city. However, anthropogenic activities threaten the sustainability and efficacy of this vital water resource hence the need to plan for its sustainable management.

The major challenges facing the dam include;

- 1) Dirty Water entering the dam,
- 2) Lack of seedlings to plant all-round the dam,
- 3) No filtration of water
- 4) Lack of sensitization to the locals.



Maruba Dam which is a major source of water for Machakos Town and its environs.

#### Makueni County

#### **Kwangesu Rehabilitation Site**

Kwangesu was chosen because it was one of the best and thought of projects for rehabilitation and in the right and appropriate place. There was a public outcry on the floods coming from the hills which had swept off a school.



Deposition of sand at Kwangesu Rehabilitation Site.

#### **Kitui County**

#### **Coal mining and Alumina clay quarrying**

Kitui County has some environmental resources in the County, Minerals. Such minerals include limestones (Mutomo and Ikutha), iron ore (Mutomo, Mumoni, Tharaka and Tseikuru) and Coal in (Mwingi and Mutitu – Mui basin), gypsum, Manganese and sulphate (Mutomo). Gemstones (green garnets, sapphire and rubies) are also found in the County.

Mui Basin Coal is divided into four blocks namely A, B, C, and D. Blocks C and D are in Mwingi East. The Board visited all the blocks.



Mr. John Gitonga – Head of Exploration in coal at Ministry of Energy, briefing the NEMA Board of Management Chairman Mr Maluki Mwendwa (centre) and Director General Prof Geoffrey Wahungu.

#### **Meru County**

Kiambogo Quarry Site is in Imenti South Sub County of Meru County. Rehabilitation of the Kiambogo quarry site was meant to restore the degraded environment near to its original status before the exaction of building stones started.

The stakeholders involved in the preparation of the restoration plan include KFS, NEMA, Ministry of Fisheries, County Government, community, local political leaders, church organizations, the Administration, and self-help groups.



Egoji- Mutonga quarries along Meru- Embu highway.

#### **Marsabit County**

#### **Bubisa Dam**

The Committee visited the dam which is situated near Bubisa trading centre along the Marsabit-Moyale highway. The dam was rehabilitated by NEMA through the environmental Restoration Fund in the year 2011 to serve the Community around to provide water for domestic and livestock. The dam currently is in poor state despite the fact that it's the only source of water for the over 50 villages/Manyattas around the area.



# **FINANCIAL STATEMENTS**



# **FINANCIAL STATEMENTS**

he Authority in the repaying period collected Ksh 451.5 million from license fees compared to Ksh 337.4 million in previous year (34 per cent increase). This was mainly attributed to enhanced field inspections leading to more compliance and change in Environmental Impact Assessment fees from 0.05 per cent of cost of project to 0.1 per cent without upper capping. The total revenue received from government and other development partners was Ksh 741.1 million compared to Ksh 666.4 million in previous year (11 per cent increase). This increase was attributed to increased government development allocation and more donors funding.

The Authority takes cognizance of Ksh 65.9 million development funds received during the financial year; no development funds were released in the previous year. An amount of Ksh 800,004 was received from bank balances held in various current accounts of the Authority. This is compared to Ksh 283,273 in previous year. The Authority has rented out canteen services and received Ksh 240,000 during the year. Same amount was received last financial year.

The entity's financial statements have been prepared in accordance with and comply with International Public Sector Accounting Standards (IPSAS). The financial statements are presented in Kenya shillings, which is the functional and reporting currency of the entity. The accounting policies have been consistently applied to all the years presented.

The financial statements have been prepared on the basis of historical cost, unless stated otherwise. The cash flow statement is prepared using the indirect method. The financial statements are prepared on accrual basis.

#### **Internal Control**

The Directors are responsible for reviewing the effectiveness of the Authority's system of internal control which is designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against unauthorized use or disposition and the maintenance of proper accounting records and the reliability of financial information used within the business or for publication. These controls are designed to manage rather than eliminate the risk of failure to achieve business objectives due to circumstances which may reasonably be foreseen and can only provide reasonable and not absolute assurance against material misstatement or loss.

### **STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED 30TH JUNE 2014**

	2014	2013
	Kshs	Kshs
Revenue from non-exchange transactions		
Government grants - recurrent	373,555,994	473,873,038
Government grants - EMCA Agencies recurrent	56,700,000	99,786,000
Government grants - development	65,900,000	-
Government grants - EMCA Agencies development	30,780,000	-
Donor funds	214,202,965	92,767,859
	741,138,959	666,426,897
Revenue from exchange transactions		
Revenue receipts	431,225,853	332,307,758
Interest received	800,004	283,273
Other income		4 770 617
Other income	19,482,116	4,770,617
	451,507,972	337,361,648
Total revenue	1,192,646,931	1,003,788,545
Expenditure		
Staff costs	561,213,554	516,347,265
Administrative costs	296,054,693	271,192,928
Board expenses	14,549,842	13,419,440
EMCA Agencies	75,955,059	109,891,460
Project expenses	177,083,817	111,528,058
Depreciation expense	31,414,731	38,798,662
Repairs and Maintenance	27,969,385	21,363,066
Finance Costs	1,834,529	1,248,036
Utilities	22,692,444	21,516,407
Total Expenditure	1,208,768,055	1,105,305,321
Surplus/(Deficit)	(16,121,124)	(101,516,775)

# **STATEMENT OF FINANCIAL POSITION AS AT 30TH JUNE 2014**

	2014	2013
	KShs	KShs
Assets		
Current assets		
Cash and cash equivalents	335,482,523	371,856,509
Receivable from non-exchange transactions	151,589,758	40,484,439
	487,072,281	412,340,948
Non-current assets		
Property, plant and equipment	140,337,315	163,998,785
Capital Work in Progress	14,772,608	14,772,608
	155,109,922	178,771,393
Total assets	642,182,203	591,112,341
Liabilities		
Current liabilities		
Trade and other payables	349,183,134	297,933,488
Total liabilities	349,183,134	297,933,488
Net assets	292,999,069	293,178,853
Equity		
Capital Fund	175,472,531	175,472,531
Revenue Reserves	117,526,538	117,706,322
Total equity	292,999,069	293,178,853

# STATEMENT OF CHANGES IN NET ASSETS FOR THE YEAR ENDED 30 JUNE 2014

	Accumulated Fund KShs	Revenue Reserve KShs	Total KShs
At 1st July 2012	175,472,531	219,197,851	394,670,382
Prior year adjustment		25,245	25,245
Net Deficit for the year		(101,516,775)	(101,516,775)
At 2011, I.m. 2012	475 472 524	447 706 224	202 470 052
At 30th June 2013	175,472,531	117,706,321	293,178,852
At 1st July 2013	175,472,531	117,706,321	293,178,852
Prior year adjustment		15,941,341	15,941,341
Net / (Deficit)surplus for the year	-	(16,121,124)	(16,121,124)
At 30th June 2014	175,472,531	117,526,538	292,999,069

## **STATEMENT OF CASH FLOWS**

	2014 KShs	2013 KShs
Cash flows from operating activities	K3115	KJIIS
Surplus / (Deficit) for the year	(16,121,124)	(101,516,775)
Adjustments for:	(10,121,124)	(101,510,775)
•		
Depreciation of property, plant and equipment	31,414,731	38,798,662
Prior year adjustment	15,941,341	25,244
Interest received	(800,004)	(283,273)
Changes in operating assets and liabilities		
(Increase) / Decrease in trade and other receivables	(111,105,319)	1,098,682
Increase (decrease) in trade payables	51,249,646	219,362,144
Net cash from operating activities	(29,420,728)	157,484,684
Cash flows from investing activities		
Purchase of property, plant and equipment	(7,753,260)	(63,233,425)
Work in Progress	-	(10,836,584)
Interest received	800,004	283,273
Net cash used in investing activities	(6,953,257)	(73,786,736)
Net cash used in financing activities	0	0
Net increase (decrease) in cash and cash equivalents	(36,373,984)	83,697,948
Cash and cash equivalents at start of year	<u>371,856,509</u>	<u>288,158,561</u>
Cash and cash equivalents at end of year	335,482,523	371,856,509