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Top Cover: Cabinet Secretary for Environment and Forestry Keriako Tobiko launching Booklets during the Commercial Forestry Investment Conference and Expo organized and hosted at KEFRI Headquarters

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KEFRI Newsletter is a Quarterly Magazine produced by Corporate Affairs and Quality Assurance

KEFRI hosts Commercial Forestry Investment Conference & Expo

KEFRI hosted the first Commercial Forestry Investment Conference and Expo at its headquarters from 23rd to 26th November 2021. The theme of the conference was 'Commercial Forestry Investment for Wealth Creation, Enhancing Manufacturing, Food Security, Health and Attainment of 10% Tree Cover in Kenya'.

The conference brought together stakeholders in the commercial forestry sector including; practitioners, researchers, wood processors and investors, and development partners to share knowledge, experiences and opportunities in commercial forestry sector in Kenya and within the region.

The Cabinet Secretary for Environment and Forestry Mr. Keriako Tobiko officially opened the conference and launched six (6) research booklets authored by KEFRI scientists. The booklets are;

1.Kenya Commercial Tree Improvement Framework

- 2.Kenya Commercial Tree Improvement Strategy
- 3. Biodiversity Status of Buda Forest, Kenya

4.Aerial Seeding for Rehabilitation of Degraded Forestlands and Landscapes in Kenya.

5.Protocol for Aerial Seeding of Forestlands and Landscapes in Kenya

6.Commercial Forestry in Kenya; Status of Tree Breeding, Tree Seed Sources and Seed Supply chain and threats from pests and diseases

The key note address highlighted the potential of commercial forestry investment in contributing to the achievement of the Big 4 Agenda through creating wealth, boosting manufacturing, food security, and health as well as attainment of 10% tree cover in Kenya.

It was noted that currently, Kenya has an annual wood deficit of approximately 10.3 million m3 and with the population projected to increase to over 80 million people in 2050, the demand for forestry products to support other sectors of the economy such as construction (timber), and energy (fuel wood and charcoal) is expected to increase exponentially.

In the medium term, it is projected that industrialization and urbanization will increase demand of wood products to approximately 66 million m³ by 2030 thus tripling the wood deficit in the country. Current, the country only meets 70% of its forest products demand through sustainable supply and this has caused small and medium–sized enterprises to operate below capacity.

The Conference which also integrated an exhibition, as side event, recommended the followings;

1. Establishment of a commercial forestry investment centre to coordinate further engagement with stakeholders from both public and private investors including youth and women interested in commercial forestry;

2. Develop standards to attract better markets and prices for tree and non-timber forest products;

3. Resource mobilization to support commercial forestry investment in Kenya.

Board of Directors visit research sites in Kitui, Rift Valley and Central Highlands

KEFRI Board of Directors led by the Chairman Dr. Sammy Letema made a monitoring and evaluation visit to KEFRI research sites in Tiva station and woodland in Kitui County where selection and breeding of high-quality drought tolerant tree varieties including Melia volkensii and Acacia tortilis is ongoing.

The Board assessed progress made in establishment of Melia volkensii seed orchards and progeny trials. The tree breeding project is being implemented as a bilateral venture between the government of Kenya and Japan with overall goal of ensuring sustainable forest management of indigenous tree species to achieve the national forest cover target of 10%.



The Melia clonal seed orchards occupy 13 ha with 3,000 clones from 100 selected candidate plus tress (CPTS), that were collected across its natural growing ranges in Kenya covering Taita Taveta, Makueni, Kitui, Embu, Isiolo and Tharaka Nithi counties.

The 3.3 ha Melia progeny trial was established in 2015 to assess the growth performance of the various families. This has been replicated in four counties namely Taita Taveta, Makueni, Kitui and Tharaka Nithi. provide high quality seed to establish plantations to meet the ever-increasing demand for its products. Acacia tortilis is very useful for, fuelwood, timber, posts, poles, fodder (pods and leaves) tannins and dyes, and it's also useful for Nitrogen fixation and soil conservation.

The Board pledged to support furtherance of the breeding work into 2nd generation progeny which is factored under upcoming JICA support project.

"The Board is keen to oversee the upgrading of Tiva to a centre of excellence in tree breeding and seed production centre. I also urge the management to work closely with the local communities in good neighbourliness to promote sustainable management of the woodland," said the Board Chairman Dr. Letema.

"KEFRI has concerted efforts to upscale *Melia volkensii* growing on-farm in collaboration with various individuals including Mr. Jonathan Kituku, a farmer in Kibwezi, Makueni County, public and private partners such as Better Globe, KOMAZA and County Governments," said Dr. Cheboiwo.

The Chairman Dr. Sammy Letema acknowledged the University of Nairobi which has offered 400 ha of land in Kibwezi to KEFRI for joint forestry research including establishing Melia plantation.

At the Rift Valley Eco-region, the Board members visited KEFRI Marigat Sub-centre, 4-year *Moringa Stenopetala* seed stand at Parmolok Island - Lake Baringo and proposed sites for establishment of tree conservation stands.



"KEFRI will plant *Osyris lanceolata* and *Moringa stenopetala* among other indigenous species to conserve and expand the diversity of trees varieties endemic in the region," said the Assistant Regional Director Mr. Simon Choge.

Some of the species will be planted at the seven islands to conserve the unique biodiversity of and critical habitat for both flora and fauna.

At Rumuruti Sub-centre, the Board held a meeting with Laikipia Governor, Nderitu Mureithi and reflected on partnership in forestry development, especially in tree seed and seedlings production, institutional capacity building and trainings.

Governor Mureithi revealed that his County has over 100 tree nurseries with a capacity of 2 billion seedlings. The Governor urged KEFRI to establish on-farm trials and research demonstrations sites to enable communities adopt forest practices and move the County forward in terms of commercial forestry.

The Board and County officials planted commemorative trees to honour the partnership as well as support tree growing initiative and for the attainment of 10% tree cover.



At Nyeri sub-centre, the Central Highlands Regional Director Dr. Eston Mutitu reported that KEFRI jointly with Nyeri County has planted 10,000 indigenous trees at Karima and Tumutumu hills.

The Board urged the centre to consolidate efforts to collect the 8 tonnes of tree seed which is part of the institute's Performance Contract target in the current financial year.

KEFRI participate at the Devolution Conference, in Makueni County

KEFRI sent an envoy to the 7th and Final Annual Devolution Conference held from 23rd to 26th November, 2021 at Makueni Boys High School in Makueni County, to advance forestry issues, establish links with both private and public partners with similar interests, and scout for climate actions/ resolutions to boost agenda of propelling research in forestry and allied natural resources.

The team that comprised delegates and exhibitors build capacity of stakeholders through exhibition of technologies and other research findings with impact of making communities resilient to negative effects of climate change.



sector session that addressed natural resource management

The 7th and Final Annual Devolution Conference under the Theme 'Multi-level Governance for Climate Action; and Sub Theme; Sub-National Mobilization in Unlocking the Full Potential of Climate Action during and after Pandemics, was organised by the Council of Governors (COG), composed of the 47 county governments, in conjunction with the Office of President, Senate, Ministry Departments and Agencies (MDAs), majorly Ministry of Devolution, Environment and Forestry, Ministry of Health, County Assemblies Forum, development partners, civil society organizations, private sector among other key players.

The Conference coming soon after COP 26 in Glasgow, was critical in ensuring that sub-national Governments both local, regional and across the globe deliberate on their role and measures to unlock opportunities to turn around the climate change effects in the communities.

The conference was preceded by planting of over 300 tree seedlings at Agricultural Training Centre (ATC) at Kwa Kathoka in Makueni County. KEFRI and Kenya Forest Service (KFS) provided the tree seedlings, that werer planted by the Interiors Cabinet secretary on behalf of His Excellence (H.E) President Uhuru Kenyatta, Right Hon. Raila Odinga, Cabinet Secretaries, the speaker of the senate, all governors present and representatives from county assemblies, civil societies, private sector and development partners.

While opening the Conference virtually, from a state visit in South Africa, H.E. President Uhuru Kenyatta stated that the focus on climate action has been necessitated by the need to regulate release of industrial wastes and emission of Green House Gases (GHG) in the atmosphere which is a resultant of global warming and adverse climate change.

"Kenya, like many other African countries is facing myriad of climate change associated crisis such as change in rainfall patterns, rampant floods, drought, pandemics, landslides among others nature-related hazards that has resulted into stunted development, increased burden in health care and poor living conditions especially in marginal areas," said President Kenyatta.

The two levels of Government and private sector have a responsibility to ensure that the climate change issues are dealt with including concerted actions to legislate, fund and enforce climate-smart strategies to reduce greenhouse gas emissions at sub-national and national levels. This would ensure that the population is food secure, has access to affordable and quality healthcare, and employment. This would also result to sustainable use of natural resources and effective waste management.

Woody Weeds +Project extended in Kenya

The PS, Ministry of Environment and Forestry, Dr. Chris Kiptoo launched phase two Woody Weeds + Project on 12th October, 2021 at KEFRI Headquarters.

The Project, financed by the Swiss Agency for Development and Cooperation, will support the implementation of National Prosopis Strategy (NPS) for sustainable management of *Prosopis juliflora* in Kenya.



PS Dr. Kiptoo (3rd front row) with key partners of the woody weed + Project who attended the launch

KEFRI as the national authority for Prosopis management in Kenya will lead key players including KFS, CABI, CETRAD, Nature Kenya, Northern Rangeland Trust, and Community Based Organizations (CBOs) in the implementation of the Strategy and coordinate activities among counties.

Prosopis, locally known as (Mathenge tree) is one of the world's most threatening weedy and invasive tree species. It was introduced in East Africa in the 1970s to arrest desertification and reduce erosion on degraded lands. The species spread out rapidly becoming weedy with severe negative ecological impacts including loss of grazing land and access to water, declining biodiversity, reduced human health, and increased human-wildlife and humanhuman conflicts.

In one of the presentation it indivated the invasive weed consumes up to 36 litres of water daily with thickets consuming more than half of the annual rainfall in the invaded landscapes. Furthermore, grassland degradation has led to a 40-50 percent decrease in soil organic carbon. In Kenya, Prosopis was introduced in Tana River, Baringo and Turkana counties and has since spread to several neighboring counties affecting about 2 million ha of land. Similarly, in Ethiopia it has invaded 1.2 million hectares of land in the Afar region since its introduction in 1990.

In his remarks Dr. Kiptoo stated the 3-year Project builds upon phase one which assessed the effects of Prosopis on the environment and rural livelihoods in Kenya, Ethiopia and Tanzania.

"The Project will support implementation of the National Prosopis Strategy in pilot counties in Kenya and strengthen livelihood security and environmental integrity in affected areas." said PS.

This will be achieved through capacity building, restoration technologies including bush clearing, and rehabilitation of rangelands with pasture in counties of Baringo, Isiolo and Tana River. Additionally, awareness creation on Prosopis invasion will be conducted in the neighbouring counties of West Pokot, Laikipia and Meru.

The PS implored on the need to apply scientific knowledge and research-based solutions to tame the spread of invasive weedy species, noting that the UN's Sustainable Development Goals (SDGs) emphasize on halting land degradation and restoring degraded land as an urgent priority to protect the biodiversity and ecosystem services vital to all life on earth human well-being.

KEFRI Director Dr. Joshua Cheboiwo in his remarks, stated the Strategy and Action Plan relied on scientific results of the Project phase 1, and is in line with Kenya's Vision 2030 and other national pillars that define sustainable management and integrity in resource use.





KEFRI supports 4K Clubs to grow trees

KEFRI in collaboration with the Ministry of Environment and Forestry (MoEF), KFS and other state agencies will partner with Ministry of Education, Ministry of Agriculture and County Governments to pass on information and skills to school children so as to grow trees and other food crops for food security, environmental conservation and climate change mitigation.



Dr. Jane Njuguna directing pupils at Khudho Primary School in Kisumu on tree planting skills

"In the arrangement, KEFRI will provide highquality tree seed, technical backstopping and mentorship of the schooo children in environmental science and other disciplines," said Dr. Njuguna.

Dr. Njuguna was speaking during the launch of the partnership at Khudho Primary School, in Kisumu County where a tree growing programme to engage school children in embracing the culture of tree growing through the 4K Clubs of Kenya was initiated.

Environmental sustainability will depend on how well we pass the baton of right information and skills to our children," said Dr. Jane Njuguna.

Speaking at the same event, the Conservation Secretary (acting) Mr. Alfred Gichu, representing the Cabinet Secretary Keriako Tobiko emphasised that the programme will support the Ministry's efforts towards growing seedlings in schools to meet the 10% percent tree cover by 2024. "Kudho Primary School will be among those to raise tree seedlings for the purpose," said Mr. Gichu. The USAID representative Mr. Enock Kanyanya, who accompanied the guest of honour informed the meeting of USAID's efforts in engaging the youth in the environmental conservation initiatives.

According KEFRI Lake Victoria Basin Eco-region Research Programme Director Dr. John Otuoma approximately and head teacher Ms. Elizabeth Akoth, 200 seedlings were planted to mark the event while planting will continue under the slogan 'Going green'.

Conserving Mumaki water catchment in Kitui

KEFRI donated 2,000 seedlings that were planted at Syomuitu Primary School in Matinyani, Kitui County on December 8, 2021, to mark 8th Kitui County Annual Tree Growing

in his remarks, the Kitui County Environment Director, Mr. Benjamin Mukulo, thanked the African Development Bank (ADB) for granting 202 million shillings to conserve Mumaki Critical Water Catchment Area in Kitui County.

The remarks delivered by Mr. Dominic Mumbu further disclosed that the water catchment was started in 2011 as a joint venture between the community in Mutonguni, Kakeani, Kauwi, Musengo, Ngutani, Katutu, Kivani and Mutanda locations and KEFRI which gave technical support.

The official urged residents to grow trees noting that they can reclaim and replenish degraded forests and threatened species. He also stated that Kitui is among the Kenya's counties that have embraced adaptation to climate change and set up the County Climate Change Funds.

KEFRI Dryland Eco-region Research Programme Director, Dr. Albert Luvanda who was represented by a Scientist Mr. Bernard Kigwa, encouraged local communities to conserve indigenous trees and desist from illegal charcoal production, which has negative impact on the environment. Mr. Kigwa also urged farmers to conserve riverines and water catchment areas, integrate improved Mukau (*Melia volkensi*i) on-farm, and preserve the wild fruits trees among them the baobab, Tamarind and *Vites payos* from diminishing in the region.

At the same time KEFRI donated 1,200 seedlings to Saint Luke's School for the Deaf, in Gachoka, Mbeere South, Embu County, on December 18th , 2021.

The seedlings that comprised *Sapindus saponaria* (soapberry), *Gmelina arborea*, *Melia volkensii*, *Delonix regia*, *Croton megalocarpus* and *Casuarina equisetifolia* was planted to establish a woodlot.

KEFRI Regional Director, Dr. Albert M. Luvanda stated that KEFRI is partnering with public institutions in growing trees so as to achieve the 10% tree cover by 2024.

Dr. Luvanda urged the community to conserve indigenous trees and integrate on-farm fast growing and commercial species like Casuarina, *Gmelina arborea*, *Terminalia brownii*, bamboo and East African Sandalwood, to improve livelihood and abate negative impacts of climate change.



The head-teacher, Mrs. Keziah Kagendo thanked KEFRI for supporting the school's environmental conservation activities.

KEFRI support Kajiado Women Group to establish tree nursery

KEFRI-CHERP on 30th December 2021, trained Nadupoi-Oloolotikoshi Women's Group and the youth in Kajiado County on tree nursery establishment and management.

KEFRI will support the school to establish a commercial tree nursery and offer technical backup to ensure tree survive.

As tree seedling demand is high in this area the youth are keen to establish tree nurseries to support government agenda of achieving 10% tree cover as well as expanding their sources of income.



At the same time, KEFRI donated 700 assorted seedlings at Enkasit Primary School and members farms. The school through 4K-Club members will take care of the planted trees.

CHERP Deputy Regional Director Dr. Stephen Omondi, led 4K club students at Kanyenyaini Primary School in Muranga County in planting 650 assorted tree seedlings on 21st December 2021.

The Ambassador of Republic of Slovakia to Kenya, Her Excellency Katrina Ziffia, accompanied by Kiambu Deputy Governor, Dr. Joyce Wanjiku and CHERP Regional Director, Dr. Eston Mutitu, launched Model Fruity Schools at Kiu Secondary in Kiambu County, on 22, October, 2021. Around 1,000 assorted fruit tree seedlings were planted at the school's compound.

Conserving Sasumwa dam

KEFRI's CHERP Regional Director, Dr. Eston Mutitu together with KFS Deputy Chief Conservator of Forests, Mr. Patrick Kariuki on 31st October 2021, led community in planting 25,000 assorted indigenous tree seedlings at Sasumwa dam in Nyandarua County to commemorate the birthday of freedom fighter Field Marshal Dedan Kimathi.

K E F R Idonated 1,000 assorted indigenous t r e e seedlings that were planted jointly with teams



from Dedan Kimathi Foundation, freedom fighters, KEFRI, KFS, Equity Bank, Eco planet, Nairobi Water, local administrators and County officials, Greens Africa Foundation, ENSDA, WASREB and Cooper Kenya Limited also participated in the event. Dr. Mutitu and Mr, Kariuki later donated a goat, signifying a birthday cake to Mukami Kimathi, a freedom fighter and widow to Field Marshal Dedan Kimathi.

KEFRI and CARITAS - Malindi partner to conserve coastal forests

KEFRI and Catholic Diocese of Malindi (Caritas-Malindi) during a meeting held on 22 November 2021 at Gede, agreed to partner and establish forests and environmental conservation in Kilifi County.

The Regional Director, CERP Dr. Linus Wekesa hosted the church delegates which included representatives from Ethiopia Orthodox Church – Development and Inter Church Aid Commission (EOC-DICAC) and Malindi Catholic Church. The team which was led by the Rt. Rev. Willybard Lagho, Bishop of the Catholic Diocese of Malindi aims to restore Church forests to conserve biodiversity and improve the livelihoods of adjacent forest dependent communities.

"EOC has established forest covers in 75,000 churches within Ethiopia and we hope that all our catholic churches in Kenya will establish forests hence improving the countries forest cover," Rt. Rev. Lagho said.

He added that the church forests will not only serve as biodiversity reserve, but also as incubators for improved ecosystem management and resilience to climate change beyond the church boundaries.

The project also aims to raise awareness and

k n o w l e d g e of the forest d e p e n d e n t c o m m u n i t i e s about climate change and value of sound forest management.



Conserving Cherangany Hills

KEFRI participated in the 1st edition of the Cherangany Hills tree planting and conservation event, held at Jemunanda Primary school in Elgeyo Marakwet County, on 8th October 2021.

KEFRI Director Dr. Joshua Cheboiwo, who was the chief guest, led in planting 10,000 seedlings in the forest while others were distributed to 5 schools for planting with the aim of contributing towards the 10 % tree cover.

"Conservation of forests is very important national activity because forests attracts not only rainfall but helps in water catchments, " said Dr. Cheboiwo. The patron of the conservation initiative Prof. Grace Cheserek from University of Eldoret organised the event. Others in attendance were the area MP William Kisang, area Member of County Assembly (MCA), Head of Conservance. Elgevo Marakwet, Deputy County Commissioner, Raiply, KWTA, Eldowas, Diesel Power and First Choice Recruitment and Consultancy.

Know Your Tree-Pencil Cedar

African pencil cedar (Juniperus procera) also known as East African cedar, E.African juniper or pencil cedar, is an evergreen tree with a native range that extends from the Arabian Peninsula to Sudan, Eritrea and Ethiopia southwards through the highland of East Africa and eastern DR Congo to Malawi and

Juniperus grows naturally in sub-humid sub-tropical highand elevation tropical climates areas with annual lows E. African Pencil Cedar (photo:ngkenyacom)



of 7 to 16°C, annual highs of 18 to 30°C, annual rainfall of 600 to 1300 mm and a dry season of 6 months or less. in Kenya, Cedar grow to a height of 40m high with a straight bole in drier highland forests with an elevation of between 1800-2950m asl. It is found growing naturally on the slopes of Mt. Kenya, Mt. Elgon, Aberdares ranges, Kikuyu Escarpment, Cherenganihills, Chyuluhills, Elgeyo-Marakwet Escarpment, the Mau and the Kabarnet-Tenges forests as well as in the slopes and valleys of the isolated mountains of the Northern parts of the country e.g. Maralal, Marsabit and Mt. Kulal.

Juniperus procera grow in extreme conditions, though it is intolerant to shady conditions. Plantlets usually grow from seed, which are extracted by crushing and sieving the dried female cones.

Cedar is one of the ancient conifer plants exploited due to its moisture resistant, decay resistant, termite resistant timber as well as provision of essential-oil yielding wood.

The valuable timber is used for construction and oil distillation lining, joinery, flooring (strip and parquet), furniture and outdoor work such as roofing shingles and fence posts.

According to Plant Resources of Tropical Africa (PROTA), tonnes of logs were exported from East Africa to Europe and North America, in slats form during colonial era.

The slats are used for production of pencils, ship and boat building, agricultural implements, musical instruments, carving and rail sleepers.



Environment Management Dr. James Ndufa inspecting an estimated 80 years old Cedar sleeper at the edge of the famous Mwisho wa Reli railway line in Nanyuki town, Kenya

Juniperus procera has favourable attributes for creating employment as a plantation species as it adapts to extreme climatic conditions and produces high-quality timber.

However, its slow growth and poor survival in the field, coupled with fluting of the bole discourage cultivation in its native range.

Marking the 10th Anniversary for the Late Prof. Wangari Maathai

Muguga Ecosystem Research Community Forest Association (MERCFA) and its partners on November 19th, 2021 planted 10 indigenous trees at Gachuthi natural forest, Kiambu County. 10^{th} celebrated the anniversary to for late Prof. Wangari Maathai.

The Late Prof. Wangari Maathai (1940 - 2011), the founder of Green Belt Movement (GBM), won the Norwegian Nobel Peace Prize in 2004 for her contribution to environmental conservation,



democracy, community empowerment and conflict resolution in Kenya and in Africa

Mr. Peter Gachie, a scientist at CHERP, planting *Podocarpus* latifolius an indigenous species highly valued for quality timber

KFS, Kenya Agricultural and Livestock Research Organization (KALRO) and MERCFA

KEFRI.

the main stakeholders of the forest are which is administered through Participatory Forest Management Plan and agreement.

"Gachũthi natural forest hosts two indigenous endangered species; Vepris glandulosa which fruits only in this forest and Sandalwood (Osyris lanceolata) valued for its essential oil," said Peter Gachie.

Gachie who is an agroforester, stated that KEFRI has developed a protocol to guide propagation domestication of Sandalwood, whose and seedlings are fetching good price," said Gachie.

"The Gachuthi forest site has over 400 valued indigenous species planted since 2011, enriching the biodiversity that needs to be conserved for the benefit of current and future generation," said MERCFA Chairman, Mr. Simon Kamonde.

KEFRI joins PAMMICO in CSR activities

KEFRI Choir Master Mr. Charles Mwangi and Ms Margaret Omeda joined other members of choirs under the Parastatals, Ministries, Counties & Companies Choir (PAMICCO) umbrella in their 2021 annual corporate social responsibility initiative in Makueni County on 15th to 18th December, 2021.



tial Coordination Unit donating foodstuff to children home

The main activities involved planting over 1,000 tree seedlings and gifting food stuffs to various homes for the needy in Makueni County.

KEFRI Kibwezi Assistant Regional Director Mr. Michael Okeyo donated the seedlings comprising Acacia species, Melia volkensii, Moringa oleifera, Senna siamea, Azadirachta indica (neem), Zvzygium cumnii and Bamboo.

KEFRI and JICA review collaboration in forestry research and development

KEFRI Director Dr. Joshua Cheboiwo held a meeting with JICA Kenya officials that included, Chief Representative Messrs-Iwama Hajime, Senior Representative, Hayashi Kenji, Project Formulation Advisor Shimizu Tadashi, and Chief Programme Officer - John Ngugi, at KEFRI headquarters in Muguga, on 19th October, 2021.



The meeting was to enable the newly posted JICA team in Kenya to familiarize themselves with project activities that KEFRI has undertaken in partnership with JICA and adoptive areas of collaboration.

KEFRI partnership with JICA, which dates back to 1985, has implemented several project including social forestry training project (SFTP) whose main objective was to raise 200 million seedlings annually for re-greening and meeting high fuel demand in Kenya. Other KEFRI/JICA projects implemented over the years include: Social Forestry Extension Model (SOFEM); Third Country Regional Trainings; Project on Development of Drought Tolerant Trees for Adaptation to Climate Change in Drylands of Kenya; and Capacity Development Project for Sustainable Forest Management in Kenya (CADEP-SFM).

KEFRI, Franklinia Foundation & Botanic Gardens to conserve endangered species in Taita Taveta

Mr. Olivier Hasinger (Grant Manager) of Foundation Franklinia and Ms. Kirsty Shaw of Botanic Gardens Conservation International held a discussion with KEFRI Director, Dr. Joshua Cheboiwo on the progress of a 3-year project to conserve endangered tree species endemic in Taita Taveta County. The project entitled, 'Promoting long-term Conservation of Endangered Tree species in the Eastern Arc Mountains forests of Taita Taveta' commenced in September 2020 and will end in August 2023.

"The project is worth USD 140,000 (USD 110,000 from Franklina Foundation and USD 30,000 from KEFRI in-kind funding," said Olivier.

The project's overall goal is to promote long-term in situ conservation of two endangered endemic tree species (*Coffea fadenii* and *Afrocarpus usambarensis*) in the Eastern Arch Mountains Forest in Taita Hills, Kenya.

The target species are listed as endangered on IUCN Red list and yet they are important in supporting local livelihoods. *Coffea fadenii*, also known as trade wind fruit, is a threatened species - facing a very high risk of extinction in the wild and its native range i.e. Taita Hills in Kenya, Eastern Usambara Mountains, and Chome forest reserve in Tanzania.

To date, the project has partnered with Furaha and Chakiloli community nurseries in Taita Hills to raise the seedlings of the target species for planting in the degraded sites in the forest fragments in order to conserve them.



Dr. Stephen Omondi, Dr. Wekesa, Olivier Hasinger, Dr. Joshua Cheboiwo, Ms. Karsty Shaw and Dr. James Ndufa during their brief visit at KEFRI headquarters



KEFRI with City partnership Konza Development **Technopolis** Authority

KEFRI and Konza Technopolis Development Authority have agreed to strengthen partnership in re-greening Konza City. Details of the partnership were discussed between Director

KEFRI, Dr. Joshua Cheboiwo and CEO, Engineer John Tanui when he paid a KEFRI on



1st October, 2021.

Engineer Tanui was also interested in quality tree seedlings for re-greening Konza City, that also aim to balance between modernity and environmental sustainability through incorporating a wildlife corridor.

Konza Technopolis, located along Mombasa Road in Machakos County, is a key flagship project of Kenya's Vision 2030 economic development portfolio, envisaged to be a thriving information, communications and technology (ICT) hub with superior reliable infrastructure and business friendly governance systems.

Awareness on medical insurance cover and accreditation of facilities

Madison General Insurance Ltd, which is the incumbent medical scheme provider commencing 1st October 2021, jointly with Smart Applications International Ltd created awareness on medical cover and accreditation of medical facilities to staff at KEFRI headquarters and CHERP on 15th December 2021.

KEFRI staff Messrs Joshua kyalo and Vincent Agui on behalf of Director led the seminar where Madison Health Supervisor Mr. Austin Odhiambo, and Mr. John Nderitu and Ms. Angela Nyawira from Smart Applications International Ltd were Guest presenters.

"Madison Insurance will cater for Covid 19 treatment upon the maximum of one's allocation," said Mr. Odhiambo. Smart Applications International Ltd will offers digital services and related technologies to make hospital manage biometric data to enable clients access services uptime.

Members of staff urged the management of Madison Insurance to improve services in respect to several issues raised concerning poor response to medical approvals, inclusion of suggested pharmacies and medical facilities within reach.

COVID-19 Vaccination



As one part of managing COVID-19 disease, KEFRI in conjunction with the Ministry of Health administered around 465 vaccines to members of staff, their family and adjacent communities.

The 2nd dose of AstraZeneca (Oxford) was administered as well as Pfizer and Moderna for recipients of 1st dose, according to Nurse Ms. Vera Mayore.

The Director urged staff to be vaccinated against Covid 19, noting those who have been vaccinated are less prone to severe health issues.



People with underlying conditions, such as those with a weakened immune system, serious heart or respiratory problems, severe obesity, or the elderly (including individuals age 65 years or older) are at the greatest risk of mortality from COVID-19.

The main preventive measures isstaying at least 1 metre away from others, covering while coughing or sneezing in your elbow, frequently cleaning your hands, wearing a mask and avoiding poorly ventilated rooms or opening a window.

Mainstreaming Road Safety at regional levels

KEFRI is sensitizing its staff among other stakeholders to change their attitudes and adopt positive behaviours while using the roads.

KEFRI Director while rolling out the road safety sensitization initiative for the Rift Valley and Lake Victoria Eco-region Research Programme in Londiani and Maseno Centres respectively, stated that Road Safety Sensitization is a multisectoral task spearheaded by NTSA and KEFRI has factored its implementation as a PC activity.

According to NTSA, 3,564 people have lost their live through road accidents across the country in the latest annual statistics compiled on 31st, October 2021.

KEFRI management together with Rightway Driving Services trained 20 drivers on road safety, focusing on aspects of defensive driving, Highway Code and traffic rules. KEFRI Road Safety Committee coordinated the 2-day refresher course held on 21st and 22nd December 2021, at the headquarters.

KEFRI Senior Deputy Director for Research and Development Dr. Jane Njuguna while closing the training, called upon the drivers to practice defensive driving to avoid risks of road accidents.

"The most important aspect of driving defensively is to be cautious, to drive safely to save lives, time and money," said Dr. Njuguna. Dr. Njuguna also commended the Road safety committee, trainers - Messrs Samson Keesi and Stephen Kilonzo, from Rightway Driving Services, for imparting the skills, which she termed critical to the drivers, who are in the first line to reduce road crashes and related incidents.

KEFRI Principal Administrator Mr. Frederick Odhiambo, praised the drivers for undertaking their duties responsibly with very few traffic incidences ever reported since KEFRI was established, three decades ago.



The facilitators, Messrs Samson Keesi (Inset) and Stephen Kilonzo urged the drivers to adopt the new defensive driving skills and comply with Highway Code, Traffic rules act among other legal requirements as being cascaded through NTSA and other state agencies.

"Defencing driving is precautionary driving; an interlocking driving technique aimed at better way to good motoring; ensuring safe driving to avoid crashes at all times in spite of the conditions, conserving lives, time and money; and acting reasonably around the conditions and actions of others," said Keesi.





KEFRI Pension Scheme hold Annual General Meeting for Regional Centres

KEFRI Defined Contribution Retirement Benefits Scheme, in the fiscal year 2020-2021, held its annual general meetings for staff in Rift Valley, Lake Victoria Basin and Coast Eco-region Ecoregion Research Programmes.

Speaking at the Coast Eco-region Research Programme, the chairman of KEFRI DC Retirement Benefit Scheme Dr. George Muthike reported that the scheme grew by 14.2%, the highest margin ever since the scheme was established in 2011. The Pension reached 3 billion Kenya shillings in assets by the end of financial year 2020 - 2021.

"I urge you fellow members to increase your retirement benefits through Additional Voluntary Contribution (AVC)," said Dr. Muthike.

The Chairman KEFRI Board of Directors Dr. Sammy Letema, thanked the fund managers, trustees and all the members for exemplary performance in the year.



Board Chairman Dr. Letema and Pesion Chairman Dr. Muthike with KEFRI staff at Gede after AGM forum

"As Trustees strive to achieve optimal returns for the scheme, members should equally support them by making more contributions, and electing Trustees with integrity," said Dr. Letema.

KEFRI Director Dr. Joshua Cheboiwo while addressing staff in Rift Valley, and Lake Victoria Basin Eco-region Research Programmes noted that KEFRI scheme is stable and among the best managed in the country.



KEFRI staff at Rift Valley Eco-region Research Programme attending AGM at Londiani centre

Staff Exit July to December 2021

Name	P/No.	Exit date	Mode
John K.Mirii	6100	1/7/2021	Rt
John O. Mukolwe	6187	1/7/2021	Rt
Charles A. Shibu	5966	26/8/2021	Rt
Charles O.Mukolwe	6532	25/9/2021	Rt
Francis O.Ochung	5583	10/10/2021	Rt
Stephen O.Ochito	6545	5/11/2021	Rt
Hassan S.Abdi Dido	6221	21/11/2021	Rt
Hannah W.Kinyanjui	7126	12/11/2021	Rt
Alexander K Chepk- wony	6311	12/12/2021	Rt
Philip O.Maroro	6291	23/12/ 2021	Rt
John Anyienda	6807	31/12/2021	Rt
Joseph R. Kimondo	5741	1/10/2021	Rt
Pauline M. Kimuyu	7161	31/7/2021	Rs
Stella M. Nyarindo	6913	26/07/2021	Rs
Tom O.Nyakwara	6955	4/8/2021	Death
Salina Chesang	6518	14/8/2021	Death
Solomon M. Gathii	5961	29/9/2021	Death

* Key: Rt -Retirement, Rs -Resignation







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