



KEFRI *Newsletter*

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**LAUNCH OF THE DRYLAND ECO-REGION
RESEARCH PROGRAMME - KITUI**

JUNE 2015



The DERP Regional Director Dr. Kamiri Ndufa explaining to the Cabinet Secretary Prof. Judi Wakhungu (centre) about research and other laboratory works on-going at Kitui laboratories

LAUNCH OF THE DRYLAND ECO-REGION RESEARCH PROGRAMME (DERP)

The Environment and Natural Resources Cabinet Secretary Prof. Judi Wakhungu on 26th June 2015 launched the Dryland Eco-region Research Programme (DERP). During the function the Cabinet Secretary also launched a book entitled “An Assessment of Socio-economic importance of *Melia volkensii* based Enterprises in Kenya”. The book is based on results of a study within “Development of Drought-tolerant Tree Species for Adaptation to Climate Change” which is one of the dryland flagship projects. In her speech Prof. Wakhungu pointed out that the DERP programme, re-branded from the former Kitui Regional Research Centre (KRRC), will cover research and development activities in Arid and Semi-arid Lands (ASALs) of Kenya.

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“The dryland eco-region research programme is an important center for forestry research, conservation and provision of research findings required for sound management of forest and woodlands as well as allied natural resources that include wildlife,” she said.

“Launching of Eco-region programmes is derived from KEFRI Strategic Plan 2013-2018 focusing on multidisciplinary, multi-sectoral and thematic forest research areas

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CONFERENCES AND WORKSHOPS

The 2nd National Prosopis Management Workshop

By Gitonga Stephen

The 2nd National Workshop on Management of Prosopis species in Kenya under the theme “Unlocking the economic potentials of Prosopis in the face of a changing climate” was held at Soi Safari Lodge, Baringo County from 19th-22nd May 2015. Environmental scientists, representatives from donor agencies, private and public institutions, and communities from affected regions shared their experiences.



Conservation Secretary Mr. Gideon Gathaara addressing participants during the opening of the workshop at Soi Lodge

Conservation Secretary Ministry of Environment Water and Natural Resources Mr. Gideon Gathaara opened the 4-day workshop on 19th May 2015. The chief guest was accompanied by KEFRI Director Dr. Ben Chikamai and KFS Acting Director Mr. Emilio Mugo

Mr. Gathaara highlighted that prosopis was introduced in the counties of Turkana, Baringo, Tana River, Garissa and Taita Taveta in 1970s to increase tree cover and address land degradation due to human and natural causes. However, it later turned out invasive eventually bringing environmental concerns. These challenges required urgent scientific intervention and collective responsibility to ensure that Kenya’s environment is sustainably managed for prosperity.

“Kenya’s ability to manage prosopis invasion is hindered by several factors such as; inadequate information, poor access to financial resources, armed conflicts due to a scramble for diminishing natural resources and low management capabilities, among others,” said Mr. Mugo.

to address pertinent forestry and related development issues in each region. Researchable issues in the DERP re-branding process therefore, followed a systematic approach that include; gathering stakeholders views, reviewing secondary data and identifying gaps and opportunities for research in line with views of relevant stakeholders,” added Prof. Wakhungu.

The event was graced by the presence of the Acting Director Kenya Forest Service Mr. Emilio Mugo, County Governor for Kitui Dr. Julius Malombe, Kitui Deputy County Commissioner Mr. Henry Wafula and Kitui Central Member of County Assembly Hon. Daniel Ngoima.



Prof. Judi Wakhungu (3rd left) with Japanese experts next to a 6-month old *Melia volkensii* tree

Field visit

Before the launch the CS made a field visit to *Melia volkensii* orchard and Progeny trial in Tiva Pilot forest

site where trials for mother plus trees are being screened and tested. The project, partly funded by both Japan and Kenya Governments, is breeding selected *Melia volkensii* candidate plus trees for adaptability to climate change and drought tolerance. *Melia volkensii* is tolerant to drought and resistant to termites which are major pests to trees in the dryland. The species is a major candidate for afforestation of drylands. Selection of 100 trees, two orchards and four progeny trials have been established in Kitui and Kibwezi counties. Thereafter the Cabinet Secretary and the Governor toured DERP laboratory, and the exhibition displaying research activities, products and services available at the programme.

The DERP head office is at Kitui and is supported by two sub-centres, Garissa and Kibwezi, and a field centre in Bura. The programme operates in Kitui, Machakos, Makeni, Mandera, Wajir, Isiolo, Garissa, Samburu and Marsabit counties. It also partially covers; lower Kajiado, upper Taita-Taveta, Lower Embu, and Tharaka-Nithi.

Way forward

KEFRI through DERP proposes to construct two new research sub-centres at Laisamis to serve Isiolo, Samburu and Marsabit counties, and Wajir to also serve Mandera counties, in order to widen its scope in research and dissemination of technologies in partnership with different stakeholders and counties.



KEFRI Director Dr. Ben Chikamai (left), Mr. Gideon Gathaara and Mr. Emilio Mugo briefing the media after the opening of prosopis workshop at Soi Lodge

Suggestions for research included investigations on: allelopathic effects of Prosopis species i.e. suppression of other tree species and pasture; role of prosopis in blocking of water ways; health effects of prosopis smoke during charcoal production; possibility of integrating well managed prosopis with crops; storage of prosopis products; and carbon trading.

Director KEFRI Dr. Ben Chikamai said the government through KEFRI, KFS and development partners, especially FAO, developed various initiatives to manage and control spread of the invasive Prosopis through utilization.

The workshop was informed that Baringo, Garissa and Tana River counties have encouraging management strategies for Prosopis. These efforts have resulted in viable enterprise by communities and entrepreneurs in the areas of energy, wood fuel, electricity, animal feed with more opportunities in the wood carving industry.

The 2nd National Workshop aimed at taking stock of the achievement made since the 1st Prosopis National Workshop and developing a road map of transforming the resource into a vehicle for development.

Prosopis despite its negative attributes, has helped in tackling impacts of climate change, through conservation and restoration of degraded areas, enhanced economies and livelihoods.

It emerged that communities in Marigat sub-county, Baringo County for instance earns monthly incomes of Ksh 10 million from sale of Prosopis charcoal whereas Tana River county in 2014 earned 278 millions.

Recommendations

The workshop recommended continuous consultations between institutions dealing with issues of prosopis and Revival of the National Prosopis Task Force on Prosopis. In addition, the workshop recommended a review of existing policies so that county governments and communities within the affected regions will spearhead prosopis management, utilization and invasion control.



Workshop participants interacting with Salabani CFA Chairman Mr. Samuel Mundolosi who has spearhead management of prosopis in their sub-county

The workshop was followed by Woody Weeds Stakeholders Meeting held at KEFRI headquarters from 2nd to 5th June, 2015. The meeting which was opened by Dr. Ben Chikamai aims at mitigating the negative effects of woody invasive alien species on biodiversity, ecosystem services and human well-being in East Africa.

The project is also looking at impacts and the control measures of particular damaging 'woody' invasive plant species namely; Prosopis spp, *Lantana camara*, and *Chromolaena odorata*.

In South Africa alone, the costs to ecosystem services were estimated at USD 1 billion per year, while Prosopis is already estimated to cover 1.5 million hectares in Kenya.

The meeting was attended by delegates from Ethiopia, KEFRI, Kenya Agricultural and Livestock Research Organisation – KALRO (Kenya), Sokoine University and Tanzania Forestry Research Institute (TAFORI), Centre of Excellence for Invasion Biology – CIB (S. Africa), Centre for Development and Environment– CDE (Switzerland) CABI (Switzerland).

International Bamboo Workshop

By Gitonga Stephen

Bamboo is a fast growing plant, with properties similar to timber. Bamboo resource can support economic development and contribute to key national goals, such as Vision 2030.



Dr. Alice Kaudia shaking hands with former KEFRI Board Chairman Mr.H.M. Ngibuini after she opened the workshop

KEFRI, KFS and the Ministry of Environment and Natural Resources with support from the International Network for Bamboo and Rattan (INBAR), held a 2-day National Bamboo Workshop at KEFRI headquarters Muguga, on 21st and 22nd April 2015.

During the opening ceremony, the Environmental Secretary, Ministry of Environment, Water and Natural Resources Dr. Alice Kaudia, INBAR Director General Hans Friederich, KEFRI Director Dr. Ben Chikamai, Mr. Esau Omolo representing Director KFS addressed eighty four (84) participants from government, academia, private sector, and international development organizations engaged in bamboo-related initiatives.

The workshop overall goal was to contribute to the development of a 'National Bamboo Sector Plan in Kenya which explored five key thematic areas, namely; identification of policy and legislative gaps in support of bamboo development, appraisal of the current status of natural and on-farm bamboo domestication for sustainable resource management and landscape restoration, bamboo biomass for energy, construction, and industrial development.

Dr. Alice Kaudia highlighted that at present, bamboos form an integral part of indigenous forests, providing vital ecosystem services to the nation's water towers. Unfortunately, it is largely underutilized in land restoration, renewable energy, poverty alleviation and industrial development goals. "Furthermore, while many advances have been made in integrating sustainable forest management into forestry regulation in recent years, these are still inadequate measures to address bamboo underlying challenges," she said.

The workshop recommended Kenya Government to create a more enabling policy and investment environment for adoption of bamboo, share information widely and integrate public and social institutions. In addition, stakeholders to embrace opportunities to up-scale proved technologies and value chains for a range of renewable energy, industrial, craft, and construction applications.

According to the Acting Director of INBAR Programmes Mr. Oliver Frith, the workshop was informative and provided input for positioning the Ministry of Environment's bamboo flagship programme in the globe.

"Progress of Kenya's bamboo sector development will be presented at INBAR-organised side event at the United Nations Forum on Forests (UNFF) on the 14th May. This will provide Kenya with an opportunity to share with the world forestry community the role it sees bamboo being able to play in its national forest programme," he stated.



Ms. Miriam Pedersen from Kenya Bamboo Centre displaying eco-friendly bamboo products handcrafted by community groups living in Nairobi slums.

Laikipia Investors' Conference

By S. Mogire & J. Otwoma

KEFRI Central Highlands Eco-region Research Centre jointly with Forest Products Research Center-Karura participated at Laikipia Investors' Conference held from 18th to 19th June, 2015 at Nanyuki Sports grounds.

Laikipia County Governor Joshua W. Irungu assured investors of his government's commitment to improving governance and creating a conducive environment for doing business.

The governor was among 125 guests who visited KEFRI exhibition which demonstrated technologies for: seed collection and processing; bamboo and *Osyris lanceolata* propagation and utilization; and value addition to assorted wood and non-wood forest products.

"I have a passion for KEFRI and that is why I have offered a plot of your choice within the County to build a research facility," said the Governor.

The information was received with jubilation by KEFRI staff represented by Deputy Directors Dr. Joshua Cheboiwo, Dr. Jane Njuguna and CHERP Regional Director Mr. Ely Mwanza.



Governor Joshua Irungu (second left) visit to KEFRI exhibition held simultaneously with the Conference



KEFRI staff with Governor Joshua Irungu (centre) during Laikipia Investors' conference

Open Data and Open Science in Agriculture Workshop

By Paul Tuwei

KEFRI staff Ms. Sheila Mbiru, Paul Tuwei, Joseph Koech, Teresah Ngigi, Rachael Kariuki, Stephen Gitonga and Penuel Oyabi attended an Open Data Scientific Workshop at Jacaranda hotel, Westlands from 15th to 18th June 2015.

The participants were drawn from Kenya Agricultural and Information Network (KAINet) partner institutions (Kenya Agricultural and Livestock Research Organization (KALRO), Ministry of Agriculture (MoA, AIRC), KEFRI and Jomo Kenyatta University of Agriculture and Technology (JKUAT) and the Food and Agriculture Organization of the United Nations (FAO).

The objectives of the workshop were to advocate Open data and Open Science' in the agriculture sector in Kenya and provide capacities to information management specialists to support researchers in the management and publication of data.

The workshop was organized in three specific sessions and each stakeholder, each institution presented information on the following:-

- i) How open knowledge, open access, open data are handled in respective institution
- ii) Institutional open access policy, data workflows, current products and challenges experienced in knowledge management
- iii) Materials used to advocate for open access in each institution and ideas/suggestions on how the current infrastructure used in the institution and KAINet could be improved.

Scientific research findings must be effectively communicated to the public for impact. KEFRI scientists are encouraged to emulate open data and open science in agriculture to increase visibility of their research outputs.

It emerged that Publications are beneficial to the researchers, readers, public, government and even publishers. Researchers and scholars should make effort to publish in Open access channels and develop Information Repositories. Researchers should partner with other stakeholders to package information to suit diverse readership. Deliberate efforts should be made and strategies put in place to encourage scholars and researchers to publish in open access.

TRAININGS

County Environment Executives Seminar

By John Otwoma

A 4-day Policy level seminar on Participatory Natural Resources Management for County Executives was held from 25th to 28th 2015 at KEFRI Headquarters, Muguga.

At the seminar, 24 counties were represented while KEFRI partner institutions namely Kenya Wildlife Service (KWS), Kenya Forestry Service (KFS), Kenya Environmental Management Authority (NEMA), United Nations Environmental Programme (UNEP) and Egerton University facilitated the event.

Conservation Secretary Mr. Gideon Gathaara relayed the opening speech on behalf of the Cabinet Secretary of Environment and Natural Resources Prof. Judi Wakhungu.

The seminar provided a platform for County Environment Executives to share experiences and gain skills on sustainable natural resources management from relevant institutions.

The Conservation Secretary urged the participants to conserve forests and related natural resources in their counties. Many of the forests have been degraded due to human activities. This degradation is a catalyst to climate change.



Participants of the County Executive course and representatives of partner institutions in a group photo after the opening of the course

Knowledge Management Training

By John Otwoma

Knowledge is a very important asset that needs to be managed effectively especially in research organizations where new skills and innovations are generated occasionally.

A 2-day Knowledge Management Training comprising 15 participants drawn from; Information, Training, Information Communication Technology, and Administration took place on 14th and 15th May 2015, at KEFRI headquarters.

This was the last training out of others carried out in KEFRI centers and sub-centers. "The trainings aim at establishing a systematic approach to improve knowledge management in KEFRI," said the Team Leader Ms. Sheila Mbiru.

The institute has been losing knowledge through staff turnover, consequently, capturing critical tacit and explicit knowledge and creating a repository system for storage and retrieval of information which is crucial in decision making and increasing productivity.



A well organised shelf illustrating knowledge management on publications

Health and Safety Committee Training

By Margaret Njenga

KEFRI Health and Safety Committee members from regional centres underwent a 4-day training from 25th to 29th May 2015 at Machakos Agricultural Training Centre.

The purpose of training was to sensitize participants on the requirements of Occupational Safety and Health Act (OSHA 2007) on Health and Safety Committee rules L.N. 31- 2004, the roles of health and safety committee members, basic principles of occupational health and safety, hazard spotting skills and accident investigation.

KEFRI staff are required to observe occupational hygiene, safe work procedures, machinery and plant safety, use of personal protective equipment, and observe proactive safety attitude. The staff are also required to avoid; spread of occupational diseases, drug and substance abuse at the workplace, stress and HIV/AIDS.

Sensitization of Communication Strategy

By M. Njenga and Gitonga Stephen

KEFRI has established an integrated Communication Strategy to improve the institute's visibility. The Strategy will guide the institute's communication approaches in research, operations and in dissemination of research findings to both internal and external publics.



Mr. Paul Tuwei from KEFRI headquarters briefing staff in Kitui about KEFRI Communication Strategy

Sensitization of the strategy has been done in DERP, LVBERP and CERRP. During the sensitization staff were informed that communication strategy is a constitutional requirement and will contribute to achieving Vision 2030.

Issues addressed during the sensitization included: Effective internal communication campaign; establishing active staff complaints committee to deal with staff complaints; adopting e-communication and feedback mechanisms.

Members of staff will use the guide to: build and strengthen actions for implementing KEFRI mandate; increase public awareness on products and services; improve efficiency in effective service delivery as stipulated in the vision, mission and the Strategic Plan 2013-2018.

Commission on Administrative Justice (CAJ) Training

Eleven (11) KEFRI staff from Headquarters and FPRC-Karura attended training by Commission of Administrative Justice (CAJ) on 25th June 2015 at KEFRI-Kitui.

They learnt types of public complaints namely; Public Officers and Institutions, Public Officers against a fellow officer and Public Institutions against other Public Institution, and how to manage such problems before they intensify into a conflict.

A good complaint handling system should be top down, set time scales, well documented, confidential, effective and receptive. Implementation of the resolutions of public complaints is a requirement in the Performance Contract.

Commission on Administrative Justice (CAJ) Training of public complaints is a requirement in the Performance Contract.

Bamboo Stakeholders Training - Makueni

By Samson Mogire

Bamboo is a suitable alternative to timber. The resource can also be used for furniture, weaving and products such as souvenirs and ornamental, household items such as cooking utilities, belts, pen holders and table mats.

KEFRI has developed technologies for establishment and utilization of bamboo. In this regard, eight trainers from DERP Kitui, Kibwezi jointly with FPRC Karura conducted a training workshop on bamboo propagation and product development at Muiu and Malili in Makueni County from 22nd to 27th June 2015.

The Workshop brought together 80 participants mainly farmers and artisans, local administration, extension officers from Kenya Forest Service and Ministry of Agriculture.

Participants were trained on bamboo propagation, on farm establishment, management and sustainable utilisation which includes harvesting, treatment and seasoning, handcraft design and products development. Topics covered during the training included lectures and hands on activities. Using the skills learnt participants made flower holders and stand, straw holder, coin box, card holder, cooking stick, phone holder, dough roller, coffee stool and cloth hangers.

The training was an eye opener on potential of bamboo industry in rural and national socio-economic development.



Officer in Charge KEFRI Kibwezi Ms. Josphine Kamene addressing participants during the closing session. In front is a display of products made by course participants

Audit and Risk Management Training

By Zaituni Chelang'at



KEFRI Audit Committee, some of Board members and Trainers in a group photo

Audit Committee's functions are to advise the Director and Board of Management in fulfilling its oversight responsibilities for the financial reporting process, risk management process, the internal controls, the audit process and the KEFRI's process for monitoring compliance with laws, regulations and the code of conduct. In order to execute their duties fully in line with their function, a two (2) days training on Audit Committee and Risk Management was organized at KEFRI-Kitui from 15th to 16th June 2015. Four Audit Committee members of the Board and six KEFRI staff participated in the training. The training covered part of the MWONGOZO, the Code of Governance for State Corporations.

Among the areas covered were:

- 1) Roles and Responsibilities of Audit Committee
- 2) Role of Audit Committees under the Constitution
- 3) The Public Finance Management (PFM) Act (No. 13 of 2012) and Gazette Notice No. 5440 on the Public Sector Accounting Standards Board (PSASB), Financial Reporting and Internal Auditing Standards Pronouncement (3.1).
- 4) Audit Committee Charters, Composition, Working Relationship with Management and Auditors
- 5) Role of KEFRI's Audit Committee in managing KEFRI's Risks and improving its oversight role at KEFRI.

Fire drill

By Milton Esitubi & Risper Mokaya

Disaster preparedness is crucial in any organization. KEFRI fire marshals conducted two drills on 4th and 5th June 2015 at Muguga Center and headquarters respectively.

The objective was to comply with the Fire Code's mandatory requirement to conduct fire drills annually to determine emergency preparedness of both the fire marshals and staff in case of emergency.

The fire drill was set by burning organic matter while the indoor one was set in the laboratory where chloroform, a dangerous chemical if exposed to a human's skin was used. Chloroform can cause cardiac arrest and death if first aid is not administered immediately.

Fire marshal secretary Mr. Milton Esitubi led the team in application of appropriate equipment and techniques during fire-fighting, evacuation and administration of first aid to the injured.

CHERP Regional Director Mr. Ely Mwanza accompanied by his Deputy Mr. Joram Kagombe commended the fire marshals and cautioned staff from being spectators in times of emergency.

Ms. Grace Muthike from KFS and Ms. Mercilyne Akinyi were awarded for their quick response. Fire marshals were commended for their swift action in putting out the fire and evacuating staff.



Fire marshals extinguishing fire during the fire drill exercise held at CHERP head office, Muguga

Action in case of a Fire:

- Raise alarm to alert others
- Try to extinguish the fire before it spreads
- Use the right equipment to extinguish the fire
- Vacate the scene using the marked exit
- Assemble at the designated fire point

World Environment Day

By Gitonga Stephen

KEFRI joined National Environment Management Authority (NEMA) and other institutions in celebrating World Environment Day on June 5th 2015. The Cabinet Secretary for Environment and Natural Resources Prof. Judi Wakhungu led delegates in a walk and tree planting at Maasai Girls Secondary School Narok to mark the day whose theme was “Seven Billion Dreams. One Planet. Consume with Care”.

Deputy Director Corporate Affairs and Quality Assurance Dr. Jackson Mulatya, Communication and Public Relation Officer Mr. Stephen Gitonga, Dissemination Officer for CHERP and FPRC Messrs Samuel Wakori and Samson Mogire represented KEFRI in marking the day. The institute displayed exhibits on: bamboo propagation and utilization technologies and *Osyris laceolata* and *Melia volkensii* an indigenous dryland fast growing tree species.



KEFRI staff Mr. Samuel Wakori displaying products on KERI during World Environmental Day at Narok

For over two decades, KEFRI has partnered with other institutions in undertaking research and environmental conservation initiatives particularly in Mau Forest Complex to ensure a healthy and clean environment, and improved livelihoods.

Prof. Wakhungu pointed out that Narok was chosen due to its past experiences with flash floods which has adverse effects and even causing death. These problems are compounded by climate change. Environmental degradation is a result of human activities hence there is need to balance consumption and the limited resources available. Human prosperity need not cost the earth. Ensure a healthy future where our dreams can be realized.

ASK SHOWS AND OPEN DAYS

Machakos ASK Show

By Damaris Munyao



Machakos County Governor Dr. Alfred Mutua awarding trophy to Ms. Damaris Munyao for KEFRI exemplary displays in Research and Development at Machakos show

The Dryland Eco-Region Research Programme participated in the South Eastern Ask Show held at Machakos County Show Ground from 24th to 27th June 2015. Items displayed included; various tree seeds, tree management, propagation and products from *Osyris*, *Melia*, Bamboo, charcoal briquetting process, micro- gas fire jikos for energy conservation, Aloe products, Gums and gum resins, products from indigenous fruit trees Baobab, Tamarind and *Vitex payos*.

Collaborators displayed value added herbal products. KEFRI Mission Vision banner, Service Charter and relevant posters were used to explain technologies and related information.

Judgement Performance:

KEFRI stand was ranked as follows in five judgment categories.

- Best in Research and Development
- Second best displaying locally manufactured products
- Second Best Medium Government stand
- Second Best in interpreting show theme
- Second best in Innovation and Invention

Nakuru ASK show 2015

By Gitonga Stephen

The Rift Valley Eco-region Research Programme exhibited at Nakuru Agricultural Society of Kenya show from 29th June to 4th July 2015. The Principal Secretary for Agriculture Ms. Secily Kariuki opened the show and visited KEFRI stand.

KEFRI showcased technologies, products and services in line with the theme “Enhancing technology in Agriculture and industry for food security”. Quality tree seeds both exotic and indigenous, propagation and endangered tree species *Osyris lanceolata*, propagation and products from *Melia volkensii*, management of tree diseases, application of ISO 14001:2004 Environmental Management System (EMS) standard through management of effluent from research laboratories, information dissemination and outreach methods.

Outdoor display comprising the model of environmental management showcased technologies of rehabilitating degraded areas such as the Mau forest and complex, bamboo propagation, tree nursery management techniques.



Officer In-Charge KEFRI, Baringo centre Mr. Simon Choge interacting with students who visited KEFRI stand (Insert). At the background is newly constructed KEFRI Nakuru stand

Karura Open day 2015

By Samson Mogire

The Annual Forest Open Day for Products Research Centre–Karura was held on 15th May 2015. The event gave stakeholders and public an opportunity to interact and share experience with KEFRI scientists on processing and utilization of forest products.

Around 630 visitors attended the show that displayed and demonstrated numerous technologies that included timber processing and treatment, bamboo propagation, utilization, production of fancy and laminated fancy items from scrap timber, energy conservation using Micro gasifiers, improved charcoal production skills, prosopis products.



Dissemination Officer at Karura Mr. Samson Mogire (centre), demonstrating wood preservation through deeping during the open day

In addition, value added on-wood products namely; aloe, *Mondia whytei*, Baobab flour and sweets, wine and Jam from Mkwaju (*Tamarindus indica*), gums and resins, management of pest and tree diseases were displayed, and products sold at subsidized cost.

Tree Biotechnology Project Trust (TBPT), Kenya Forest Service (KFS), and Ministry of Agriculture (PSDA) amongst other exhibitors exhibited too.

Gakoe Farmers Field Day

By John Otwoma

Central Highlands Eco-region Research Programme (CHERP) held a farmer’s field day at Gakoe in Kiambu County, on 11th June, 2015. The field day took place at Mr. Muchane Ndungu’s farm.

Objective of the field day was to demonstrate conservation of riverbanks using bamboo. Different bamboo propagation techniques and products were demonstrated by KEFRI staff and Mr. Muchane who has been planting bamboo for the last 15 years.

A total of 97 people attended the field day of which 10 were from Africa-Farm Forestry Small scale Producers Association of Kenya. The group was on a study tour to observe unique landscapes in Muranga and Kiambu where bamboo is grown.

Coast Region Field Day

By K. Muema

KEFRI Coast Eco-region Research Programme in collaboration with the forest adjacent community held a field day on 29th June 2015 at Mida Creek, Kilifi County and demonstrated rehabilitation and management of degraded mangrove forest sites. KEFRI through Kenya Coast Development Project (KCDP) has been supporting the rehabilitation of mangrove ecosystem in coast region.

Mangroves are a good source of fuelwood and timber, poles for housing and fishing materials. Mangroves support the natural food chain by forming a link between the land and the sea. They also serve as the sanctuary of both aquatic and terrestrial wildlife and offers breeding habitat for fish as well as a source of assorted fishery products. There were 109 attendants who included students, conservation group and Kilifi County Assembly representatives. They planted 10,000 seedlings and 15,000 propagules.



Community planting mangroves at Green Island Mida creek (left) and the drying river Lumi (right)

Taita Taveta

CERRP on 29th May 2015 held a field day on rehabilitation of riverine ecosystems in River Lumi, Taita taveta County.

River Lumi originates from Mount Kilimanjaro and feeds Lake Jipe where fish species *Oreochromis jipe* is only found. The river is threatened by human activities and reduced rainfall due to climate change.

Muguga CFA marks World Environment Day 2015

By Simon Kamonde

Franklin D. Roosevelt once said, “A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people”.

These sentiments relates with Muguga Community Forest Association (MERCFA) actions in marking the World Environment Day (WED) 2015 where over 200 assorted indigenous tree species were planted at Nguriunditu Primary School, Kiambu County.



Chief Waithaka planting a tree at Nguriunditu Primary School to mark World Environment Day 2015

Kerwa Location Chief Mr. S. K. Waithaka graced the ceremony by planting *Warburgia ugandensis* tree locally known as Muthiga. Muthiga tree is valued for medicinal purposes according to the CFA Chairman Mr. Simon Kamonde.

Teachers, pupils and community members likewise planted indigenous tree species that included *Teclea simplicifolia* (Munderendu), *Markhamia lutea* (Muu), *Juniperus procera* (Mutarakwa), *Vitex keniensis* (Muhuru), *Podocarpus latifolius* (Muthengera) and *Prunus africana* (Muiri). The purpose was to conserve indigenous trees threatened by human activities in their natural environments. The congregation also cleaned the environment by collecting rubbish in and outside the school compound.

Chief Waithaka commended the effort and commitment shown by the Muguga Forest Adjacent Community towards environmental conservation in the region.

Pupils who had taken good care of trees planted last year were recognized and awarded courtesy of MCFA. Assessment of trees and monitoring of tree performance was done by teachers and evaluated by parents.

KEFRI Pension Scheme Election

By Mercy Gichora

Election of KEFRI Pension Benefit Scheme Trustee took place on 14th May 2015 at headquarters, regional and sub-regional Centres. Dr. Mercy Gichora, Mr. Paul Tuwei and Mr. Joseph Koech were re-elected to represent scientists and non-scientist staff respectively. The trustees thank members of staff for giving them another opportunity to serve for another 3-year term from July 2015 to June 2018.



Dr. Mercy Gichora
Chairperson



Mr. Paul Tuwei
Deputy Chair



Mr. Joseph Koech
Treasurer

At the same time the Board of Trustees bid farewell to Mrs. Loice Gathoni Ruhiu, a long serving Trustee representing the Sponsor, and whose term ended on 30th June 2015.

Further the Board states that members who were in Defined Benefit (DB) have retired in the course of the year and the rest will have retired by June 2016 at which point that scheme will wind up.

In compliance with benefits processing the board urges retiring members to present their required personal documents to the Secretariat within the first 30 days of leaving service so as to ensure their dues are processed on

Defined Contribution Retirement Benefits Scheme (DC scheme) Benefit Structure

By Rotich

1. The benefits payable from Defined Contributory types of scheme is based on mode of exit (this may be on account of resignation, death, emigration, or retirement (Early, Normal or ill health))
2. Members can only access their pension benefits when they cease to be in the service of the employer
3. A member may exit from the service of the Employer and opt not to access his benefits, the Board of Trustees will treat such benefits as deferred

Centre Research Advisory Committees (CRACs) 2015

By Gitonga Stephen



KEFRI through respective Eco-region Research Programmes namely; CERP, DERP, CHERP, RVERP, LVBERP and FPRC hold Centre Research Advisory Committees (CRACs) meetings during the fourth quarter of every

year. Objective of the CRAC meetings is to; review existing projects, identify research concepts, and proposals. During the CRAC meetings stakeholders are also present to give their views on-ongoing and proposed research.

In 2015 the CRAC meetings were held between May and June. At the meetings, the Regional Directors gave overview of research activities in their respective region. Scientists and technical staff also presented their on-going research activities for year 2014/2015 and proposed research concepts for the fiscal year 2015/2016.

Proposals presented at the CRAC meetings covered all research areas including; forest health, forest rehabilitation, breeding of fast growing trees, development of drought tolerant tree species to mitigate climate change, soil fertility improvement, production and commercialization of Non-wood Forest Products (NWFPs), knowledge management, information dissemination, socio-economics and policy in relation to forestry. Community collaboration was also covered within the concepts.

The Senior Deputy Director Research and Development, Dr. Bernard Kigomo (*in picture*), called upon KEFRI scientists to expand their horizon and craft multi-disciplinary proposals that could attract global funding unlike majority of the current ones that are singly funded by GoK. He noted that research concepts will undergo polishing and consolidation before funding. Recommendations made to the Consultative Committee (CC) will be considered.

Dr. Kigomo thanked stakeholders namely farmers, collaborators and partners from both public and private institutions who gave their research concerns. "Such inputs help KEFRI focus its research towards the end users thus improving livelihood and the environment," he said.

This table explains benefit structure applicable under various modes of exits

| Members age as at date of exit | Mode of exit | Benefit payable as at first (1st) application | Benefit payable as at second (2nd) application |
|--|--|--|---|
| Below age 50 | Resignation, Dismissal, Retrenchment | 100% of members contribution plus income AND 50% of employers contributions plus income | <p>The second application relates to the deferred portion payable after age 50. The application is made to the Board of Trustees</p> <p>1/3 of deferred portion is payable as cash lump sum</p> <p>The balance shall be used to purchase annuity</p> <p>Where the balance purchases a trivial pension the entire deferred portion shall be paid out as lump sum</p> |
| Any age | Ill health, death | 100% of members contribution plus income AND 100% of employers contributions plus income | No second application due |
| Between age 50 and 59/64 where consent for early retirement is not given by the Sponsor | Unconsented Early Retirement | 100% of members contribution plus income and 50% of employers contributions plus income | <p>The second application relates to the deferred portion payable after age 50. The application is made to the Board of Trustees</p> <p>1/3 of deferred portion is payable as cash</p> <p>The balance shall be used to purchase annuity</p> <p>Where the balance purchases a trivial pension the entire deferred portion shall be paid out as lump sum</p> |
| After age 50, where early retirement is consented by the Employer and Normal Retirement date of 60 and 65 years for Non Scientists and Scientists respectively | Consented Early Retirement and Normal Retirement | <p>1/3 of total benefits attributable to employee and employers contributions plus income is payable as cash</p> <p>The balance shall be used to purchase annuity</p> <p>Where the balance purchases a trivial pension the entire deferred portion shall be paid out as lump sum</p> | No second application due |

The Director's Tea Forum

By Mokaya and Otwoma



The Director KEFRI Dr. Ben Chikamai (in picture) convened a quarterly interactive tea forum on 30th June 2015. The meeting deliberated on staff welfare and progress on implementation of ISO 9001:2008 Quality Management System (QMS). Senior Deputy Director Finance Mr. Patrick Omesa, Senior Deputy Director Research and Development Dr. Bernard Kigomo, Deputy Director Corporate Affairs and Quality Assurance Dr. Jackson Mulatya and Deputy Director Administration Mr. John Gisemba also attended the meeting.

The Director informed the staff that appraisals are conducted at the end of each financial year to evaluate individual staff performance in respect to the requirements indicated in their performance contract. Consequently, appraisals aids in awarding promotions and monitoring organization's performance.

Salary and allowances

Mr. Patrick Omesa informed the staff that the implementation of staff remuneration is ongoing following approval of the Salary Remuneration Commission (SRC) circular by KEFRI Board.

Quality Management System

"KEFRI was one of the pioneer state agency to be ISO 14001:2004 Environmental Management System (EMS) certified in 2011. In the year 2014 the institute also embraced the process of implementing Quality Management System ISO 9001:2008 (QMS)," said the Director.

"Senior management staff have been sensitized as well as representatives at all Eco-region centers to cascade implementation of the Standard. Requirements for QMS have been reviewed by an external contractor who has given a go ahead on all the corrective stages. The institution is looking forward to being QMS certified by April 2016.

The Director, assisted by Dr. Mulatya, who is the Quality Management Representative (QMR), issued certificates to those who qualified during QMS Audit training conducted in May 2015.

Gender policy

The Director revealed that the institute is in the process of preparing gender policy to guide gender equity in employment and curb social vices in line with employment Act, 2007 6 (2), 4.

KEFRI CHOIR PERFORMANCE

By Charles Nyogot



KEFRI Choir entertaining guests during the launch of DERP at Kitui Centre on 26th June, 2015

KEFRI Choir entertained guests during the DERP launch in Kitui gaining praises from government officials who attended the function.

Similarly, the choir entertained staff with new compositions during the quarterly Director's Tea Forum at the headquarters on 30th June 2015. The choir is preparing for audition to entertain at the Nairobi International Trade Fair 2015.

The recent exemplary performance could be attributed to skills acquired by KEFRI choir officials namely; Charles Mwangi, Charles Nyogot, and Margaret Omenda who attended music workshop organized by The Parastatals, Ministries, Counties and Company Choirs (PAMICCCO) at Rabi Hotel, Nairobi from 5th-9th May, 2015.

The workshop was sponsored by The Permanent Presidential Music Commission (PPMC). Participants were drawn from different corporate choirs who are members of PAMICCCO.



PAMICCCO Choir Officials in a group photo during the Music Workshop at Rabi Hotel, Nairobi. Ms Margaret Omenda and Charles Nyogot are squatting 1st and 2nd left while Charles Mwangi is standing 2nd left

KEFRI Farmers Resource Center-Baringo



Senior maintenance Superintendent Mr. Ainsworth Karani (left) aligning columns for the second phase construction of KEFRI Farmers Resource Centre Baringo. The block will host the resource centre administration office, reception, warehouse, nursery, and dry food stores, supply chain and enterprise offices, laundry and open courtyard.

At the background is the Resource Center with 12 bed self contained air conditioned rooms.



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