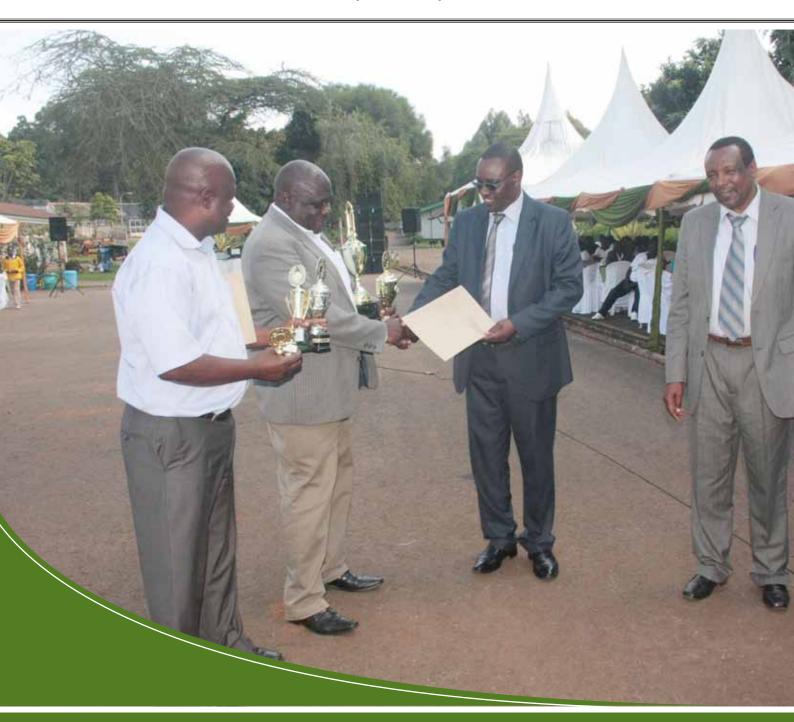


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KEFRI celebrates 6th End Year Party

By R. Mokaya and J. Otwoma

EFRI held its 6th End of Year Party and Staff Award Ceremony on December 9th 2015 at the Headquarters in Muguga.

The ceremony comprised of staff from the Headquarters, Central Highland Eco-region Research Programme -Muguga, Forest Products Research Centre-Karura, and representatives from other eco-regions countrywide.

In his welcoming remarks, the Director KEFRI Dr. Ben Chikamai congratulated



KEFRI Dr. Ben Chikamai congratulated Mr. Ely Mwanza, Dr. J. Mulatya, Mrs. Nelly Oduor and Mr. Hewson Kabuyi KEFRI stakeholders for continued implementation of the (chief guest- right) holding trophy gained during NITF show and certificate 5th Strategic Plan 2013-2018. He also lauded the staff of appreciation by KEFRI.

and the Board of Directors for the synergy that saw the Institute achieve excellence during the annual evaluation of 2014-2015 Performance Contract.

KEFRI entered into performance contracting in 2007 and since then, it has been graded in the "very good" category. However, in the Fiscal Year 2014-2015, for the first time the Institute was ranked in the "Excellent" category. "This was a great performance and each staff will be issued a certificate of appreciation," said the Director.

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The Chief guest Mr. Hewson Kabugi, conveyed the goodwill message from Dr. Richard Lesiyampe, the Principal Secretary, Ministry of Environment Natural Resources and Regional Development Authorities.

He commended the management for initiating the End Year party whose essence is to reflect on what the institute has done throughout the year.

He shared the following facts about life: "Out of 100% only 10% is about oneself. The rest 90% is about how one reacts to the surrounding, for instance colleagues and challenges encountered on daily basis. This is critical in shaping ones' life", he said.

Mr. Kabugi encouraged KEFRI staff to continue committing themselves in fulfilling the mandate of the institute. Specifically, he challenged the new staff to strengthen the institutes' capacity through ample production in their areas of specialization.

During the event staff members who excelled in their service delivery within the year were awarded.Likewise, Regional Directors were appreciated for trophies they gained during the 2015 Agricultural Society of Kenya (ASK) show exhibitions within their Eco-regions.

The Director and the chief guest wished all the staff a Merry Christmas and a Happy New Year 2016.

KEFRI Newsletter is a quartely publication produced by Corporate Affairs and Quality Assurance Office

ASK Shows and Farmer's Field Days

World Food Day 2015

By S. Mogire



KEFRI staff Mr Samson Mogire (left) explaining KEFRI technoloies displayed during the event

The World Food Day celebration is an annual event which aims at heightening public awareness and strengthen solidarity in the fight against hunger, malnutrition and poverty. This year's event whose theme was, "Social Protection and Agriculture in Breaking Rural Poverty Cycle", was held in Nyamira County on 16th October, 2015.

Dr. Phanuel Oballa, Dr. Robert Nyambati and Messrs. Samson Mogire, Milton Estubi and David Njagi represented KEFRI in the event and exhibited forest technologies on tree seed, on farm sawing, bamboo propagation, soil fertility improvement, and processing forest products.

Guidelines on charcoal production, wood preservation, facts on eucalyptus, on-farm sawing and bamboo utilization were amongst 190 publications issued to the public.

The Principal Secretary Ministry of Agriculture, Fisheries and Livestock Hon. Alexander Cherop was among 250 professionals and members of the public who visited the KEFRI stand. The PS commended KEFRI for highlighting solutions that if embraced could support the vulnerable and help the poor to alleviate hunger and poverty. A certificates of recognition was issued to institutions that participated in the event.



Kabarnet and Kitale ASK shows

By A. Kisiwa & S. Nyambane

Rift Valley Eco-region Research Programme participated in the Kabarnet and Kitale shows held between 13th to 17th and 26th to 31st October respectively.

At the Kabarnet show Londiani, Marigat and the Forest Product Research Centres (FPRC) jointly exhibited forestry technologies on collecting and processing quality tree seeds, bamboo propagation and utilization ,value addition to wood and non-wood products.

KEFRI scooped the trophy for the Best Stand displaying Research and Development.

At the Kitale show, KEFRI exhibited jointly with Kenya Forest Service (KFS) and the stand scooped trophies for the Best stand in Environmental Management Standards and for the Best stand in Energy Saving and Conservation respectively.



Mr. Reuben Shanda (right) taking judges through KEFRIs' display of non-wood forest products during the judgment session

Cestrum Field Day

By S. Nyongesa

embers of the giant Kimothon Community Forest Association (KCFA), with 1,090 registered members drawn from twenty three (23) groups, benefited from skills on management of Cestrum invasion during a field day held at the KFS Londiani offices on 22nd December, 2015.

The purpose of the field day was to demonstrate methods of managing and controlling *Cestrum aurantiacum* targeting communities in Mubere, Mutumbei, Endebes and Cholem sub-locations Kimothon, Trans Nzoia County.



Messrs Kinyanjui and Fred Lwolei, Forester in charge and the CFA Chairman respectively hosted the event. KEFRI Rift Valley Eco-regional Programme Director Dr. Jared Amwattta, Mr. Boaz Ngonga and Ms. Sylvia Nyongesa made presentations on Cestrum invasion and management options on-farms, in plantation and natural forests.

The KEFRI team also sensitized the CFA members on the side effects of the shrub to the environment which include suppressing trees and other crops growing around it.

Cestrum possess poisonous elements which can be transferred to humans through products derived from animals which have foraged large quantities of Cestrum biomass.

Despite its negative effects the community has nicknamed the evergreen plant 'Zimamoto' as its branches are commonly used to extinguish fires in the forest. The shrub is used as firewood, poles for fencing, supporting banana stems, bee forage and fruits for birds.



Community Forest Association during the Farmer's Field day

Barclays Bank Community Day By A. Kisiwa

EFRI Rift Valley Eco-region Research Programme- Londiani hosted Barclays bank Kericho branch delegate, on 31st October, 2015 to commemorate a day of community service rendered by the bank.

Barclays bank dedicates the day globally to market and learn other private sector activities. It is the first time Barclays Bank Kericho branch selected a public institution to participate in the event.

KEFRI staff advised the bank to empower youth and women to establish tree nurseries and raise bamboo seedlings so as to build their entrepreneurial capacity.



The Barclays delegate toured centre facilitates namely tree nursery, bamboo processing workshop, seed processing and sale unit, laboratory and the library.

KEFRI Rift Valley Eco-region Forestry Research Programme is mandated to address research and development needs in forestry and allied natural resources in highlands and drylands of the Rift Valley eco-region.

The Eco-region covers 14 counties namely; Baringo, Bomet, Elgeyo-Marakwet, Kajiado, Kericho, Laikipia, Nakuru, Nandi, Narok, Samburu, Trans Nzoia, Turkana, Uasin Gishu and West Pokot. Londiani in Kericho County.

Londiani in Kericho County serves as the Rift Valley Eco-Region Forestry Research Programme head office while Turbo, Baringo and Turkana are the sub-ecoregion centers.



Turbo Eco-region Research Sub-centre modern offices. The center is undertaking progeny trials of valuable commercial tree species

Gums and resins field day

By V. Oriwo and R. Shanda

EFRI is undertaking various activities in the ASALs of Kenya focusing on alternative livelihoods to mitigate rural poverty and environmental degradation.

Laisamis Sub-County Gums and Resins Marketing Cooperative and Melako Community Conservancy (MCC) jointly with KEFRI organized a field day on 25th November, 2015 in Laisamis, Marsabit County. The objective was to create awareness and enhance capacity of communities on harvesting and post harvesting of gums and resins.

The event was attended by 92 participants amongst them beneficiaries trained during the Acacia Operation Project and the Gum Arabic and Resins Association Project. Gums and gum resins are tree harvestables used in ceremonies as incense, pharmaceutical and cosmetic industries.

Gum Arabic, Hagar, Frankincense (both black and white), and Myrrh with their respective essential oils were displayed. Further information was given in form of posters, publications and brochures to reinforce Information, Education and Communication (IEC) on tree species producing gums and resins and their respective locations. In addition, skills were imparted on gums and resins sustainable harvesting, sorting and grading, utilization, branding (labeling) and packaging to attain credible market. Gum tapping techniques on harvesting oleo gum resin - frankincense (black and white) from Boswellia neglecta and oleo gum resin from Commiphoraholtiziana - (Hagar) were demonstrated in the field. The gum is collected two weeks after tapping. Acacia Senegal tree can produce 8 kg of Gum Arabic per month

Speaking during the event Mr. Mohammed Sanjir, the Manager of Melako Conservancy, said conservation of trees producing Gums and Resins is crucial in the Conservancy. "Gums and Resins from Kenya is rebranded in Ethiopia and Somalia then is purported to have come from these countries. Likewise the gum is exported raw and sold back to Kenya very expensively after value addition," he said.

Mrs. Pauline Lemalasia, a community representative, informed participants that at the initial stage of her involvement in the trade, travelling long distances in search of gum yielding trees, environmental stress to the trees, human/wildlife conflict, scarcity of market



Mr. Reuben Shanda (Left) displaying products fortified with gum Arabic and publications



Ms. Pauline Lemalasia (right) demonstrating gum and gums resin tapping skills.

and poor harvesting techniques were challenges she encountered. However KEFRI's intervention especially through capacity building has improved the situation.

Mr. Antonino N. Kaldalle Senior Chief Laisamis Location, thanked KEFRI for holding the field day at Laisamis. Gum trade has empowered women and youth in the said area and called upon men to form groups to embrace the trade to beef up sustainable environmental conservation and management.

In Kenya, production of Gums and Resins is relatively widespread and plays a vital role in the lives of pastoralists in terms of financial gain from their collection which is mainly used in buying foodstuff, livestock, drugs and activities towards livestock economy.

However, the potential of Gums and Resins has not been harnessed fully due to lack of financial capital, transport, marketing information, trends and prices coupled with lack of expertise to boost production, insecurity, and lack of policy and infrastructural support.

Conferences and Trainings

Regional Training Course on Adaptation to Climate Change

By J. Otwoma, S. Kamonde and B. Namisi

The 2nd Regional Training Course on Adaptation to Climate Change in Africa through Social Forestry was held form 26th October to 27th November at KEFRI headquarters. The 5-week training that was supported by JICA, KFS and Regional governments. The course attracted 22 participants from 15 African countries namely; Botswana, Burundi, Ethiopia, Lesotho, Malawi, Namibia, Somaliland, South Sudan, Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe and Kenya.

The course aimed at improving the capacities of participating countries to implement adaptation measures to climate change through participatory social forestry extension methodologies. Participants were encouraged to identify, design and implement action plans that would help their communities be more resilient to climate change for improved livelihood in a bid to end the indignity of poverty that faces many Sub-Saharan communities.

The training involved both presentations and practical lessons with field visits to parts of Eastern and Western Kenya. It covered topics ranging from policy and institutional issues and measures on adaptation to climate change and development; participatory social forestry extension methodology and livelihood; drought resilient tree species and the execution of action plans. Focus was on acquiring practical skills that will lead to the implementation of practical action plans.

In her address to participants, Prof. Judi Wakhungu, Cabinet Secretary Ministry of Environment, Natural Resources and Regional Development Authorities appreciated the training which was taking place at an opportune time as new challenges are constantly emerging due to diverse influence with climate change. She emphasised on behaviour change amongst communities and the adaptation of best practices to mitigate climate changes.

Mr. Kazuhiro Tambara, Senior Representative JICA Kenya Office pointed out that the course marked 21 years of strong partnership between JICA and KEFRI in the area of social forestry which began in 1995. He added that although climate change is a global phenomenon, African countries are more vulnerable to its effects due to inadequate human resources and financial capacity coupled with the adverse climatic and environmental conditions that exist in some of these countries.

Kenya Forestry Service (KFS), was also very excited to play a role in the training and offered its expertise through both classroom and field training, said Mr. Bernrad Omondi.

Dr. Bernard Kigomo, on behalf of the Director KEFRI, welcomed participants and urged them to make full use of KEFRI facilities and the expertise of its trainers.

The training aims at involving many African countries to build on social forestry extension and conservation of drought tolerant species for adaptation to climate change.

The participants, led by Mr. Michael Mukolwe the Training Manager Social Forestry Training Centre, visited different parts of the country to familiarize themselves with forestry issues. They also visited Muguga Ecosystem Research Community Forest Association (MERCFA) alias Muguga CFA on 21st November, 2015 where they shared experiences on participatory forestry management by forest adjacent communities.



Participants visit to MERCFA a forest adjacent community group

MERCFA is involved in conservation of the remnant Muguga forest and its environment through nondestructive forest activities that include; raising tree seedlings, bee-keeping and growing strawberry on farm to improve forest ecosystem and community livelihood.

The participants visited these nurseries where indigenous and exotic tree seedlings are raised by the group, visited other conservation activities that included woodlot established in schools and individual farms and utilization of energy saving jikos that contribute to forest conservation.

The Chairman of the group Mr. Simon Kamonde revealed that these activities have created job opportunities to youth and women. The participants were impressed by the traditional baskets and beads among other artefacts woven by women.

Stakeholders' Trainings

By E. Kyalo



Members of women self help group undertaking training on Melia volkensii seed extraction

EFRI Drylands Eco-region Research Programme evaluated the adoption of skills imparted during stakeholders trainings conducted under partnership with Africa Sand Dam Foundation (ASDF).

Africa Sand Dam Foundation is a Non Govermental Organization (NGO) undertaking various activities to improve community livelihood within Makueni, Kitui and Machakos counties through projects: Water (sand dams, construction of shallow wells and rock catchments); livestock production (improvement of animal breeds); conservation of environment (tree planting and terracing); piloting on fish ponds; capacity building on various fields to the working group members and staff.

Sinai Self Help Group

The group of 30 members based in Tawa began in 2004. It partnered with ASDF in 2014. Members were trained between 21st May and 2nd June, 2015 on income generating activities (production of seedlings, growing of vegetables and pastures) and environment conservation.

Umiisyo wa Muangeni Self Help Group

The group was selected by ASDF to undertake environment conservation and agroforestry activities as an alternative way of improving livelihood of their members. The group started in the year 2000 and has 30 active members. It collaborated with ASDF in 2014 to drive its major objectives of accessing water through construction of sand dams, water tanks in schools, capacity building of its members involved in diverse activities, tree planting and terracing of their farms to control soil erosion and conserve the environment.

Mbukilye Ngukilye

The group with 21 members was started in the year 2011. It aims at availing water through (Sand Dams, Water tanks); soil conservation through farms Terracing; income generating activities (such as growing of vegetables and tree nursery).

Members of the group were trained on species selection, tree nursery establishment and planting techniques between 7th to 9th July, 2015 at Ikalaasa village.

Wikwatio wa Mutula Self Help Group was formed in 2005, and its 29 members bebefited with training.

Ndwaaengutwaae Self Help Group has 47 members who were trained in Uvanga, Kalawa village, Machakos.

The five groups established their own nurseries and raised *Melia volkensii* seedlings which were planted on community demonstration plots mixed with mangoes.

KEFRI experts have been requested to impart skills on silviculture to help in the management of the group farms.

Environmental Training Management Course

By Dr. J. Mulatya



Dr. Jackson Mulatya (4th front row from left) with fellow participants who attended the course

The Deputy Director Corporate Affairs and Quality Assurance Dr. Jackson Mulatya attended an Environmental Management Course at Galilee International Management Institute in Israel from October 19th to November 6th, 2015.

The Institute offers courses on solid waste, effluent handling and management. Due to population dynamism and economic development, the two items have implications on consumables, which results into waste that might lead to environmental pollution.

The course also covered climate change and measures that have to be considered in adaptation and mitigation to impacts of climate change. The consequences of climate change are manifested through temperature increase hence, 15% reduction in food production, new types of insects and diseases threatening agriculture, rising of the sea levels, increase in number of fires and water shortage. Mitigation and Adaptation Measures include,

- Use of Low carbon energy such as solar energy, wind energy, hydro and nuclear energy
- Reduction in energy consumption; improving installation of houses and improving efficiency of cars and reduction in number of private cars.
- Expanding forests and other "sinks" through intensified afforestation programmes

- Developing technologies for Carbon dioxide (CO₂₎ limination (algaes)
- Improving energy efficiency

Generally, Solid Waste Management can be done through recycling plant, waste to energy, (Incinerator – mass burning; refuse derived fuel), fermentation using biological processes, and Pyrolysis which involves incubators and furnace burning. The use of these technologies depends on level of development and financial affordability of the technologies to the users. However waste can be managed using simpler/cheaper solid methods referred to as 7Rs.These are:-

- 1. Reducing the amount of waste by buying things that can be reused or easily bio-degradable
- 2. Rethinking before buying a wasteful product and its impact to environment
- 3. Refusing to use the product that is unbiodegradable or that cannot be safely disposed off
- 4. Recycling wastes or recycle them with the responsible recyclers
- 5. Reusing plastics, fibres etc.Donating to needy users who will reuse until time to dispose safely
- 6. Repairing broken items or gadgets for continual use
- 7. Refilling those products that can be refilled (Ink, pen etc)

The 2015 United Nations Climate Change Conference – COP21

By B. Namisi and J. Otwoma

The 21st yearly session of the Conference of Parties (COP21) was held in Le Bourget Paris, France from November 30th to December 11th, 2015. The eleven day conference attracted more than 40,000 delegates from 195 countries including President Uhuru Kenyatta, President Barrack Obama of America, Chinese President, Xi Jinping and Indian Prime Minister Narendra Modi.

The main objective of the conference was to achieve a binding and universal agreement on climate change, as well as keep global warming below what most scientists say is at a critical threshold of 2° Celsius.

Countries have recognized that climate change presents an ever growing threat to development, poverty eradication efforts, and the welfare of its citizens.

According to the Inter-governmental Panel on Climate Change the impacts of climate change are being felt on every continent. The world's greenhouse gas emissions are on the increase whereas the planet has been warmed by 0.85° Celsius since 1880. It is feared the global temperature rise would exceed 2° Celsius that countries agreed upon during the Kyoto protocol. Each country that ratified the agreement will set a target for emission reduction, though the amount will be voluntary.

The conference came up with the following recommendations:

- i. To peak greenhouse gas emissions as soon as possible and achieve a balance between sources and sinks in the second half of this century
- To keep global temperature increase "well below" 2° Celsius (3.6F) and to pursue efforts to limit it to 1.5° Celsius
- iii. To review the progress every five years
- iv. Commit \$100 billion a year in climate finance fund for developing countries by 2020, with further financing in the future

United Nations Secretary General, Ban-Ki Moon, lauded the Paris Agreement as being a monumental triumph for mankind. "The Paris Agreement and the outcomes of COP21 cover all the crucial areas identified as essential for a landmark conclusion," he said.

"It is now upon us to come up with mitigation measures to reduce emissions fast enough, craft policies and accounting systems for climate action, adaptation, strengthen ability to recover from climate impacts; and support including finance for nations to build clean, resilient futures," he concluded.

Community Nursery Training - Kilifi

By J. Muthimi, S. Mwalewa, N. Leley and K. Mwema

Training on tree nursery management, and practices is a key service offered by KEFRI. This is because seedling production is one of the steps in domestication of tree species. Skills on tree nursery management prepares farmers and enterpreneurs to produce quality planting materials.

KEFRI Coast region in conjunction with Kenya Coastal Development Project (KCDP) held a training on tree nursery establishment and management for Vitendo Nursery community Group in Kwale and Ushirikiano Nursery group in Kilifi counties. The training took place on 21st to 24th December, 2015 and on 5th to 7th January, 2016 respectively.

The objective of the training was to provide knowledge on how to; produce high quality tree seedlings, that can provide opportunities in terms of income, self employment and technology transfer, plant trees on farms for personal or commercial use and for rehabilitation of degraded sites to enhance forest cover, and also plant trees to meet present and future demand for wood and non-wood products.

The training covered; Tree seed technologies that ensures collection of healthy and high quality seeds for the nurseries, Nursery establishment and management practices and Integrated Pest Management (IPM), a process used to solve pest problems while minimizing risks to humanity and the environment.

Equipping communities with tree nursery information will help them improve their skills so as to carry out routine activities in an organized way and with better understanding. It will further enable them collect seeds and raise quality planting materials that will improve sales and tree growth performance.

The trainers recommended further training for the community nursery groups in their respective areas of operation and follow ups evaluations.



Investing in tree seedling production is a worthwhile venture and this bussiness thrives during the rainy season

Secretaries' Workshop

By M. Njenga



EFRI secretaries who are members of Kenya National Secretaries Association (KENASA) ▲attended a Workshop at Meru Technical Training Institute, Meru County, between 1st and 2nd October 2015. Among the topics covered were; HIV and AIDS, Administrative Justice, Retirement benefits and Career progression.

Mr. Jim Njoka, the Senior Deputy County Commissioner, Eastern Province opened the workshop and emphasized on; setting targets in order to meet goals, advancing careers to fit in the corporate world, working towards filling gaps that arise in the work place so as to enhance continuity, stress management in the work place and retirement needs that ought to be prepared early to avoid being a burden once one retires.

A representative of The Commission on Administrative Justice (Ombudsman) encouraged participants to adhere to professional ethics and integrity.

She emphasized on positive attributes of office management including; time management, efficiency, orderliness, courtesy, competence, responsiveness, administrative justice, performance contracting and dispute resolution methods.

Ignatius Namuju, the General Secretary of KENASA in his closing remarks informed the members that they are committed to activities and management of KENASA.

He encouraged participants to engage themselves in career development activities which would see them climb the career ladder.

Career Development

By R. Wanjama and S. Gitonga

EFRI staff attended diverse courses as part of their creer development and were awarded Degrees, Diploma and Certificates after successfully completing their studies.

Mr. Keneddy Mutwiwa Mwangangi was awarded a Bachelor degree in Business Administration - (Finance Option) at Maseno University on 11th December 2015. Ms. Gladys Nyanchama was awarded Bachelor of Commerce (Finance Option) by Masinde Muliro University on 4th December, 2015.



During the 54th Graduation ceremony for the Conferment of Degrees and Award of Diplomas by the University of Nairobi held on 4th December 2015, Messrs. Linus Wekesa (in picture) was awarded a Doctor of Philosophy Degree in Business Administration

At the same time Stephen

Gitonga was awarded Master of Science Degree in Agricultural Information and Communication Management, Reuben Shanda Bachelors degree in Sociology and Communication, and Vincent Mosome Bachelors of Commerce in Procurement and Supplies Chain Management.

Mr. Robert Wanjama was awarded a degree of Bachelor of Business Administration (Human Resource) and Ms. Ann Wairimu a Maina Diploma in Business Management at St. Paul's University on 9th October, 2015.

It is incumbent for institutions to provide training required by employees for their career development.

Human resource views this perspective as partnering with employees to meet the basic competence for the job.

Trained staff develops good skills and abilities that the organization need to sustainably retain itself in a competitive environment.

It is in this line that KEFRI has undertaken the effort to support staff training to improve careers in oder for staff to become competitive, undertake organizations professionally responsibilities thus increasing productivity.



KEFRI Participates in the Standard Chartered Nairobi Marathon – 2015 By S. Gitonga

s part of Corporate Social Responsibility KEFRI staff joined thousands of participants in the 13th edition of the Standard Chartered Nairobi International Marathon which kicked off at Nyayo stadium on 25th October, 2015.

The staff namely Sarah Mogaka, Robert Mwachai, Victor Jaoko, Margaret Njenga, Stephen Gitonga, Betsy Namisi, Zaitun Chelangat and Loise Njoroge represented KEFRI and ran in different road races from the set categories of Full Marathon 42 Km, Half Marathon 21 Km, Wheelchairs 21Km, General race 10Km, Corporate managers 5Km, and Family Fun run 6Km.

The Marathon, first held in 2003, is an annual sporting charity fundraising event organized by Standard Chartered Bank under a flagship project 'Seeing is Believing'. The project aims at eradicating avoidable blindness in children under the age of nine years. The fund is used to restore children's eye sight, equipping beneficiary hospitals, construction and refurbishing eye care health facilities, capacity building, to eye care specialists to improve delivery of services.

The Nairobi Marathon is the first of the four races in the 'Greatest race on earth series' that also includes Singapore, Mumbai and Hong Kong Marathons.



Some of the KEFRI team that participated in the Nairobi Marathon



Mr. Stephen Gitonga starting the 10km race at the Nyayo Stadium

Kakamega Forest Marathon

By Dr. R. Nyambati



Dr. Robert Nyambati, Lake Basin Regional Director congratulating Millicent Auma for completing the race

EFRI was privileged to be one of the sponsors of the Kakamega Forest Marathon which was held on 28th November, 2015.

The race whose motto was RUN, RESTORE, CONSERVE was organized by the Kakamega Forest Heritage Foundation and its stakeholders. The Chief guest was Prof. Judi Wakhungu Cabinet Secretary Ministry of Environment, Natural Resources and Regional Development Authorities. She was accompanied by Hon. Eugene Wamalwa-Cabinet Secretary Ministry of Water and Irrigation among other national leaders.

Dr. Robert Nyambati KEFRI Regional Director in charge of Lake Victoria Basin Eco-region Research Programme led staff from Maseno and Kakamega in the Marathon and exhibition.

The staff exhibited a number of forestry technologies and forest products relevant in the region. Pauline Adhiambo Onyango, Millicent Auma, Samuel Kirui, Zablon Onchieku finished the 42Km while Dennis Ambani, Jessicah Sonye, Elkana Siayi, Juliet Vihenda, Benard Wambua, Calistus Malala and Nelson Kwova completed the 21Km race.

Pension Annual General Meeting-2015

By Dr. M. Gichora and P. Tuwei

EFRI Staff Pension Scheme Annual General Meeting for the year 2015 was held on 6th October, 2015 at the Headquarters. A total of 261 staff members from the headquarters, CHERP-Muguga and FPRC-Karura attended.

Statement from the Chairperson

The chairperson, Dr. Mercy Gichora informed members that the year under review saw the combined scheme investments change to Kshs. 1.59 Billion in value from Kshs. 1.46 Billion as at the end of the financial year 2014/2015.

The Defined Benefit plan (DB) Scheme had 14 members out of 34 members recorded as at June 2014. It is expected the remaining 14 DB members will have retired by the end of June 2016 and the DB scheme will wind up. The chairperson informed members that the scheme has been compliant in terms of annual audit, Trust Deed and Rules, Agreements with Service Providers, Board of Trustees composition, Statement of Investment Policy, holding of AGMS, issuing of member statements as well as filling of Annual Returns and payment of RBA Levy.

The Chairperson further informed members that Ms. Mary Gitahi joined the Board of Trustee with effect from 1st July 2015. Ms. Gitahi replaced Mrs. Loise Gathoni Ruhiu, along serving Trustee retired from the Board on 30th June 2015.

Administrator's Report

Mr. Rotich from AON Kenya presented the report and informed members that AON the Administrator of KEFRI fund, has opened an online portal for members to access updates of their benefits in real time. To access the portal, each member has been assigned a prescribed password and username.

Typical timeline	for accessing	benefits upon	leaving the s	cheme are as follows:
	101 00000000000000000000000000000000000	Series apon		

1 5P	Typical timeline for accessing benefits upon leaving the scheme are as follows:				
Item	Action	Timeline	Action owner		
1	Application of benefits	1 Month to retire	Member/Trustees		
2	Computation of benefits indicating Lump sum and annuity payable	48 Hours from receipt of final contributions.	AON		
3	Approval and Authorization to pay	48 Hours from date of receipt of computation of final contributions-lump sum only	TRUSTEES		
4	Soliciting and circulation of Annuity Quotes	1 week from date of computation	AON		
5	Choice of suitable underwriter	1 week(law gives 1 year)	Member		
6	Communication of preferred annuity provider	1 week	Member		
7	Completion of application and nomination Form	1 week	Member		
8	Transfer of purchase price	3 days after receipt of name of annuity provider	AON		

Finally the Administrator gave the following tips:

- 1. Never start a business when you retire
- 2. Develop financial discipline through Budgeting
- 3. delaying in saving has an opportunity cost to it.

Other Benefits

Health Insurance Benefits KEFRI staff are covered by Saham Assurance Company Limited. Health insurance benefits in Kenya shillings per category are as follows.

Category	Job Group (RF)	Inpatient	Outpatient	Optical	Dental	Free Maternity
А	11-15	600,000	200,000	20,000	20,000	60,000
В	8-10	400,000	100,000	15,000	15,000	50,000
С	6&7	200,000	50,000	10,000	10,000	40,000
D	1-5	100,000	50,000	10,000	10,000	40,000

KEFRI 8th Board Term Ends

By S. Gitonga, S. Mogaka and Z. Chelangat



KEFRI 8th Board members during an Induction seminar organized by State Corporations Advisory Committee at Mombasa Continental Resort from 25th - 28th October 2015

The KEFRI 8th Board of Directors' term ends on 30th December 2015. The members include; Prof. Daniel Mugendi (Board Chairman), Prof. Agnes Mwangombe (Chairperson Finance and Administration Committee), Dr. Supinder Singh Soin (Chairman Research and Development Committee), Ms. Caroline A. Oduor (Chairperson Audit committee) Robison Ngethe, Dr. Ben Chikamai (Director KEFRI), and Dr. Abdullahi Dima Jillo who was appointed member of the Board for a period of three years commencing 17th April, 2015. Dr. Jillo replaced Dr. Kingiri Senelwa who passed away on 23rd September, 2014. Until his death Dr. Senelwa chaired Research and Development Committee.

The altenate Board members are; Mr. Emilio Mugo, Director - Kenya Forest Service (KFS), Mrs. Margaret Maimba, representing National Commission for Science Technology and Innovation (NACOSTI), Mr. Hewson Kabugi, representing the Principal Secretary, Ministry of Environment, Natural Resources and Regional Development Authorities and Mrs. Margaret Muiru, representing The National Treasury.

Achievements

Speaking during the 6th End of Year and Staff Bonding party at KEFRI Headquarters, Prof. Mugendi commended the Board for implementing KEFRI 5th Strategic Plan (2013-2018) which was prepared using balanced score card; hiring potential staff to beef up the current human resource; expanding and rebranding regional centres, and improving KEFRI Pension Scheme for staff.

"Soon after appointment, the Board encountered challenges in staff welfare and it had to negotiate for equitable salaries with Salary and Remuneration Commission and retrieve the Institute from the looming merger with other state parastatals," he added.

Biocontrol Agent BGC iIdentified

By E. Mutitu

The Blue Gum Chalcid (BGC) *Leptocybe invasa*, an invasive insect pest that has posed a challenge in the forest sector in Kenya and Africa at large, may soon come to pass.

The pest first reported in Kenya in 2002 caused damage to Eucalyptus tree species and if unabated may spread with time.



Blue Gum Chalcid (*Leptocybe invasa*) an invasive pest of Eucalyptus species

Past experiences have proved that such invasive pests can only be sustainably controlled through the implementation of a classical biological control program.

Probing for a suitable biocontrol agent that would overcome the challenge and put in place a management strategy that is permanent and economically viable has remained elusive.

Two bio-control agents imported from Israel were tested in Kenya and South Africa, where this pest is causing a lot of economic loss particularly in Kwa Zulu. The agents failed the test in both countries and the trial did not go beyond the rearing facilities – insectary.

Mass rearing of the two agents in South African proved difficult despite several shipments from Israel as well as Australia. There was no success in mass-rearing of the two Israel biological control agents.

Luckily, Forestry and Agricultural Biotechnology Institute (FABI-University of Pretoria, South Africa) has founded and validated a new species *Selitrichodesneserisp* (*nomem provisorium*) which is a likely prospective to be the panacea to BGC problem in Africa.

The biological control agent, closely related to the Israel species, is lethal and easy to rear en mass in the insectary, thus it can produce adequate number for field release.

Tests done at the quarantine indicated a potency of 72% to 90% eradication. This is a very high laboratory parasitism rate for a biological control.

CHERP Activities

By S. Wakori, S. Omondi and R. Othim

The Central Highlands Eco-region Research Programme conducted several activities in research and information dissemination some of which are hereby reported.

Refining propagation method for various tree species

CHERP was to raise 2000 seedlings in the nursery adhering to nursery practices in readiness for planting during the April/May, 2016 long rains. Seedlings acquired from the tree nursery at headquarters were changed into larger potting bags to provide nutrients to attain vigorous growth status before grating activity commenced. 2000 *Cupressus lusitanica* implants of 30 mother trees were grafted between November and December 2015 when the scions were abundant and are currently natured in the glass house.



Similarly, *Eucalyptus urophylla* seed were collected from outstanding individual trees within plantations found within. The aim is to facilitate CHERP raise 1,200 seedlings and establish one hectare plantation. More seeds were to be collected from other already selected plantations in Meru to enhance the gene pool of the already collected seeds

Grevilea robusta seeds were to be sowed and raise 1,200 rootstocks at the headquarters' tree nursery for grafting. Twenty three mother trees (families) from Muguga *G. robusta* gene bank are to be used in raising the grafts. Scions were collected from 30 mother trees from Grevillea tree bank at Muguga and were used to graft 1,000 rootstocks. The grafts are currently maintained and monitored in the glass house. The grafts have sprouted well.

In refinement of *Melia volkensii* propagation through tissue culture, five hundred (500) Melia explants were inoculated for shooting development and currently no contamination has been reported. Most of the explants have callused with some already developing shoots.

Pests and Diseases Survey

A Baseline survey to determine the socio-economic impact of tree pests and diseases was conducted in Nakuru County, Rift valley Eco-region, from the 20th to 24th December, 2015. Questionnaire were pretested and validated in consultation with scientists from Entomology and Pathology division. Serious pests and diseases were found on major plantation and on-farm tree species that include the Pines, Cypresses, Eucalypts and Grevillea. Pines and Cypresses are predominant in the plantations.



Blue Gum Chalcid (BGC), *Leptocybe invasa* the Eucalyptus Snout Beetle (ESB), Bronze bug, *Thaumastocoris peregrinus* (TP) and the Red Gum Lerp Psyllid (LP), *Glycaspis brimblecombei* and termites are some of the major pests of Eucalypts include whereas Botryosphaeria stem cankers and dieback caused by the Botryosphaeriaceae complex are diseases that attack Grevilleas.

Farmers' Field day

CHERP also held a field day on 3rd December, 2015 at Kamae, Kiambu County to demonstrate benefits of established plantationt using Plantation Establishment and Livelihood Improvement Scheme (PELIS) methodology. The field day was attended by 68 people, mainly farmers benefiting from PELIS practice in Kamae forest. The aim was to stimulate and motivate farmers to engage in tree enterprises to improve their livelihoods.

KEFRI staff shared information on suitable tree species for the area, tree products, market opportunities and other valuable information.

Durring the event, bamboo products, propagation and management were demonstrated. Technologioes on vegetative propagation that included single node, double nodes, multiple nodes, offsets and edible bamboo shoots.



New Accomodation Rates and Other Services

By M. Miingi



EFRI Enterprise Division is the marketing arm for KEFRI technologies, products and services, that includes quality tree seeds and seedlings, timber and non-wood forest products, provision of meeting rooms and conference facilities, catering and accommodation at affordable prices.

To continue delivering services, the rates of the following components were revised upwards with effect from 1st September, 2015.

Component	Old Rates (KES.)	New Rates (KES.)
Accommodation per Night (B&B)	1,800	2,000
Accommodation ;; (FB)	4, 300	4,500
Accommodation ;; (HB)	2800	3,000
Hire of KEFRI House (Per day)	20,000	20,000
Hire of grounds	10,000	15,000
Auditorium Hall	10,000	15,000
Bamboo Meeting Room	4,000	4,000
Acacia, Cedar and Ebony	3,000	3,000
Photography (Session Max.4hrs)	3,000	5,000
Videography (Per day)	3,000	7,500

These services are available at the following KEFRI Centres:

Headquarters - Situated 25km from the city centre along Nairobi- Nakuru highway

• Conference hall that accommodates 250 pax, meeting rooms, workshops and hostels for 50 pax and catering facility and retreat garden.

Kitui- Located in Kitui Township

• Workshop and hostel facilities for 30 pax, catering facilities and retreat garden

Maseno-Located along Kisumu-Busia road near Maseno University

• Meeting rooms and Catering facilities for both indoor and outside catering

Lamu – Located at Mokowe centre

• A hostel block completed for capacity building for farmers and other stakeholders.

Turkana – Located at Lodwar Township

The facility is used to build capacity for farmers and other stakeholders within Turkana County on forestry and allied natural resources management

Baringo- Located at Marigat Township

The centre offers meeting and Training rooms as well as catering facilities.

facilities.

Other Services available:

• Timber processing and product development at Karura centre, along Nairobi-Kiambu road, 10km from the city centre.

New staff



Hudson Wafula Barasa

Deputy Director, Supply Chain Management

Holds a Master of Science in Education Logistics & Procurement from JKUAT. Has attended several courses and gained fast experience in his proffession. Previously worked with Insurance Regulatory Authority (IRA)



Leonida Cherotich

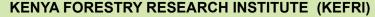
Research Scientist II (Tree Improvement) Muguga (CHERP)

Holds Master of Science in Biotechnology from JKUAT. Previously worked at Unilever Tea-Kericho, for one and a half years.

OCTOBER - DECEMBER, 2015



Eucalyptus sapling attacked by Blue Gum Chalcid pest





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