Recognizing Renown Kenyan Scholar
Applications are invited from interested applicants to attend the following short courses. The courses will be mounted in the Department of Entrepreneurship and Procurement, School of Human Resource Development, JKUAT main campus, Juja.

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<th>COURSE</th>
<th>WHO SHOULD ATTEND</th>
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<td>EPDSC001 Business start-up</td>
<td>All who desire to start and run their own businesses.</td>
<td>12 days 5th Nov – 17th Nov. ‘12 11th Feb – 23rd Feb. ‘13 6th May – 18th May. ‘13</td>
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<td>Those contemplating starting a business, those wishing to expand their businesses</td>
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<td>EPDSC005 Strategic Planning</td>
<td>Managers, executives, business analysts and those involved in planning and/or</td>
<td>2 weeks - 1st Oct – 13th Oct ‘12 12th Nov – 24th Nov ‘12 14th Jan – 26th Jan.</td>
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The application and uptake of Biotechnology in Kenya and Africa at large has been a subject of intense discussion with scholars and the public expressing both apprehension and applause to the practice. To concretize the way forward, JKUAT in partnership with United States Agency for International Aid hosted an executive workshop on Agricultural Biotechnology, moderated by the distinguished Harvard Scholar Prof. Calestous Juma. This issue brings you the details of the conference and resolutions arising thereof.

The university has equally registered growth in its various facets; inaugurating the Arusha Campus, registering additional constituent colleges under its mentorship besides actualizing beneficial linkages with other research institutions.

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Read these and much more in the new look edition as we wait for response and contributions for subsequent editions. Happy reading!

Ogeke Araka

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**From the Editor**

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Ogeke Araka
he future of Kenya’s economic development lies in the country’s ability to embrace the application of new technologies such as biotechnology which has the potential of opening new opportunities for industrial development.

Prof. Calestous Juma, one of Kenya’s leading academics, currently serving at the prestigious US based-Harvard University, dispelled the notion that agricultural biotechnology in particular was an instrument used to benefit rich farmers in developed countries, while at the same time, it undermined food security and the environment. Prof. Juma was speaking at Jomo Kenyatta University of Agriculture and Technology where he was awarded an honorary doctorate degree of doctorate of science in agricultural biotechnology during the University’s 19th graduation ceremony held in June 2012.

In his acceptance speech, Prof. Juma likened the revolutionary emergence of biotechnology to the first arrival of mobile telephony in Kenya that then ‘cost the price of a three bedroom house in Nairobi’s middle-income Kariobangi estate’. At the time, he said, mobile phones were seen as toys of the elite which is not the case today. He said, mobile revolution then had its detractors such as then incumbent landline industry that mounted deceptive scare campaigns of the dangers of the new technology that claimed could lead ‘to job loss and cause cancer’.

He argued the application of biotechnology was beneficial to the poor, citing empirical studies conducted among 16.7 million

Gender and Disability Week
Celebrations

The third JKUAT Annual Gender and Disability week organized by the Directorate of Gender and aimed at sensitizing the University community on the need to address gender and disability concerns in the University was held in June 2012. With the theme: “Gender and Disability Mainstreaming,” the organizers used the occasion to encourage the JKUAT community to shun any aspect of discrimination and stigmatization on the basis of gender and disability.

The event, marked with thematic performances involving differentially disabled students was punctuated with inspirational speeches to the physically challenged and updates on the progress of the university in mainstreaming gender and disability.
“Embrace New ICT Technologies,” Huawei CEO tells JKUAT Students

by Ogeke Araka and Gerald Gichuru

The Managing Director, Huawei Enterprises Business Group (Kenya) Mr. Jason Lin Ming has encouraged students and staff to embrace new technologies in order to improve service delivery. Speaking recently during the implementation of a total of eight policies developed to guide JKUAT Information and Communication Technology functions, he said that his company that specialized in telecommunication technologies was willing to support JKUAT in its agenda to promote the ICT sector in Kenya and the East African region.

The MD said, the multinational, Huawei company with its origin in China had a lot to share with JKUAT in terms new telecommunication technologies and called for a joint training pact between the two institutions. ‘We can start a certificate training programme that JKUAT can host’.

During the function, the Vice Chancellor Professor Mabel Imbuga said that in the past year, the university had successfully completed several key projects aimed at enhancing the University’s ICT service delivery. “During the year we managed to complete the automation of the University library. We also managed to adopt a new email management system in partnership with Google Inc.”

Prof Imbuga also noted that JKUAT was for the first time using a seamless communication platform which she said was augmenting learning at the University.

Military Training for Marine Engineering Students

by Adhere Cavince

The first group of JKUAT Marine Engineering students has successfully completed its month long cadet training at the National Youth Service (NYS) College in Gilgil. The training is part of the requirement under the International Maritime Organization’s (IMO) Standards of Training, Certification and Watch-keeping (STCW). It aims to equip Marine Engineering students world over, with competence in personal survival techniques, personal safety, fire prevention, fire fighting and life skills before they can go to the sea.

JKUAT graduates will undertake these proficiency courses to be certified by Kenya Maritime Authority [KMA] as mandated by the IMO. The training at NYS, which was the first of its kind, is part of preparation for the above course and it prepares them for careers in the shipping industry. The cadets showcased some of the skills they had acquired during the training in a colourful parade during the passing out ceremony.

In her speech, read by the acting Dean, School of Mechanical, Manufacturing and Materials Engineering Prof. Eng. B. W. Ikua, the Vice Chancellor Prof. Mabel Imbuga congratulated the cadets and thanked the management of NYS for their time and resources which led to the successful implementation of the training programme.

The parade that was presided over by Mr. C. T. Muchiri, the Deputy Director General of the NYS was also attended by Mr. Edward Osore, the Commandant of the NYS College, and the Commanding Officer, Senior Staff Training Wing, Mr. Patrick Muchai. Other guests included Captain Dave N. Mulli, who represented the Secretary General of Kenya Maritime Authority (KMA). In his remarks, the Chief Guest called for greater collaboration between JKUAT and NYS on thematic areas of mutual interest.

The JKUAT team included staff from the School of Mechanical, Manufacturing and Materials Engineering (SoMMME), Research, Production and Extension (RPE) and Academic Affairs (AA) divisions, as well as Sports Department.
End of an Inspiring Era as Japanese Hands over Babaroa Trust Fund

by Adhere Cavince

The stewardship of the Babaroa Trust fund, conceived 15 years ago by the JKUAT pioneering Japanese nationals, was handed over in June 2012 to the Babaroa Alumni Association in a colourful ceremony graced by the Vice Chancellor and the JICA Chief Mr. Hideo Eguchi.

Supported by over 200 Japanese Babaroa society members, the Babaroa fund has rewarded close to 600 top performing students drawn from the College of Engineering, Faculty of Agriculture, and School of Building Sciences, all which have been hosting the JICA funded academic programmes.

The handover that was sandwiched by this year’s Babaroa and Vice Chancellor’s awards, brought together the past beneficiaries of the Babaroa awards and saw over 100 students receive the twin prestigious awards.

Addressing the beneficiaries and guests at the event, the Vice Chancellor, Prof. Mabel Imbuga lauded the Babaroa fund initiative and paid special tribute to the founders led by Prof. Hiroji Nakagawa and Prof. Iwasa. She equally urged the beneficiaries to emulate their predecessors and aim to better the society.

“Take the challenge and keep the beacon of excellence burning. Continually aim for self improvement, learning the ropes of the outside world while enjoying the warmth of the university setting”, advised the Vice Chancellor.

The success of JKUAT and the Babaroa award scheme was the central theme of the address by Mr. Hideo Eguchi, chief JICA representative in Kenya. Mr. Eguchi traced his personal history with JKUAT 15 years back when he was in charge of the institution in Japan.

“JKUAT is the most successful JICA project in Africa and I hope the beneficiaries will buffer this success by creating hope, stability and knowledge for future generations”, said Mr. Eguchi.

In his address read by Dr. J. Nosaka, Prof. Nakagawa hailed the measures taken by the university to sustain the fund citing the formation of the Babaroa Alumni Association and the seed money set aside by the university to fund the award scheme.

On behalf of the Japanese Babaroa Society, Dr. Jiro Nozaka, currently attached to the JICA office at the African Institute for Capacity Development, commended the University for keeping the embers of the trust fund alive, and urged the students to self actualize academically for their own good and that of the country.

In keeping with the sustainability progress of the Babaroa trust fund, the Chairperson of the Alumni Association Mr. Gathogo Githatu challenged the beneficiaries of the Vice Chancellor’s award to equally found an alumni association to sustain the twin funds.
For universities in East Africa to considerably contribute to East Africa’s economic and technological development, they have to invest more of their time in the enterprise of applied research aimed at developing new and appropriate technologies that could particularly revitalize the agricultural sector known for its potential to advance the wealth creation circumstances of populations. Dr. Enos Bukuku, East Africa Community (EAC) Deputy Secretary General is of the view that what ails universities in Africa is their preoccupation with generalized research that he said hardly target real problems afflicting the people.

The EAC official was speaking in Arusha, Tanzania, Thursday, July 5, 2012 during the official inauguration ceremony of a teaching centre, sanctioned by Tanzanian Education authorities from where Kenya’s Jomo Kenyatta University of Agriculture and Technology (JKUAT) has since last July 2011 launched a number of its academic programmes. Dr. Bukuku welcomed JKUAT into the larger regional market but advised the university to focus on providing solutions to specific challenges that hinder full exploitation of tropical agriculture.

‘Given the poverty challenges that can largely be attributed to the low per capita productivity in agriculture, JKUAT should intensify its research effort to provide solutions for value addition in agriculture as a way of raising incomes to farmers,’ he told a team of JKUAT top management led by the university chancellor Prof. Francis Gichaga. Dr. Bukuku articulated the fact that the process of value addition had the capacity to empower populations through increased regional investment and trade.

The initiative to open own teaching facility makes JKUAT the first public university in East Africa to take advantage of the revitalized regional corporation to mount its academic programmes across the country’s borders.

The inauguration ceremony was presided over by Prof. Francis Gichaga, who used the occasion to underscore the importance of higher education in fostering regional integration. Prof. Gichaga recalled the dark days of the 1970’s that led to the collapse of the then, East Africa Community, but added that the education sector was least affected by the disintegration citing the Inter-University Council of East Africa which he said, remained proactive in the promotion of inter-state relations in East Africa.

Regional integration he said was now widely acknowledged as an essential instrument for the
people who grew crops using the new technology in 2011. The study, he said, established that an overwhelming 15 million of the sample study were mainly small poor farmers in developing countries. In 2010 alone he added, net farm economic gain stood at $14 billion ‘equal to an average rise in income of $100 per hectare’.

The don said Kenya’s major challenges of increased population, ecological degradation and climate change could be mitigated through a mix of approaches including biotechnology. Prof. Juma is of the view that countries that embraced agricultural biotechnology were better prepared to use similar techniques to solve health, industrial and environmental problems. ‘As an early adopter, Kenya is now applying mobile technology to other fields such as health and agriculture’.

Prof. Juma said a vision for biotechnology in Kenya had to include meeting the needs of the very poor by developing cheaper products such as diagnostics for crop diseases citing three countries in Africa, South Africa, Burkina Faso and Egypt that were now growing biotechnology crops on commercial scale and had registered commendable economic progress. The challenge he said was for Kenya and other countries of Africa to find ways of harnessing the benefits of biotechnology ‘while reducing their risks’. He however acknowledged that there was no risk free technology but maintained that the benefits of biotechnology far much outweighs the risks citing growing evidence that suggests for example that biotechnology produced crops were helpful to the environment. He declared there is evidence which shows that the adoption of biotechnology reduced carbon dioxide emissions and reduced use of pesticides, benefits useful in boosting human health.

According to Prof. Juma, embracing biotechnology too comes with unintended benefits in terms of detected lower pest infestation particularly to crops cultivated through conventional means by farmers within the vicinity of those utilizing biotechnology.

In her address, the Vice Chancellor, Prof. Mabel Imbuga underscored the commitment of the university to the global aspiration of providing equal opportunities to all irrespective of gender or physical orientation.

“Our students with physical challenges are free to enroll in the courses of choice since we believe physical impairment does not translate to mental ineptness”, said the Vice Chancellor.

Addressing the participants, the Deputy Vice Chancellor (Academic Affairs), Prof. Romanus Odhiambo, reinforced the Vice Chancellors position by adding that, “affirmative action on disability is already factored in the Joint Admissions Board’s cut off points for university admission”. Prof Odhiambo added that the university was currently working on a model aimed to integrate gender and disability issues in the curricular as part of the University’s obligation to narrow gender and disability gaps.

The Deputy Vice Chancellor (Research Production and Extension), Prof. Esther Kahangi encouraged the society to be mindful of the plight of people living with disabilities for the benefit of humanity.

In her speech, the Director Gender-
It was the first time for the students to organize a Career day, and the aim was to provide a platform for students to interact with their potential employers. And the event did not disappoint, at least going by the large number of students who for three days swarmed from booth to booth to talk to industry professionals invited by the University to help students to relate their academic programmes to their future careers.

The Career fair mounted in July 2012 brought over 35 companies to the University with their representatives who had a common message to the students; that career development was a lifelong process through which individuals come to understand themselves as they relate to the world of work and their role in it. At the end of the event attended by Mr. Mwatata Mwangala, CEO, Youth Development Fund, and Prof. Mabel Imbuga, the Vice Chancellor, there was general consensus that students should recognize career development as part of their total lifestyle that includes their occupation, education, social responsibilities and leisure time activities.

Mr. Mwatata Mwangala had very good news for the students. He urged them to come forward and take advantage of the Youth Development Fund that extended affordable loans to individual youths and youth groups at 8 and 5 percent interest. The fund, he said, was established in 2007 to address the youth unemployment menace in the country, had for the last five years – disbursed Kshs. 5.9 billion to 158,000 youth enterprises, provided entrepreneurship training to over 200,000 youths and assisted 1800 youth to market their products and services.

Prof. Imbuga on her part castigated the concept of white collar jobs where students hoped to secure easy jobs in the public sector saying the notion was now outdated. Prof. Imbuga instead made a passionate appeal to students to employ their entrepreneurial creativity that was now the hallmark of JKUAT training to create their own enterprises which she said would help alleviate the country’s unemployment dilemma.

Prof. Imbuga advised students, her administration had now put in place mechanisms to finance the development of students’ promising innovations 'to the stage of expanding the novelties to possible SME's ' to support the culture of wealth creation in the country.

The vice chancellor used the occasion to warn students to be wary of the increased insecurity in the country urging them 'to be always their brothers keepers’. The new ultra-modern Thika superhighway she cautioned had also come with a number of security challenges advising students to ensure they used available footbridges to avoid imminent accidents.

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One of the far flung and fastest growing JKUAT campuses located at the coastal town of Voi has been elevated to a university college under the watch of JKUAT. It becomes the first ever JKUAT own campus to enjoy full support from the Government’s managed status. The JKUAT Taita Taveta Campus was established in 2008, following Government’s decision to hand over the decade-old abandoned structures initially constructed as Taita Taveta Teacher Training College under World Bank funded programme that stalled in 1997, with an estimated 95 percent of the project completed.

Speakers at the ceremony officiated by the University Chancellor, Prof. Francis John Gichaga, and attended by top University Management and a cross section of local leaders, unanimously commended JKUAT for its bold and strategic foresight that had led to the rehabilitation of the facilities paving way for a teaching university campus which they acknowledged, had stimulated development opportunities in Taita Taveta County. The campus has been instrumental in opening new opportunities for school leavers to enroll for university courses on offer at certificate, diploma and degree levels while at community level, the campus has been a beehive of technology transfer training programmes designed to empower the local community.

Prof. Gichaga, in a speech to officially initiate the institution’s inaugural Council, was of the view that, the actual task for the new JKUAT Taita Taveta University College was clear cut in terms of knowledge creation and dissemination for Kenya’s national development. The coastal region, Prof. Gichaga argued, was facing numerous challenges that hindered the region’s development goals saying, it was the duty of the university college to embark on the path towards the provision of solutions to unlock the region’s development potential.

Director for Higher Education in the Ministry of Higher Education, Science and Technology, Dr. Salome Gichura stressed that, the elevation of the institution to a university college was part of the Ministry’s policy to address the country’s constitutional obligation to meet citizens’ right to access quality education at all levels. Dr. Gichura reminded the new team of the enormous challenges ahead which she said, required the officials to lay a firm foundation to guide the college. In carrying out their duties, the Director, encouraged the Council to consult widely and be guided by relevant government policy documents that will be instrumental in guiding them to discharge their duties. She also pledged her Ministry’s support saying, “as founders, all you need is courage, determination, and commitment”.

Engineer Riungu, JKUAT Council Chairman who handed the instruments of governance to his new counterpart at Taita Taveta University College, Dr. Florence Nyamu, advised the new team to institute measures that would ensure prudent planning and utilization of resources.
The Department of Mechanical Engineering and Library have floored their contemporaries in the second quarter online visibility ranking of academic and non-academic categories respectively. Mechanical Engineering department also elbowed the department of Botany from the coveted overall best position to stamp its online authority in a competition that is growing fiercely with each ranking.

Closing in after Mechanical Engineering Department in the teaching category was the department of Statistics and Actuarial Science while the Department of Performance Contracting came second in the non-teaching category.

Speaking at a brief ceremony to announce the rankings, the Vice Chancellor, Prof. Mabel Imbuga commended the efforts made by the departments in promoting the university’s online presence.

On receiving the ranking results, Head of Mechanical Engineering Department, Dr. Hiram Ndiritu attributed their success to teamwork, effective infrastructure and unwavering commitment to continued improvement.

“We constantly review the department website and update it regularly. Each member of the department has a role to play and modern tools to execute our duties professionally, both online and offline”, avers Dr. Ndiritu with a smile.

The Deputy Librarian, Dr. G. Gatero was equally elated after his department overshadowed its category sisters. Dr. Gatero opined that since the website is the window through which the department interacts with its diverse clientele, a section of the staff has been deployed to fully man the library website.

“Besides continuous update and review of the site, we are cognizant of the dynamic communication landscape and trends of our clients. We have consequently taken to active use of the social media platforms to disseminate relevant and timely information”, said Dr. Gatero, beaming with joy.

The quarterly internal ranking of the departments is aimed at fostering the overall online visibility of the university, an imperative requirement for a modern university. The university website has registered a phenomenal improvement in the global ranking, with over 52,000 hits in June 2012 alone, up from a paltry 300 hits monthly three years ago.

In conducting the internal departmental rankings, the Website Committee benchmarked the evaluation on accessibility of the site, comprehensiveness of available information, peer review, insights, unique selling points and use of emerging technologies.

A total of 52 academic and 15 non-academic departments were evaluated and ranked in the second quarter. However, 15 non-academic and one academic department were not evaluated because they lack own websites. The full ranking criteria can be found at: http://www.jkuat.ac.ke/ranking-criteria/
The Assistant Minister for Youth Affairs and Kathiani Legislator Hon. Wavinya Ndeti has hailed the Jomo Kenyatta University of Agriculture and Technology (JKUAT), Japanese International Co-operation Agency (JICA) and Women Enterprise Fund for their partnership in empowering women in Kenya through financial and entrepreneurial skills development. The Assistant Minister said these while presiding over the official opening of the women’s In-country Training Programme that opened at JKUAT, Tuesday August 21, 2012.

The training programme with the theme: “Incubating Grassroots Women Capacity for Sustainable Socio-Economic Empowerment and Livelihoods Transformation,” to run for 21 days has attracted over 50 women trainees drawn from different parts of the country.

In her address, Hon. Wavinya, appreciated the role that Women Enterprise Fund had played in adding value to the entrepreneurial training programmes and particularly acknowledged the organization’s expanded mandate of marketing, networking women entrepreneurs a move which she said, will help in fast-tracking the attainment of Kenya’s Vision 2030 through training of trainers.

The Assistant Minister, challenged the women trainees to take advantage of the programme to acquire necessary entrepreneurial skills that would enable them play a proactive role in enhancing social, economic development in their specific regions and country at large.

Commending JICA for a job well done in women’s capacity building, Hon. Wavinya pleaded with the Japanese Government through JICA, to increase the number of trainees in the In-country Training Programme and thanked the agency for continued support.

Vice Chancellor, Prof. Mabel Imbuga welcomed all the trainees to the programme and congratulated them for securing a place under the In-country Training Programme. The VC appealed to the trainees to “take their training seriously so as to acquire skills and knowledge which they could apply to empower other women at the grassroots.” She urged the trainees to use their vast God given gifts to capitalize on the expanded educational opportunities to enhance their academic qualifications.

Prof. Esther Kahangi, the JKUAT Deputy Vice Chancellor in charge of Research, Production and Extension Division (RPE) where the training programme is domiciled, was encouraged by the immense enthusiasm displayed by the previous women trainees whom she noted,
“had been easy to train, appreciative and above all, willing to apply and implement what they had learnt in the programme since its inception”.

She further explained the introduction of a new concept of “incubation without borders” that would allow trainees to identify business enterprises of choice for investment and pledged JKUAT support in terms of technical and financial expertise to the women. She added that the university will enable them to partner with big buyers, through establishment of what she called, “Working Markets for Women.”

The Chief Executive Officer, Women Enterprise Fund, Mr. S. T. Wainaina, congratulated JKUAT and JICA for enhancing the capacity of women particularly the incubation programme. He reiterated the support of Women Enterprise Fund adding that “upon graduation, the trainees will be called upon to be mentors” once a mentorship policy that is being developed is put in place.

In addition, Mr. Wainaina said, Women Enterprise Fund will undertake to sensitize women on the formation of cooperative societies to address challenges that women face when dealing with mainstream banking institutions. He pledged to offer facilitation and education on the formation and operations of cooperative societies in the grassroots.

Mr. Kibe, who represented the Japanese International Co-operation Agency, characterized “education and training as key in economic empowerment” and appealed to all Kenyans to change their mindset and attitudes. He underscored the need to acquire requisite skills, experiences for social economic transformation as a means to minimize inequalities among communities.

He said that since year 2000, JICA had continued to modify the content in line with the needs of the grassroots women and was confident that the skills so learnt will contribute to the realization of Kenya Vision 2030. The content, he said, is aimed at equipping the trainees with knowledge and skills that are relevant in training others for sustainable community, and social economic empowerment while at the same time enabling the trainees become champions who will share and impart in others the lessons learnt at JKUAT.
Jomo Kenyatta University of Agriculture and Technology held its 3rd Edition of the Annual Open Day in July, 2012. The function whose theme was: “Science, Technology and Innovation for Sustainable Industrialization and Food Security,” was officially opened by Bob Collymore, the C.E.O, Safaricom.

In his opening remarks, Collymore paid glowing tribute to JKUAT for coming up with very innovative products and services which address the critical issues affecting the society.

He urged JKUAT to seek collaborative initiatives from donors who are keen on championing the interests of the society and therefore ready to support solutions to problems affecting Kenyans.

Distinguished guests who graced the occasion include: the C.E.O of Media Max, Mr Paul Wanyaga, the JKUAT Council Chair, Eng Julius Riungu, Council Member, Ambassador Stephen Loyatum and the representative from Nazarene University Prof Kigatira.

The event is coordinated by the Research, Production and Extension (RPE) Division. The DVC (RPE), Prof. Esther Kahangi observed that JKUAT is committed to improve its products through innovations noting that unless we embrace research and innovation culture like in the developed economies, agriculture development will remain a pipe dream.

The Vice Chancellor, Prof. Mabel Imbuga, in a speech read on her behalf by the DVC, Administration Planning and Development Prof. Francis Njeru observed that, “JKUAT has been proactive in developing innovative solutions to the challenges facing this nation”.

She added that on the agricultural front, our engineers have produced several machines which are relevant to the farmers. Some of these machines include: the Plant Mill, Fruit Pulper, Juice Extractor and Maize Collector. These cost effective tools are essential in terms of value addition to the farm produce.

She urged farmers to take advantage of these modern technologies to foster optimal incomes from their produce. Other innovations of the University that has been commercialized include the Eco-friendly block making machine, Hardness testers, and the walking tractor.

Besides these innovations, the university is also processing various chemistry and food products. At the Chemistry Products Center, you can access a wide range of cosmetics products, detergents, disinfectants, paints and wood preservatives. The Food Science department is processing food products like yoghurt, wine, fruit juices, instant noodles and jam.

Apart from students and parents, other stakeholders who attended the event include innovators, exhibitors, small scale farmers and women groups across the country.

If there is one quality that defines successful leaders of top performing private and public institutions, it is their ability to organize and lead their teams to outperform set organizational goals. Such leaders understand that it takes the collective contribution of all team members in an organization to actualize its potential. They have overcome self conceit and instead; elevated group synergy, the cornerstone to organizational success.

The dynamics of today’s industry demands the realization on the part of leaders and managers that organizational success rests with all employees. The era of orders has slipped underfoot; ushering in a new dawn characterized by seamless integration and enhanced engagement at the workplace. Instead of managers individually proclaiming group success, there is greater need to percolate the recognition to the lower cadre employees who have equally labored to actualize company goals. This is the creation of group synergy or winning teams.
The reality of an entrepreneurial university is such that, universities in the developing world are left with no option but to catch up with their counterparts in the developed world or else, become irrelevant in as far as creating knowledge based social-economies is concerned. Thus, besides the traditional missions of education and research, serving society must become a coherent mission of the universities. This concept creates the challenge of integrating research and technology based entrepreneurship into the traditional missions of education and research to form a new university education model illustrated in figure 1.

This new requirement expands the traditional challenges for researchers in biosystems [Agricultural and Biological] engineering i.e. providing solutions to the tripartite global challenges of food shortage, energy deficiency and environmental degradation besides improving human well-being (health, living environment and income). An appropriate response to this expanded mandate requires a paradigm shift and reorganisation in research.

It is in recognition of this, that the Biomechanical and Environmental Engineering Department (BEED) is reorganising itself into thematic research groups as a first step. At the start, there will be three research groups, corresponding to three thematic research areas [see Fig. 2]: Machinery, Energy and Sustainable Technologies (MEST); Water and Environmental Systems (WES) and Bioprocessing, Infotronics and Structures (BIS). Figure 3 is an illustration of some research areas under each of these thematic areas. As time goes by and as the challenges for biosystems engineering change, research themes and corresponding research areas will change accordingly.

Under these research themes, researchers in BEED will endeavour to undertake strategic and systematic research which will be holistic enough to provide knowledge that can:

**Bio-processing, Infotronics and Structures (BIS)**
- Bioprocessing
- Closed environments
- Bioinstrumentation & sensing
- Bio-information systems
- Industrial biotechnology
- Sustainable bio-production systems
- Bioproducts Packaging and distribution systems
- Biomimetics [bioinspired technology & products]

**Machinery, Energy & Sustainable Technologies (MEST)**
- Automation Machinery systems
- Biorobotics
- Renewable Energy systems
- Sustainability Engineering
- Precision Agriculture

**Water and Environmental Systems (WES)**
- Water and Sanitation
- Environmental conservation
- Irrigation
- ecology eng
- Environmental Impact assessment and monitoring

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*Fig. 1: Education model of an entrepreneurial university*

*Fig. 2: BEED thematic research groups*

*Fig. 3: BEED thematic research groups*

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’Be Proactive in Research and Knowledge Creation,’ Students told

Dr. Ondimu is the Research Co-coordinator, BEED

The Deputy Vice Chancellor (Academic Affairs), Prof. Romanus Odhiambo has challenged post graduate students to embrace research and new knowledge to positively impact their respective professions. Addressing participants of a workshop on: Insider Guide to Getting Published, the scholar urged the students to come up with quality and professional research papers that can be published in globally reputable journals.

“It is now a requirement for our masters and PhD students to have an additional publication in a Refereed Journal besides the central thesis publication”, said Prof. Odhiambo, adding that the university is keen on producing scholars capable of undertaking entrepreneurial and innovative research with global case studies.

The workshop held on Friday June 8, 2012 was jointly organized by the JKUAT library and Emerald Publishing Limited and facilitated by Mr. Sibu Zondi of Emerald Publishing Ltd.

Speaking at the same event, JKUAT librarian Mr. L. Wanyama told participants drawn from various departments of the university and post graduate students body that, skills to self publishing is now a requirement of a scholarly undertaking. “Every graduate student must now have skills and knowledge on how to prepare professional manuscripts that can be published in world renowned journals’, said the librarian.

The workshop was a response to the graduate students needs to get their works published. The students were taken through the nitty-gritty of self publishing including: essentials of a research paper, targeting research work more effectively and the benefits of getting published.

Emerald Group Publishing Ltd is a leading independent publisher of global research with impact in business, society, public policy and education.
In the world of scholarship, publish or perish has become a cliché. The hallmark of scholarship rests on published work. Indeed, one cannot claim to be a scholar unless one’s research has been published.

For this reason, JKUAT now requires its postgraduate students to publish their research as a condition for graduation. However, it has been acknowledged that, having one’s work published is an uphill task especially for upcoming scholars who are yet to make a mark in academia.

Upcoming scholars therefore need guidance through the matrix of the publishing process. In recognition of the need to demystify the publishing process, the JKUAT library in collaboration with the Emerald Group Publishing organized the “Insider Guide to Getting Published” Workshop on 8th June 2012. The facilitator was Mr. Sibu Zondi who is the Emerald’s Business Manager for the Sub Saharan Africa. Here is a snippet of the content of the workshop.

Where do I start?

The issue of where to get ideas for articles that are publishable is pertinent. Suggested sources of inspiration were given as doctoral or master’s theses; successfully completed projects; opinions or observations on a subject; conference papers and presentations.

You now have an idea, what next?

The decision on which journal to publish in is critical since a good journal can enhance the impact of your work. You must therefore aim to publish in the right journal. Useful indicators of the kind of journal you should go for include the ranking of the journal (ISI) and its internationality. You also need to research on the period it takes (different) publishers to respond.

It is useful to send an abstract and ask for feedback before sending the whole paper. Including a good cover letter with the abstract provides an excellent opportunity to speak directly to the editor so as to convince them on the importance of your manuscript to the journal. Reading at least one issue of the publication will also give you an idea of what is expected of your paper.

Ready to submit your article?

Not so fast! It’s always advisable to have colleagues look at it and give their comments. You then need to proof-read your work thoroughly. By the way, spell-checkers are not fool-proof.

After submission?

Responses from the editor maybe “accepted”, “rejected” or “revise”. If your paper is rejected, you are in good company because according to the facilitator, “everybody has been rejected at least once, so don’t give up! Try to improve the paper, and re-submit it elsewhere”. The presenter pointed out that “many papers are rejected simply because they don’t fulfil journal requirements.” This may be avoided since most publishers provide author guidelines on their websites or in a copy of journal series.

Author-guides provide information on the scope of the journal, type of papers they cover, and referencing styles. If your work is accepted at the desk, appropriate reviewers are contacted. Should you be asked to revise, rejoice for you are in the publishing cycle. Nearly every published paper is revised at least once.

How about co-authorship?

Co-authorship is a good option for first time authors. A co-author may be your supervisor or colleague. Apart from helping launch beginners, co-authorship demonstrates the authority and rigour of the research. However, collaborating authors must agree on the order of their names and the person taking on the role of corresponding author. They must also check the manuscript to ensure that it reads as one voice. The workshop was a very enlightening experience for all.

Contact mndungu@jkuat.ac.ke for soft copies of the workshop presentations or visit the library ICT section for more on the workshop.

The writer works at the ICT section, JKUAT Library.
The first Annual JKUAT Career Fair was held in July 2012 at the main campus grounds with an interactive ceremony bringing together students, university management and company executives.

The three day event under the theme Developing Careers in line with Vision 2030 attracted exhibitors from over 20 companies drawn from the telecommunications, ICT, manufacturing, energy, security, enterprise and banking sectors. Besides promoting their products and services, the companies used the occasion to sensitize students on their various career opportunities.

During the opening ceremony graced by the indefatigable comedian and Kiss 100 Big Breakfast co-host Felix Odiwuor (Jalang’o), various company executives led by Ken-Gen Human Resource Manager, Mr. John Maina advised students on how they would prepare for the job market while on campus.

“A career is a journey. You therefore need to identify in good time where you want to go and initiate, strategies that will enable you to actualize the dream”, advised Mr. Maina.

Mr. Maina lauded JKUAT for introducing the Bachelor of Science in Mechatronic course saying that, “it is extremely relevant to the energy industry.” He equally called on the university to re-introduce the technician course in Geology that was crucial in servicing the energy industry that he said was now receiving increased attention in the country.

Advising students on how best they would position themselves for the job market, Dr. Kimani Kairu of Edumentor underscored the need for students to proactively develop their technical and soft skills if they hoped to enhance their adaptability in gainful employment.

“Besides the technical skills, you must equally hone your people skills including communication, collaboration, personal organization and critical thinking”, he told a packed audience.

Dr. Kimani further pleaded urged students to professionally prepare their resumes and aggressively develop networks with key people in the prospective industries.

To gain requisite job skills, Ms. Eve Mungai of Voluntary Service Overseeing exhorted the students to take advantage of numerous opportunities available to them to volunteer their services and expertise while still in campus. This she said, formed the cornerstone of her success, landing her a job years ahead of her graduate classmates.

While officially opening the career fair on behalf of the Vice Chancellor, the Deputy Vice Chancellor in charge of Academic Affairs, Prof. Romanus Odhiambo commended the organizing committee for the initiative, terming it progressive and timely.

“This career fair provide a platform for employer and employee to demystify careers allowing students to equip themselves with skills, while employers get to scout for right talents”, said the Mathematics don.

And in between the speeches, Jalang’o sent the audience gasping for breath with hilarious contextualized anecdotes, tracing his roots from humble beginnings to acquire his current position and stature.

The Career Fair which will be conducted annually aims to equip students with relevant information on available career opportunities in the job market while creating an avenue for networking with the industry players.
Vice Chancellor Urges Dons to Seek for Increased Public Private Partnerships

| by Ogeke Araka |

Dons at JKUAT have been advised to be proactive in seeking for increased government and private sector partnership as a way of advancing their professional capabilities crucial in their central functions of teaching and research. The Vice Chancellor Prof. Mabel Imbuga emphasized the many benefits likely to accrue from such partnership citing consultancy and joint research undertakings.

Prof Imbuga who was speaking to Faculty of Agriculture staffers during a consultative forum, Tuesday July 10, 2012 reminded the dons they had greater obligation to promote JKUAT Mission and Vision since ‘Agriculture’, their faculty’s name was part of the University’s brand name.

She praised the Faculty, saying it was one of the fastest growing institutions of the university that had registered the highest growth in the establishment of new programmes that was responsible for the Faculty’s marked increased number of students witnessed in the last four years. The vice chancellor as well commended Faculty of Agriculture dons for exhibiting admirable imagination that had enabled them to win leading research projects globally saying the joint projects were instrumental in attracting considerable funds to the university.

Prof. Imbuga noted that the Faculty of Agriculture was a leader in attracting foreign students through its popular postgraduate programme in Research Methodology hosted at the Faculty and implemented under the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM). Established in 2004, RUFORUM is a consortium of 29 universities in Eastern, Central and Southern Africa with the mandate to oversee graduate training. The forum has also been at the forefront in popularizing the role that universities play in contributing to the well-being of small-scale farmers and economic development in sub-Saharan Africa region.

The function was also addressed by Deputy Vice Chancellors, Prof. Romanus Odhiambo and Prof. Francis Njeruh and Prof. Kamau Ngamau, the Faculty Dean among others.
Group synergy brings to the organization many advantages: efficient utilization of human and capital resources, speedy identification and resolution of setbacks, collective responsibility and individual specialization. Within functional teams, members experience greater motivation, personal development besides interpersonal harmony and bonding. All these translate to enhanced productivity, leading to customer satisfaction and organizational profitability.

To achieve teamwork, it is not enough to stop at staffing. The CEO must create appropriate environment of open communication, trust, dependability, unity, mutual respect and shared vision. For such an environment to be realized, every action should be premised on genuine concern for all parties involved. Even more important is to set goals that are compatible with complementary skills of the team.

A team is no ends in itself. It matures overtime through the stages of forming, storming, norming and performing. The maintenance and continuous improvement of the team ought to be a core concern of all members and to a larger extent, the leader. With each passing day the industry experiences phenomenal changes; necessitating training of the staff, for relevance and productivity.

Effective internal and external communication is a proven team management tool since it eliminates misunderstanding by clarifying individual responsibilities and team expectations. To avoid disintegration of the team, the leader should be in a position to anticipate potential sources of conflict and equip the team with problem solving skills for a better harmony. Competent team leaders understand that familiarity breeds contempt. Thus, they appropriately assess and change the skills, experience and personality mix of the members.

In the process of executing its duties, successful team leaders provide the members with concrete feedback concerning the team performance, cooperation and effectiveness. This can be integrated with team building sessions, where members get the opportunity to appreciate their unique potentialities within a learning setup. Done effectively, it can be a greater impetus for individual motivation and enhanced group’s resourcefulness.

Be it in the private or public sector, modern economies are driven by collective thoughts. In self or formal employment, lasting success awaits the CEO who puts group interest ahead of self interest besides embracing team expression at the expense of self impression. This is how Peter Drucker summarizes it; “The leaders who work most effectively, it seems to me, never say ‘I.’ and that’s not because they have trained themselves not to say ‘I’, they don’t think ‘I.’ They think ‘we’; they think ‘team.’ They understand their job to be to make the team function. They accept responsibility and don’t sidestep it, but ‘we’ gets the credit.... This is what creates trust, what enables you to get the task done”.

advancement of social and economic opportunities for the inhabitants of East Africa. Larger markets, he said, permitted better exploitation of economies of scale since they encouraged mobility of people and resources across borders.

The Chancellor who was with Eng. Julius Riungu and Prof. Mabel Imbuga, who are the University’s Council Chairman, and Vice Chancellor respectively, commended JKUAT for taking advantage of the East Africa Common Market established in 2010 which he said, allowed free movement of people and services. ‘Education is such a service’ he acknowledged.

In his remarks Eng. Riungu said the new Centre at Arusha was part of JKUAT objective to open strategic campuses aimed at increasing enrollment of local and foreign students. ‘As JKUAT we are pleased that the Arusha Centre will certainly boost our foreign students enrollment’

Prof. Imbuga on her part emphasized the fact that the new facility in Arusha was part of JKUAT culture of promoting higher education and research in the region. The Vice Chancellor recalled that JKUAT had since the 1990’s been a centre of research and technology transfer training in the region. It is JKUAT’s consistency in championing the promotion of research and innovation that was instrumental in the triumph of JKUAT in 2010 to host the Pan-African University, Institute of Basic Science and Innovation. The Pan African University, Prof. Imbuga told her listeners in Arusha that is opening its doors to its pioneering 100 students in September, was essentially a continental Centre of graduate training and research aimed at promoting integration and development among African states through higher education and research.
Jomo Kenyatta University of Agriculture and Technology (JKUAT) and Tana and Athi Rivers Development Authority (TARDA) have partnered to foster development of Agriculture and Industrialization in Kenya. Through a five year memorandum of understanding signed in early June 2012 at the Ministry of Regional Development Headquarters, the two institutions have pledged to enhance research, innovation, training and marketing in thematic areas including forestry, agriculture and energy.

The MoU signed by the Varsity’s Vice Chancellor, Prof. Mabel Imbuga and TARDA’s acting Managing Director, Mr. Abdul Agonga and witnessed by Regional Development Ministry Permanent Secretary, Eng. Carey Orege will see the two institutions jointly source for funds and other requisite monies necessary for the realization of collaborative projects.

During the signing ceremony, Prof. Imbuga underscored the need for a more collaborative approach to solving the nation’s problems. “At JKUAT, we have extensive expertise in the area of irrigation, which can be adopted to facilitate optimal yields”, the scholar opined.

Mr. Agonga was equally upbeat about the partnership saying that, “agriculture sector development should be premised on sound planning, careful selection of farm projects, machinery and infrastructural development”.

The collaboration will also be instrumental in fostering professional skills, student and staff exchange programmes between the two institutions.

While witnessing the sealing of the memorandum, Eng. Carey Orege lauded the initiative, citing the expansive experience of JKUAT in education and training and the sound infrastructure that TARDA will bring on board.

“I believe this collaboration will boost food security in the country, enhance water utilization and management and value addition of the products produced by TARDA”, said the PS, adding that the collaboration is in line with Vision 2030 and the millennium development goals.

Besides facilitating joint publication of research activities, sharing of infrastructure, students’ internships, the project will be jointly managed by a committee of six, three from each institution.

The need to streamline the development and management of resources within the Tana and Athi Basins saw the establishment of TARDA, an initiative that has seen several projects including Kiambere and Masinga dams actualized.
advancing Agricultural Biotechnology Platform in Kenya

by Adhere Cavince & Patrick Amunavi

A two day Executive Workshop aimed at evaluating advances and the future of biotechnology in East Africa was held at JKUAT recently. The Workshop, moderated by US Harvard based Kenyan Scholar, Prof. Calesious Juma, attracted over 80 participants, mainly policy makers, and researchers drawn from the public and private sector agencies within the East Africa region.

In a speech to mark the official opening ceremony, Higher Education, Science and Technology Minister, Prof. Margaret Kamar underscored the significance of the workshop saying “the twin concepts of Agriculture and Biotechnology hold primary importance not only to the country, but also to the world at large”.

In a speech read for her by Dr. Roy Mugiira, the Assistant Director, Research, Management and Development in the Ministry, the Minister lauded JKUAT and the US Embassy in Nairobi through its development arm – the United States Agency for International Development for supporting Agricultural Biotechnology initiatives in Kenya. “Rising global population continues to outpace the traditional methods and practices of food generation” the minister said and added that the situation warranted urgent need for more innovative ways to ensure long term sustainability.

Drawing from the deliberations, and mapping the identified concerns on global trends and practices on biotechnology, participants were unanimous that a new national agenda on the same was not only necessary but also long overdue. Consequently, an eleven member committee was set up to develop a new biotechnology strategy for the country in consultations with relevant authorities, bodies and institutions.

The committee, with its secretariat at JKUAT, crafted a six pronged working formula to achieve its mandate:

• Serve as a biotechnology lobby group to champion for establishment of biotechnological infrastructure in the country.
• Identify barriers to development of biotechnology and put in place mitigation strategies.
• Lobby for increased fund allocation for biotechnology-based research activities from the national research kitty.
• Lobby for formulation of biotechnology friendly policies e.g. tax exemption on biotechnology infrastructure development in the country.
• Organize regular national biotechnology communication forums.
• Push for allocation of funds from research budgets to library consortium to assist built a strong scientific literature database, a key component of research.

Additionally, this action plan is to be collectively executed by universities and other institutions of higher learning which are also expected to take a leading role in the formulation of research themes for the National Council for Science and Technology.

Participating institutions included the National Biosafety Authority (NBA), Institute of Biotechnology Research (IBR), Open Forum on Agricultural Biotechnology in Africa (OFAB), and Kenya Agricultural Research Institute (KARI).
How Competent are You in Negotiating a Salary Package?

During the 19th JKUAT Graduation ceremony, held in June 2012, 929 women graduated as opposed to 1,733 male graduands. These women are now ready for the corporate world. Oblivious to them is the fact that most of them will be paid less than their male counterparts on their first jobs due to the failure to negotiate their first salary. This misstep compounds over into the span of their careers resulting in women being paid less than men.

Linda Babcock and Sara Laschever, authors of Women Don't Ask, assert that a woman can lose more than $500,000 (Ksh. 42 million) by age 60 by not negotiating her first salary. Research is replete with findings that confirm that indeed women earn less than men in the corporate world. The main reason for this perpetual pay gap is because women don’t ask.

In a bid to put to test this assertion, I decided to do some research. I asked each of my classmates how much they would ask for, if they were to negotiate a salary for a corporate communications manager position. Two female fulltime students said they would ask for at least Ksh. 60,000 and at most Ksh. 100, 000 gross salary per month. One male career student said he would ask for Ksh. 80,000 basic salary per month. Two other ladies who have work experience spanning over ten years said they would not accept anything less than Ksh. 150,000. Yet, another man who has worked for eight years said he would not settle for any amount less than Ksh. 200,000 after attaining his master’s degree.

These results confirm that women are poor negotiators as compared to men. Women feel uncomfortable negotiating for remuneration that is on the higher side because they like to preserve the status quo. They are afraid of upsetting the potential employer. They view negotiation as a fight instead of a discussion to get what they deserve.

One key thing to consider when negotiating for a first salary is to know the going rate for the job at stake. For instance, if one is taking up a web designing job, it is imperative to find out the going rate for fresh graduate web designers. The best way to find out is by asking several people in the industry.

After weighing different salary offers, one can then proceed to set an individual maximum supportable outcome and a least acceptable outcome. The maximum supportable outcome is the absolute most that one can ask for. It must not be utterly outrageous but it should be slightly higher than the average going rate. The least acceptable outcome is the least amount of money that one is willing to take home. Setting the two outcomes prior to the negotiation will ensure that even fresh graduates, whether male or female, are appropriately remunerated.

The writer is an M.Sc Student, Mass Communication, JKUAT
Jomo Kenyatta University of Agriculture and Technology was in August 2012 the venue of the 2012 Edition of the Annual Engineering Conference that brought together top engineers from thematic areas drawn from the continents of Europe, Asia and Africa.

With the theme “Engineering and Technology as a key Driver for Sustainable Development,” the annual event organized by the Kenya Society of Electrical and Electronic Engineers in collaboration with the Japan Society of Applied Electromagnetics and Mechanics, aims to document and disseminate research studies and information while encouraging budding engineers to actualize their potential.

Now in its 16th year, the two-day conference attracted 34 presentations in various fields including Electrical and Electronic Engineering, Telecommunications, Aeronautical Engineering, and Information Communications Technology among others.

Contrary to the past editions where established engineers dominated the presentations, the 2012 edition attracted rare category of scholars; five Mang’u High School students who presented an Aeronautical Engineering paper on the topic “Operation of non-motorized aircrafts as a stop-gap measure to eventual airborne engine failure.” The presentation came in handy at a time when the country had witnessed increased copter crashes. Mang’u High, the leading and only secondary school in Kenya that offers a unique course in aeronautics, is known for its academic excellence demonstrated by its numerous alumni who have served as part of ‘who is who’ in Kenya’s public and private sectors.

While officiating the opening ceremony, Dr. H. Mutai, the Managing Director, Kenya Industrial Property Institute (KIPI) underscored the importance for universities and other research institutions in the country to secure patents for their innovations. This, he said, was the only safe way through which new and usable knowledge would be manipulated to create wealth.

According to Dr. Mutai, in the 2011-2012 period, foreign companies in Kenya, most of them in the pharmaceutical industry filed the bulk of the 231 patent applications out of which, only 70 patents were granted. While lauding JKUAT for having an Intellectual Property Policy in place, Dr. Mutai challenged local institutions to set up Intellectual Property management offices to accelerate the patenting of local inventions.
Engineers Urged to Initiate New Technologies

The Vice Chancellor, Prof. Mabel Imbuga, in a speech read by the Deputy Vice Chancellor, Research Production & Extension, Prof Esther Kahangi, encouraged the participants to share their experiences and showcase their research findings with a view to develop new technologies capable of improving the living conditions of Kenyans.

In his address, Amb. Dr. Joseph Kiplagat, the Director of Industrial Information and Research, Ministry of Industrialization, reiterated the government’s commitment to realize the pillars of Kenya Vision 2030. “We have identified 21 priority areas with Iron and Steel exploitation sitting at the top of the priority list”, said Kiplagat. The official added that the Ministry was currently in the process of drafting policies critical in guiding business technology incubation and subcontracting in Kenya.

The conference was attended by over 80 participants drawn from JKUAT as well as other Universities in Kenya. Participating countries included Japan, Italy, Nigeria and host Kenya.

Varsity Students Excel at the Nokia QT 2012 Hackathon Competition

Jomo Kenyatta University students emerged tops in the Nokia QT Hackathon competition held in Nairobi in June 2012. Mike Kivuvia, a Third Year Computer Technology student developed an application: SkinSwap, which allows one to theme (phone background look and feel) own phone based on themes (background images) of various wild animals. He walked away with KSh. 1,000,000.

Another Third Year Information Technology student, Matu Jotham came in third with his application: Quickdrums, a musical beat sequencing that helps users create musical beats.

Other innovations developed by JKUAT students that were among the top 13 winners included: MyBike, a sporting application that allows cyclists to monitor speed while History Management and PeopleAround, combines Foursquare and Facebook features to help one see ‘which of your friends are near to you’.

The Nokia Hackathon, an annual event now in its second year of implementation attracted 120 developers drawn from the east Africa region including students from three of Kenya’s public Universities – JKUAT, University of Nairobi and Moi University respectively. The participants lined up a total of 75 innovations and only 14 applications made it to the shortlist.

Eng. Riungu, Council Chairman congratulates one of the student winners
Hopes to increase rice production to promote food security in Kenya are brighter following a promising study initiated by the University three years ago. The study has led researchers at JKUAT to develop high yielding and disease resistant varieties of the cereal that is now gaining importance as a major food crop in the country.

The multidisciplinary research project that has brought together researchers from different disciplines mainly from the Departments of Food Science, Horticulture, Botany, and Biomechanical and Environmental Engineering has since attracted new local and international collaborators including National Irrigation Board, National Council for Science and Technology, JICA and two leading Universities in Japan namely; Okayama and Nagoya respectively.

Speaking at JKUAT in June 2012, during the official launch of JKUAT Rice Experimental Field to be used for rice research at the University, Vice Chancellor Prof. Mabel Imbuga welcomed the considerable progress that the researchers had so far recorded saying it would go along way in addressing the country’s food security concerns. Prof. Imbuga who was accompanied by her Deputy Vice Chancellor in charge of Research, Production and Extension, Prof. Esther Kahangi told lead scientists under the project to ensure they published as well as ‘patent any products from the study’.

Among the areas to receive attention under the project include; rice breeding aimed at increasing rice yields and disease resistance, value addition and nutrient management aimed at developing nutrient protocols for different rice growing regions in Kenya. The scientist too, will use the new experimental field to conduct studies intended to isolate characterize microorganisms with the ability to fix nitrogen, phosphorous as well as produce growth promoters crucial to rice growth and development.
The Biomechanical and Environmental Engineering Department (BEED), has established a BEED garden where prominent visitors to the Department will be honored by allowing them to plant a tree at the garden.

The establishment of the garden was informed by the need to conserve African indigenous forest as well as to help in increasing the national forest cover which currently stands at less than two percent. This is far below the minimum internationally recommended 10% forest cover that each country should have.

The category of visitors to the department will be required to plant an indigenous tree in the tiny garden that extends to the BEED Professor’s site.

“I urge the incoming Council to embrace a consultative culture epitomized by inclusion at all levels of decision making”.

The Vice Chancellor, Prof. Mabel Imbuga, said JKUAT was pleased to have initiated the campus adding that the university college had registered monumental progress since its integration “into JKUAT family”. She however assured the new Council that JKUAT ties with the new university college will remain active citing the role of JKUAT Senate that she emphasized, would ensure the college continued to offer quality academic programmes.

Besides Taita Taveta University College, JKUAT will also mentor Co-operative University College, the first co-operative university in Africa and Kirinyaga University College. The newly elevated institutions are projected to play a critical role in national development through creation and dissemination of knowledge in their thematic mandate areas.

The Chancellor Prof. Gichaga (right) with Co-operative Minister, Hon Joseph Nyagah during the inauguration of Co-operative University College.
**Treat for Foreign Students**

Close to 15 foreign students drawn from the Universities of Western Ontario, Canada and University of Berlin, Germany are currently at JKUAT on an exchange programme. The group from Canada comprising 12 students is hosted by the JKUAT School of Human Resource Development where they are conducting seminars for JKUAT students based on the concept of case studies approach to training. The students from Germany are attached in the Department of Physics where they will be hosted for two semesters.

Addressing the foreign students at a luncheon at the University, Tuesday, May 15, 2012 Prof. Mabel Imbuga, the Vice Chancellor welcomed the students saying their presence at JKUAT had brought unique interactions among the Canadians, Germans and Kenyans. Such diverse cultural contacts she added, were crucial in fostering understanding among nations.

The case study approach that is mainly inductive in practice allows students to learn better from examples allowing learners room to explore how, what they learn applies to real world situations. Most case assignments require students to answer open-ended question or develop a solution to an open-ended problem with multiple potential solutions.

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**“Let Universities in Africa Pursue Entrepreneurial Agenda”, Scholar says**

African Universities have the potential to pull the continent out of poverty only if they transformed their traditional approach to teaching and research, and embrace modern entrepreneurial practices crucial in fostering economic development.

In a public lecturer at JKUAT, Wednesday June 20, 2012, renowned Harvard-based-Kenyan scholar, Prof. Calestous Juma, was of the view that the challenges facing the continent require universities to be central actors in strengthening global competitiveness of African economies.

“To achieve this, African universities need to adopt new thinking, different from the first generation universities’. The don further told a packed audience of scholars and businessmen that universities in Africa should be ‘entrepreneurial’ and ready ‘to create enterprises’.

The don reiterated that the current millennium was dominated by unprecedented knowledge and technology that required exploitation for economic development. Prof. Juma opined that the current century had equally opened unparalleled opportunities that allowed emerging economies to innovate products and services, currently being exported to developed countries, unlike in the past where the reverse was true. He singled out Kenya’s novel MPESA technology which has generated interest among researches in the west.

According to the scholar, for a university to achieve an entrepreneurial status, it must conform to certain irreducible minima including establishing crucial tripartite partnerships with government and the private sector. Equally, universities in Africa should provide incentives to their staff for optimal productivity.

“The use of money as a means of improving productivity is no longer tenable”, he advised, adding that research had clearly proved that non monetary rewards such as autonomy were more effective in boosting productivity particularly in intellectual pursuits.

Prof. Juma, is a JKUAT Doctor of Science-Agricultural Biotechnology Honoris Causa alumnus. He serves as Faculty Chair of Innovation for Economic Development executive project and directs the Agricultural Innovation in Africa Project funded by the Bill and Melinda Gates Foundation. He holds a doctorate in Science and Technology policy studies and has extensively written on science, technology and environment; winning several international awards for his work on sustainable development.
Five Simple Steps of Carrying Out Risk Assessment at the Workplace

by Daniel Omondi

The Occupational Safety and Health Act 2007 is an Act of Parliament that provides for the safety, health and welfare of workers and all persons lawfully present at workplaces. Section 6 Part II of the Act, subsections 3, 4, and 5, gives provisions on risk assessment. Subsection 3, requires every occupier to carry out appropriate risk assessment in relation to the safety and health of persons employed and, on the basis of these results, adopt preventive and protective measures to ensure that under all conditions of their intended use, all chemicals, machinery, equipment, tools and processes under the control of the occupier are safe and without risk to health and comply with the requirements of safety and health provisions in this Act.

On completion of a risk assessment, subsection 4 requires that every occupier shall send a copy of a report of risk assessment carried out under this section to the area occupational safety and health officer. Further, the subsection requires that every occupier shall take immediate steps to stop any operation or activity where there is an imminent danger to safety and health and comply with the requirements of safety and health provisions in this Act.

In order to carry out a risk assessment of the workplace, the occupier(s) may use their staff - who understands all the processes and procedures - to carry out the assessment and recommend corrective actions. This should be done as frequently as possible and also when new machinery has been installed or processes modified. The second option that complements this is to use an external safety and health advisors registered by the Directorate of Occupational Safety and Health to carry out the assessment. This way, the two methods used concurrently, may help minimize workplace risks.

But how exactly is risk assessment carried out? Five simple steps you may follow in carrying out a risk assessment at your workplace are indicated below:-

**Step 1**
Identify what are the hazards. This may be done by walking around the workplace, asking your employees what they think constitute hazards, and checking manufacturer’s instructions. Remember to include long-term health hazards.

**Step 2**
Identify persons who might be harmed and how. Identify groups of persons susceptible; remembering that some workers have particular needs, others may not be at the workplace at the time, some people may be members of the public. If you share your workplace, think about how your work affects others present. Explain how the hazard could cause harm to them.

**Step 3**
Identify what you are already doing about the hazard by listing what is already in place to reduce the likelihood of harm or making any harm less serious. Find out what further action is necessary. You need to make sure that you have reduced the risk so far, as is reasonably practicable. An easy way of doing this is to compare what you are already doing with the best practice. If there is a difference, list what needs to be done.

**Step 4**
Think about how you will put the assessment into action. Remember to prioritize, deal with those hazards that are high-risk and have serious consequences first. Specify actions to be taken, the person to take the action and by when the action ought to be taken. Indicate when done.

**Step 5**
Remember to review your assessment to make sure you are still improving, or at least not sliding back. If there is a significant change in your workplace, remember to check your risk assessment and, where necessary, amend it.

The author holds a master’s degree in Occupational Safety and Health from JKUAT and is registered by the Directorate of Occupational Safety and Health Services as an OSH Advisor. His e-mail address is domondi@eng.jkuat.ac.ke
Technology keeps evolving. This has in turn caused the office structure to shift; incorporating new and emerging technologies. Offices have to keep pace with emerging technologies.

Information technologies have made the office more responsive, efficient and flexible. We have moved from the traditional industrial office to a networked environment. With cloud computing, it now is possible to share documents among office staff without physical contact. Thanks to the creation of intranets.

ICT has changed the way office secretaries work. Bosses do not have to rely on them to accomplish basic tasks like typing letters, sending and replying to emails. The modern secretary’s desk has fewer physical files which have been replaced with soft files that occupy less space and can even sit in the cloud (with cloud computing technologies).

Classical secretarial work revolved around typewriting, shorthand dictation, responding to telephone calls etc. The modern secretary is exposed to office technologies including the internet. With new technological advances, office equipment and design will continue to evolve. This means, everyone must embrace new technological evolutions.

Today we have duplex scanning machines, laptop and notebook computers, smart phones and IP phones, ipads, personal digital assistants (PDAs) and tabloids. These have changed how people work in offices. Laptops and notebooks integrate most of the typical components of a desktop computer.

Smart phones have features found on a computer, enabling one to send and receive emails, edit documents while at home, in a meeting or while travelling. High end phones have a rich features menu like internet access, instant messaging, online chats, and social media tools. With the IP phones, the phone bills incurred in offices can be minimized. The IP phones that many businesses are turning to, use Voice over Internet Protocol (VoIP) technologies.

Wireless internet access, hotspots, smart phones and mobile computing devices have enabled people to work from anywhere.

Duplex scanners have eased content digitization. They scan and read hard copy documents in almost half the time taken by regular scanners because they read both the front and backside of a document simultaneously.

All these developments indicate that the time to redefine the order of skills required in an office has come. Technological skills rank top. For instance, the skills a secretary requires would be in the order: technological, interpersonal, writing, organizational, teamwork, multi-tasking and research skills.

There are web-based office suites, for example Google Docs for word processing, presentation development, spreadsheets etc. Sharing documents has become easier; as you develop them, others can give their input in real time.

ICTs have transformed boardroom meeting into virtual meetings. With video conferencing, meetings can be held virtually regardless of the physical location of the participants.

ICTs have reduced office space requirements. Big cabinets for storing paper files are unnecessary, thanks to electronic storage. A copy could be kept in the office and another offsite for backup. Office staff can also work while at home, a process known as telecommuting.

- The writer works at PAUSTI and is a practicing ICT professional.
Jomo Kenyatta University of Agriculture & Technology has developed several ICT policies in recent years. These include; the ICT Automation policy, Information Security Policy, the Electronic Payments Security Policy and the e-Waste Policy. It is therefore important to evaluate the role, value and implementation of some of these ICT policies.

Business acceptance of any ICT system means that users and customers of ICT systems are brought on board. It also means that the ICT systems reflect and improve the approved business and support processes of the organization. ICT does not make sense if a user needs more effort to process a fee payment or academic transcript or when a customer has to wait for long to receive their fee status or examination results. This makes a case for the need to ensure inclusion of people and processes in the ICT ecosystem.

Once people have been involved, issues related to people also become a point of concern in the ICT ecosystem. Crucial is the acceptance of users to use the ICT system to accomplish tasks related to their work and services that result from the work while customers accustom to the new way of being served.

Users and customers can also exercise the inherent bias to err and sin! They can be erratic and malicious and commit errors by omission or commission. This could result in an employee missing a salary because someone hacked the payroll system and changed the bank account?

People also make mistakes such as exposing passwords, leaving computers on and unattended, opening e-mail attachments from strangers, using simple passwords etc.

We can only insulate ourselves/institutions against the negative impact by setting up other systems to mitigate the risk, keep us within certain boundaries and spell out the consequences of failure to adhere to set constraints.

ICT policies thus find their place in this context! They help to minimize or eliminate legal liability; help us to manage end-user expectations such as setting up service-level agreements with clear provisions on service downtimes/service outages, response times and recovery periods and help in orderly acquisition of ICT resources.

To achieve these, ICT policies must be institutionalized. The implementation of the policies must be done meticulously including adequate change management, business process re-engineering as well as the use of appropriate tools and activities. The enforcement of ICT policies can be embedded in the institutions processes.

A good ICT policy defines clear and enforceable boundaries while also allowing for management latitude and decision-making. All policies must ensure fairness, justice and equity and thus the need to ensure due process in the development, implementation, enforcement and continual improvement.

The information security policy lays down the standard practices with regard to passwords and access to information systems and information resources, third party access and encryption, appropriate use of information services such as the network connections, internet, e-mail, remote computing and home-based work how to deal with viruses, handling of printing, photocopying and fax transmission, privacy, confidentiality, third party information and intellectual property.

The electronic payments security policy lays emphasis on segregation of duties within an application to reduce the risk of unauthorized actions. Segregation of duties is maintained by logically separating the functions that any one person shall carry out within an application, thus avoiding control of the entire process by any single person such as filling an imprest, approving it and cashing it.

The ICT policies discussed above are intended to steer an orderly development of the University’s ICT ecosystem while ensuring an optimal blend of hardware, network, data/information and software to achieve the University’s strategic objectives.

The writer is the Acting ICT Director, Jomo Kenyatta University of Agriculture and Technology.
Self-centeredness has put us in big trouble in previous years. In most cases we don’t think or care about other people’s feelings. We don’t think how our actions affect other people. We are so self-centered that we fail to consider the rest of humanity. We just think about our own comfort. If you are a service provider, try and learn the needs of your customers, for they should be treated with dignity and respect. They want to feel valued. Otherwise you will lose them. Your customers need to have faith in you. They need to be served with a sense of urgency too.

It is annoying and disheartening to walk into an office and find service providers who are indifferent, dragging their feet, looking tired and distant. They are not interesting or interested. They are just there to pass their day and get the pay cheque at the end of the month. It is important to keep reminding yourself the reason why you are in that office.

Servant Leader
If you are an elected/appointed officer e.g. Dean, Director, or Chairman of Department, it is important to think about the needs of the people who elected/appointed you. The reason President Barack Obama won is because he was able to convince the American people that he will bring the change they had been longing for. As a leader, think about what you can do for the people who entrusted you with the responsibility. Even if you are a small group leader, have a clear vision and mission for your office. Don’t get busy meeting your own needs without thinking about the needs of other people. There is job satisfaction when you know beyond any reasonable doubt that you are doing exactly what you are supposed to be doing.

It is high time JKUAT community started thinking about electing/appointing leaders who are willing to serve. We need servant leaders. When they run for office, we need to know what their goals are and whether they understand what our needs are. If they don’t understand our needs, how are they going to help?

Think about the legacy that you will leave behind. That is why you need to stop focusing on your own interests only. Do something that will outlive you. We need dreamers like Martin Luther King Jr. instead of individual dreams, we need a national dream, a global dream that our children and those who come after will strive to achieve. Let us lay a firm foundation that others can build on. If you lay a shaky foundation for your family, institution or organization as you pursue your personal interests, you are only inviting misery in your sunset years.

Community Service
Think about the countless people who are suffering around you; step out of your comfort zone and buy a hungry beggar a hot meal. Provide company to some lonely old people. Provide some essentials to the orphans around you. How about offering community service in a children’s home, donating some clothes, or providing free professional help to those who need it?

Think about the many pair of shoes that you never wear, and clothes that you have not worn for the last year. Give them out to those in need. There might be a lot of clothes that your children don’t wear anymore. Give them out. Let us purpose to impact other people’s lives positively at all times.

The writer is an administrator at the office of the Dean, Faculty of Agriculture
What is an Institutional Repository?

An Institutional Repository (IR) may be defined as an online locus for collecting, preserving and disseminating the intellectual output of an institution in digital form. It is a centrally managed inventory of an institution’s intellectual asset. Lynch (2003), defines an IR as a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. IRs are based on Open Access (OA) model of publishing which seeks to remove price and permission barriers that prevent knowledge from being shared. OA provides free and unrestricted access to research materials.

Why does JKUAT need an IR?

The purpose of the JKUAT IR is to capture, promote, preserve and make accessible JKUAT’s intellectual assets. JKUAT generates a vast array of intellectual output in form of theses and dissertations, conference proceedings, research papers, journals articles, inaugural lectures and speeches. There is need to make these available within and outside JKUAT. Although a lot of our research work find its way to scholarly journals, a large amount of our intellectual work does not migrate to these scholarly journals. It therefore remains largely inaccessible and consequently, underutilized. The JKUAT IR will also facilitate the realization of JKUAT’s strategic goal of dissemination of research results and innovations to target users for application (JKUAT Strategic Plan, 2009-2012).

What are the benefits of the JKUAT IR?

The JKUAT IR provides a platform to capture, store and distribute globally our wide range of research outputs, including Masters and Doctoral theses produced by the University’s researchers and postgraduate students. The Online repository will definitely increase our visibility by exposing our research to the global community. The Web presence will also improve our global ranking as a University. Increased online access will increase the impact of our research thus justifying investment on research. Administratively, the JKUAT IR provides the means for the institution to manage its research projects more effectively and efficiently.

How will the JKUAT IR benefit researchers?

A number of studies have now been carried out on the effect of Open Access on citations to articles. The studies have shown that publishing in OA increases citation impact of research articles. Open access repositories also provide an excellent means for researchers to boost their online presence and raise their profile.

Status of the JKUAT IR

The JKUAT IR is an initiative of the University Library. The genesis of the JKUAT IR can be traced back to August 2010 when the JKUAT Library held a workshop on 'Benefits of Open Access for Research Dissemination, Usage, Visibility and Impact’. One of the outcomes of the workshop was the constitution of an all inclusive committee whose mandate was to come up with an IR policy. The policy was launched by the Vice Chancellor, Prof. Mabel Imbuga on 12th June 2012. Its implementation is on course.

The repository has been installed using Dspace Software and is available on the Local Area Network (LAN) at HYPERLINK "http://ir.jkuat.ac.ke/" HYPERLINK "http://ir.jkuat.ac.ke/". Implementation will also involve awareness creation and uploading of research content on the repository. The JKUAT IR will then be launched online. We recognize that the process will require support and commitment from all quarters of the University. We hope to raise the profile of JKUAT and place our University in its rightful position by providing a platform that will showcase our research.

The writer works in the Library
Gender and disability mainstreaming remains a key concern to government institutions. In our Q&A session, Cavince Adhere sat down with the Director Gender, JKUAT chapter, Prof. Rosebella Maranga who explains to Agritech News what the university is doing to achieve this constitutional requirement.

Kindly break down for us the mandate of your office

A. Our mandate revolves around three major objectives. The first one is to mainstream gender in all the functional divisions of the university through engendering all functions including: University academic programmes, governance and management. Secondly, to mainstream disability in the university by ensuring disability is integrated in the university functions as mentioned above and finally, to reduce/eliminate sexual harassment among staff and students.

What is gender mainstreaming and how successful has JKUAT been at actualizing it?

A. Gender mainstreaming is a strategy for making men and women concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies, programs, activities and projects at all levels in the social, economic and political spheres through affirmative action and sensitization. JKUAT is implementing the affirmative action that ensures 30% representation of either gender in all functional units of the university. Current statistics in staff indicate attainment in all sections and it is surpassed in some. However, student representation shows female under representation in many courses especially engineering and ICT. There is also a gender policy in place which the university is currently implementing.

Your office has also been carrying out staff and student mentorship, what does it entail, and what have you achieved on this front?

A. The purpose of the mentorship program is to increase retention of students who join the university and improve their performance especially female students. The program has become attractive to male students as well for the same purpose. It entails matching the students with mentors who are their lecturers and for now...
A. The anti-sexual harassment policy addresses the pertinent issues of sexual harassment which is common in many institutions including ours. They affect both students and staff. You may have heard of sexually transmitted grades which are in most cases as a result of sexual harassment. Female staff are especially constantly threatened with loss of employment by their supervisors if they are not ready to offer sexual favors to the supervisors. Some give in when indeed, they should not. This also happens during recruitment of staff where such favors are demanded before employment. All this may not necessarily be happening in most cases in our university but there are a few reported cases. This policy therefore seeks to address these issues and eliminate all forms of such harassment hence creating a conducive environment for study and work.

What are some of the challenges that your office faces?

A. Some of the challenges that were originally experienced include issues of attitude. Many members of the university community did not understand gender. To them gender simply meant women issues. However, the centre has since held several seminars and workshops and I can now say that issues of attitude in this university belong to the past. All are now sensitized and indeed participating in mainstreaming gender in the university. We also faced challenges of staff but now we have just enough staff to carry out the functions of the centre. Of course finances are limiting, we are not able to carry out much of our functions because of limited budget allocated to the centre.

Finally Director, what is your message to the JKUAT community on the subject of Gender and disability mainstreaming?

A. I wish to appeal to both staff and students to embrace the mainstreaming of gender and disability since this is the most civilized thing to do in this era where all must participate in nation building. I wish to also encourage all university community to be informed about gender and disability. There is learning material available at the centre which can be issued on request to anyone who needs them. I want to let everyone know that we are all candidates of disability and therefore taking care of the needs of persons with disability now is taking care of our future. Finally I wish to thank the university administration and especially the Vice Chancellor who has been very passionate on gender and disability issues.
Performance Contracting is a system of management where parties enter into an agreement which is used to evaluate performance. The practice was introduced in Kenya as part of the broader public sector reforms aimed at improving efficiency and effectiveness in the management of the public service.

The objective of performance contracting is to align strategic plans, annual work plans and budgets of public agencies in order to improve accountability and focus resources on the attainment of key national policy priorities.

JKUAT started participating in performance contracting in 2005/2006. Since then, it has entered into contract every year. In 2008, the University reviewed its Strategic Plan and designated performance contracting as a means of implementing it.

Since 2005/2006, JKUAT has enhanced its performance score and rank. In 2006/2007, the University emerged position 29 out of 134 State corporations and position 4 out of 7 public universities. The University scored 2.1347. The 2007/2008 results were not released. In 2008/2009, the University scooped position 22 out of 139 State corporations and position 3 among public universities. In 2010/2011, JKUAT scored 1.9116 and was ranked 9th among 184 State corporations and 4th among public universities.

Organization and Management

To effectively implement the process of performance contracting, JKUAT established the Directorate of Performance Contracting and Appraisal (DiPCA).

Benefits of Performance Contracting

There are several benefits arising from performance contracting:

• Change in working culture. With the signing of contracts at various levels, most staff dedicate their efforts towards the achievement of targets set in the contracts.
• Increased sensitivity to customer needs and satisfaction. This is achieved through development and implementation of service delivery charters.
• Institutionalization of strategic planning: Since introduction of performance contracting, the University developed strategic plans that have helped the University to focus on critical areas.
• Improvement in management: The University attained ISO certification which has improved management of the University. In addition, the University has developed several policies that guide in the management of University affairs.
• Integration of various cross cutting issues. Policies have been developed to address issues like gender and disability at the University thus enhancing equity and social integration in line with the national Constitution.
• University expansion and improvement of facilities. Since the advent of performance contracting, the number of campuses has increased from one to eleven (11) and an increase in student population to 22,500.

JKUAT has constructed at least two large teaching complexes and an Olympic size swimming pool.

Future Outlook of Performance Contracting at JKUAT

Performance contracting has helped the University improve its management and service delivery. These are critical as the University pursues global excellence in teaching, research and innovation. Performance contracting will help to focus resources into identified priority areas which will result in better customer satisfaction.

Stephen Covey said “We may be very busy, we may be very efficient, but we will also be truly effective only when we begin with the end in mind”.

JKUAT will continue to strengthen performance contracting in the implementation of its Strategic Plan. Targets focusing on Vision 2030 and environmental conservation such as tree planting will be included in the performance contracts.

At JKUAT, performance contracting is no longer a beast laying in wait to devour those who attempt to embrace it; it is a novel instrument that can be utilized to our benefit as institutions as well as individuals. DiPCA is greatly indebted to the support of JKUAT management, heads of departments, Union officials and all the staff in deepening the understanding of the process.

Dr. Wesonga is a senior lecturer in the Department of Horticulture and heads the Directorate of Performance Contracting and Appraisal (DiPCA)
At the beginning of every semester, the Jomo Kenyatta University of Agriculture and Technology library is empty and lifeless. A few research and literature enthusiasts visit this section of the University when the semester begins. A few weeks later, continuous assessment tests and assignments are issued and the once deserted library teems with patrons. Towards end of the semester, the exams approach and the library is filled beyond its capacity. This pattern indicates that most students study for examinations.

Unlike most students, at 62, Jeremiah Mono regularly visits the JCUAT library to broaden his knowledge. He is a procurement officer at the Catering Department. He will often surprise the librarian issuing books with a pile of law books and journals. He is an ardent believer in the power of books.

"For the last forty years I have become what people call a bookworm. I just love books. I read wide so that I can hold a conversation with anyone in society. I can comfortably interact with an elder in my village because I have learnt the intricacies of my culture through books. I can also comfortably exchange ideas with a professor without feeling intimidated thanks to my wide scope of knowledge" says Mr. Mono.

After his 'O' level studies at Kitale High School, Mr. Mono hoped to join the University of Nairobi to study law. He never made it. He had a family to feed and therefore abandoned his dream to become a lawyer. His passion for learning was undeterred despite his responsibility as a father. In 1991, he joined JCUAT as a security personnel and he saw it as a great opportunity to use the University’s facilities to read.

Mr. Mono attributes his motivation to keep reading to his children. He felt challenged whenever his daughter asked for assistance with her homework. He did not want to let his little girl down. Consequently, he had to make sure he was conversant with what his daughter was learning so as to assist her. This greatly inspired him to be read wide.

However, Mr. Mono laments that the young generation at the University does not value reading for knowledge’s sake. His observation is reiterated by Samuel Muthami, the Head of Library Circulation at JCUAT.

"There is a very poor reading culture among JKUAT students: a culture of reading to pass exams. For this reason, most of the books that are issued are academic. These books only serve to complete an assignment or to clarify an issue from class notes", observes Mr. Muthami.

Mr. Mono advises that education is not a luxury. Hence, each person; young or old has to keep reading. He says that the greatest reward a person gets from reading is making informed decisions in life. A healthy reading culture improves one’s reasoning. As one writer said, reading is to the mind, what exercise is to the body.

The writer is an M.Sc student, Mass Communication, JKUAT.
What is Blood pressure?

Your heart is a muscular pump about the size of your fist. Every minute, the heart beats about 70 times per minute and pumps blood around the body at the rate of 5 litres per minute.

Blood pressure is created by the heart’s constant pumping of blood around the body and the size of the blood vessels through which the blood passes.

In a healthy adult, normal blood pressure is around 120/80 mmHg. The higher figure refers to blood pressure when the heart beats and the lower figure to the blood pressure in the resting phase in between each heart beat.

High blood pressure or hypertension occurs when blood pressure rises for long periods to a level which may cause damage to blood vessels, organs or even cause a heart attack or stroke.

The heart best way of minimizing the risk of high blood pressure and heart diseases is to tackle all the “lifestyle” risk factors which include; being overweight, excessive alcohol consumption, smoking, poor diet, stress and lack of exercise. Other factors include being over 40 years of age, having a family history of high blood pressure, heart disease, diabetes and kidney problems.

What can you do to reduce the risk of High Blood Pressure?

- Limit or avoid alcoholic drinks because they have high calories that increase your weight.
- Reducing salt intake because it contributes to retention of water in the body, thus increasing the circulatory load.
- Reduce cholesterol intake that can cause obesity and clogging of blood vessels.
- Having regular exercise which reduces stress and keeps your whole body system in better condition.
- Avoid smoking.
- Avoid situations which cause stress, anxiety and worry and learning to manage stress so that it does not become distress.

NOTE: if already diagnosed with high blood pressure, taking medication as directed by your doctors is important in order to avoid complications of uncontrolled blood pressure.

The trouble with high blood pressure is that you can have it for a long time and not feel any different. Often it only shows when damage has already been caused. The best way to know if you have high blood pressure is by going for regular medical check-ups of your blood pressure.

Dr. Mwaniki is a Lecturer at the College of Health Sciences
One Saturday morning, I came across a guy who was totally helpless when his partner became unconscious while training. Luckily, she was still breathing and had no other life threatening conditions. After placing her in a recovery position, she regained consciousness and was able to walk.

As a medical student, this incident left me wondering what would have happened if I didn’t have first aid skills. Since accidents don’t choose to occur in the vicinity of a medical practitioner, it is therefore important that we all understand the basic first aid skills. Below I share some first aid skills critical in saving lives.

Let’s begin with goals of first aid. They are also called “three Ps”. These are: (a) Preserve life; (b) Prevent further injury; (c) Promote recovery.

1. Nose bleeding. Do the following:
   - Have the patient sit up, with the head tilted a little forward.
   - Instruct the patient not to touch or blow the nose, and to breathe through the mouth.
   - Apply a cold cloth to the forehead and face. If the bleeding does not stop in minutes, pinch the nose closed for a full five minutes, or longer if bleeding occurs when the pressure is released.
   - If the bleeding continuous, seek medical attention.

2. Burns and scalds.
   - In a serious degree of burn and the skin is destroyed, the fluid is discharged from the raw flesh. The loss of this colourless liquid is a form of bleeding, which reduces the total volume of fluid in the body. In this case, the patient should be taken immediately to the doctor.
   - For low degree burns, place the scalded area under running water or place ice cubes on the affected area. The cold water reduces the heat and eases the pain.
   - Cover the area with a bandkerchief.
   - You can also apply toothpaste immediately on the burned area to help relieve pain and minimize development of boils.

3. Electric shock.
   - Turn off the source of electricity immediately.
   - If impossible, stand on a thick pile of newspapers or books, a rubber mat or any wooden chair or box and push the person away from the point of contact using a wooden object like a stick, brush or broom.
   - Do not to use anything wet /metallic.
   - Place the unconscious person on a comfortable bed. Then call an ambulance or take the person to the hospital.

4. Poisoning.
   All cases of poisoning should be seen by a doctor as quickly as possible. The effects of poisoning depend on the substance swallowed. However, in the meantime:
   - Find out what has been swallowed so as to tell the paramedic or doctor.
   - Do not give the person anything to eat or drink unless instructed by a health professional.
   - Never induce vomiting.
   - In case of unconsciousness, make sure the airway is open and they are breathing.
   - Open the airway by gently tilting the head back and lifting the chin to move the tongue away from the back of the mouth.
   - If he is breathing, put the person in the recovery position, preferably with their head down so that in case of any vomiting can escape without being swallowed or inhaled.
   - Seek medical attention immediately.

The Writer is a Clinical Medicine Student at JKUAT
Joining JKUAT was the right step in the right direction. Leaving JKUAT successfully is a different story altogether. It requires a delicate balance of academics and social life. The billionaires of 21st Century found their empire while in college and may you also quest to find your treasure at JKUAT. The networks you establish in college are valuable in life. Some find their future husbands/wives in college while others make powerful informal linkages.

Take every advantage the college offers to enjoy life but also be cautious because, life may also start enjoying you. Through your own sacrifice and those of others, you have made it this far, but remember, what we spend years building may be destroyed in a day. Opportunities are not like Matatus which when you miss one, you wait for another one. No one knows when the next opportunity will come after you have squandered one. Keep the following close to your heart:

Discipline. It is a trusted friend of success. The path of discipline is hard. To conform to the requirements of an institution is not easy. A disciple follows and learns to copy the master. At the end of the day, she/he should be as good as the master.

Commitment: It is better to quit school than lie to everybody while wasting precious resources. If you are not committed to learn, it is no use floating around for four good years killing your other talents. You can be forced to study books but you cannot be coerced to produce their worth. Have a vision and mission and core values to guide you. The early bad catches the worm but the early worm is caught by the bird.

Friends: Friends in school are an indivisible part of us. But the kind of friends we get matters. You can get a friend who may completely ruin your life. The seeds of evil and good are planted in our hearts daily by those closest to us. Bad company ruins good morals. Good company exalts the souls. Make peace with yourself before you proceed to the world battle-front.

Being lonely hurts, but being alone heals.

Great eagles fly alone
Great lions hunt alone
Great sharks swim alone and
Great souls walk alone

Until you are willing to respect your uniqueness, then forget birthing anything new on earth. Always remember, even the best teams in the world are led by lone creative thinkers, coaches, administrators, leaders or managers. You might have noticed how a team or entire country blames a coach when they lose a game. We mention individuals who have risen in their endeavors either in sports or academia and not spectators.

Finally Attitude: Your vision dies or rises with your attitude. A positive attitude will train you to ignore obstacles, setbacks and failures and limitations to do the impossible and a negative attitude will bury you alive.

The highest mountain in the world is no longer Mt. Everest. Mount Everest has already been conquered. The only unconquered mountains exist only in our minds. Change your attitude and gain some altitude.

The writer is an Administrative Assistant, Dean of Students’ Office
Many people tend to blame God whenever their plans fail to pass. This analogy reinforces the need to trust God in all that we go through.

Me (in a tizzy): GOD, can I ask you something?
GOD: Sure.
Me: Promise You won’t get mad?
GOD: I promise.
Me (frustrated): Why did You let so much stuff happen to me today?
GOD: What do you mean?
Me: Well, I woke up late.
GOD: Yes.
Me: My car took forever to start.
GOD: Okay...
Me (growling): At lunch, they made my sandwich wrong and I had to wait.
GOD: Hmmm...
Me: On the way home, my phone went dead, just as I picked up a call.
GOD: All right.
Me (loudly): And to top it all off, when I got home, I just wanted to soak my feet in my foot massager and relax, but it wouldn’t work. Nothing went right today! Why did you do that?
GOD: Well, let Me see... The death angel was at your bed this morning, and I had to send one of the other angels to battle him for your life. I let you sleep through that.
Me (humbled): Oh...
GOD: I didn’t let your car start because there was a drunk driver on your route that might have hit you if you were on the road.
Me (ashamed): ......
GOD: The first person who made your sandwich was sick and I didn’t want you to catch what they have, I knew you couldn’t afford to miss work.
Me (embarrassed): Oh...
GOD: Your phone went dead because the person that was calling was going to give a false witness about what you said on that call. I didn’t even let you talk to them so you would be covered.
Me (softly): I see, GOD.
GOD: Oh, and that foot massager, it had a short that was going to throw out all of the power in your house tonight. I didn’t think you wanted to be in the dark.
Me: I’m sorry, GOD.
GOD: Don’t be sorry, just learn to trust Me...in all things, the good and the bad.
Me: I WILL trust You, GOD.
GOD: And don’t doubt that My plan for your day is always better than your plan.
Me: I won’t, GOD. And just let me tell you GOD, thank You for everything today.
GOD: You’re welcome, child. It was just another day being your GOD and I love looking after My children.
JKUAT Karen Campus Duo to Join Kenya National 15s Rugby Team

by Joan Adalo

Two Karen Campus students, Lawrence Buyachi and Eden Agero were called up to the National Rugby 15s team for a three-week training camp at Limuru Golf Club. The two are professional players who play both in the 15s and 7s rugby circuits whereby, Eden turns up for Impala RFC while Buyachi plays for Harlequins. They are both third year students pursuing B.sc (Information Technology). After the intensive residential training, the duo survived the axe and was selected to be part of the team that represented Kenya in the Confederation of Africa Rugby (CAR) Tournament in Tunis, Tunisia between 9th and 15th July, 2012.

Kenya was grouped in a tough pool (Group 1A) alongside Tunisia, Zimbabwe and Uganda. Kenya dismissed the hosts Tunisia in their first match 31: 24 and lost narrowly to our East African neighbors, Uganda 19:20. It was worth noting that both players made it to the first 15 where Lawrence and Eden contributed immensely to the performance of the team with the latter making one try and one conversion.

At the end of the tournament, the Kenyan team stood shoulders high after they were declared winners after tallying results from the first leg qualifying matches played in November 2011 in Nairobi. As a result, Kenya qualified to take part in the Rugby World Cup qualifiers scheduled for 2014. We are hopeful that Eden and Lawrence will still be in good form for these qualifiers. We wish them all the best in their academic and sporting endeavors since they are great ambassadors of JKUAT.

On another front, the Karen Campus men’s basketball team made their debut in the 2012 Nairobi Basketball League (NBA) that began in April and ends in November. The team is pooled in Zone B which has bigwigs such as Strathmore, Kenya Polytechnic, Daystar and Mt. Kenya [Nairobi] universities. Given their maiden entry in this league, the team managed one win against MKU [Nairobi] beating them 68:49 during the first leg fixtures. However, players have since stepped up their game in the second leg, whereby three out of the four games played against FOB, Legacy and Heroes were wins.

Currently, the team lies at position ten (10) out of thirteen (13) with nine (9) matches to go. The team, captained by Bethwel Arogo needs to be applauded for the commitment, discipline and improvement so far shown in terms of honoring all their fixtures every weekend despite a few challenges such as lack of uniforms, refreshments and transport all of which are being looked into.

Finally, we wish the team all the best in the remainder of their matches.

-The writer is the Sports and Games Coordinator, JKUAT Karen Campus
### 2012 - 2013 Calendar for Short Courses

Applications are invited from interested applicants to attend the following short courses. The courses will be mounted in the Department of Entrepreneurship and Procurement, School of Human Resource Development, JKUAT main campus, Juja.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>WHO SHOULD ATTEND</th>
<th>HOW LONG AND WHEN</th>
<th>FEES (ksh)</th>
</tr>
</thead>
</table>
| EPDSC007 Project Planning and Management | Planning and Investment Project Officers, Business Managers | 1 month - 1 – 30 Nov ’12  
1 - 28 February ‘13  
1 – 31 May ‘13  
1 – 30 June ‘13  
1 -31 July ‘13 | 100 000 |
| EPDSC008 Project proposal writing | Anybody involved in writing project proposals | 5 days - 1-6 Oct. ’12  
3-8 Dec. ’12  
11 – 16 Feb. ‘13  
6 -11 May. ’13  
10 – 15 June. ’13  
22 nd – 27th July ’13  
19th – 24th Aug. ’13 | 27000 |
| EPDSC009 Entrepreneurial management of academic institutions | Heads of schools and training colleges | 6 days - 3rd – 8th Dec. ’12  
10th – 15th Dec. ’13  
8th – 13th Apr. ’13  
22 nd – 27th Apr. ’13  
5th – 10th Aug. ’13  
19th – 24th Aug. ’13 | 30000 |
| EPDSC010 Participatory project monitoring and evaluation | Planning and Investment Project Officers, Business Managers | 1 month - 1 – 30 Nov ‘12  
1 -28 February ‘13  
1 – 31 May ’13  
1 – 30 June ‘13  
1 -31 July ‘13 | 100000 |
| EPDSC011 Entrepreneurial customer care | Front line officers plus any person who renders services to customers | 5 days - 1 – 6 Apr ‘13  
8 – 13 Apr. ’13  
15 – 20 Apr. ’13  
22 – 27 Apr. ’13  
6th – 11th May, ’13  
15th – 20th Jul. ’13  
12 -17th Aug. ’13 | 27000 |
| EPDSC012 Entrepreneurial business expansion and diversification | Managers, including owner -managers wishing to grow in business | 5 days - 4 – 9 March. ’13  
11 – 16 march. ’13  
18 – 23 march ‘13  
25 – 30 march ’13  
15th – 20th Jul, ’13  
19th – 24th Aug. ’13 | 27000 |
JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

THE SEVENTH
JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
THE SEVENTH
JKUAT SCIENTIFIC, TECHNOLOGICAL AND INDUSTRIALISATION CONFERENCE

CO-HOSTED WITH
Japan Society for the Promotion of Science (JSPS) Institute of Plant Science and Resources (IPSR), Okayama University, Japan

ANNOUNCEMENT AND CALL FOR PAPERS

THEME
Science, Technology and Innovation for Sustainable Development

DATES: 15TH - 16TH NOVEMBER 2012 | VENUE: JKUAT MAIN CAMPUS, JUJA, NAIROBI, KENYA

SUB-THEMES

1. Basic and applied sciences for advancement of research and industrialisation.
2. Recent developments in health sciences.
3. Engineering technologies, built environment and infrastructure for industrialisation.
4. Advances in information and communication technology.
5. Policy, governance, cultural and socio-economic aspects of development.
6. Harnessing agricultural potential for food security and industrialisation.
7. Water, energy, environment and climate change.

CONFERENCE FEE

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<tr>
<th>Participants</th>
<th>Early registration (by 5/10/2012)</th>
<th>Late registration</th>
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<td>KES</td>
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<tr>
<td>Local</td>
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<tr>
<td>Foreign</td>
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Payment should be made through cheque, telegraphic transfer or direct cash deposit to:
Kenya Commercial Bank, Account Number 017-234630480,
Moi Avenue Branch, Nairobi, Swift Code LKENX (for international transactions).

For more information, contact the Secretariat through:
jkutconf@rpe.jkuat.ac.ke (copy jkuatconf@gmail.com).
Website: http://www.jkuat.ac.ke/conf2012