



# MMUST NEWS

A Weekly Digital Publication of Masinde Muliro University of Science and Technology

# Post

Vol. 1 Issue 7: 28<sup>th</sup> October 2018-3<sup>rd</sup> November 2018

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**UPCOMING**

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- Inspection of Universities by the National Assembly Committee on Education and Research, Friday, 23<sup>rd</sup> November 2018 (*Important!!*)
- 13<sup>th</sup> Graduation Ceremony on Friday, 14<sup>th</sup> December 2018
- 2018 Gala Dinner and Awards, Friday, 21<sup>st</sup> December 2018
- National Youth Summit- February 2019



# Editor's Pen



Dear MMUST Community,

Welcome to the seventh edition of the MMUST *NewsPost*.

In this issue, we highlight the upcoming visit by the National Assembly Committee on Education and Research on Friday, 23<sup>rd</sup> November 2018. We also feature the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Biennial Conference. Lastly, do not miss out Part Three of the MMUST pursuit of the Big Four Agenda and the research being conducted to stop the shrinkage of Lake Turkana.

We wish you a productive November 2018!

As always, let us tell our own stories.

**Nashilluh Brendah Kabindio**

**Chief Editor/ Ag. Public Relations Officer**

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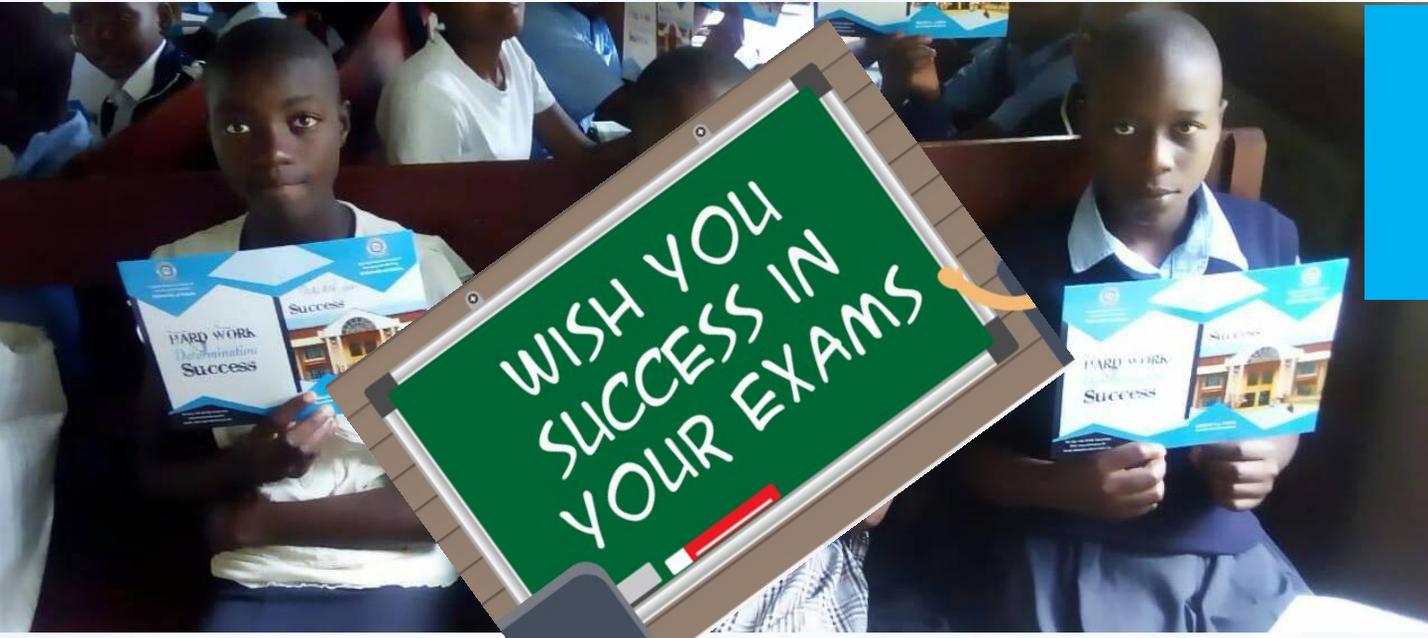


## Inspection of MMUST by the National Assembly Committee on Education and Research

The Departmental Committee on Education and Research, established under the National Assembly Standing Order 216, is mandated to, among other things, study the programmes and policy objectives of the Ministry and Departments under its purview and interrogate effectiveness of the implementation of the same. In pursuit of this, therefore, the Committee on Education and Research will conduct a one day inspection visit of Masinde Muliro University of Science and Technology (MMUST) on Friday, 23<sup>rd</sup> November 2018. The purpose of the inspection is to establish the extent of adherence by MMUST to the Universities Act 2012, regulation and set standards by the Commission for University Education (CUE). The key focus areas of inspection include; University profile, leadership and governance, scope and status of physical infrastructure and major ongoing projects, academic programmes offered and status of

accreditation, human and academic resources to support the programmes, University quality assurance systems; collaboration and research activities, financial viability of the University; government funding and internally generated income, staff and students' welfare, feedback and involvement in running the University and successes achieved and challenges faced by the University.

The team is expected to meet with the University Management, representatives of academic and non-academic staff and students' leadership. The team will later be taken for a guided tour of the University. All concerned sections of the University are urged to address their area and these be compiled at least a week before 23<sup>rd</sup> November 2018.



## MMUST wishes 2018 KCSE/KCPE Candidates Success in their Exams

**A**s part of Vice Chancellor's outreach initiatives, MMUST prepared and distributed success cards to a number of 2018 KCSE and KCPE candidates in the country. The initiative which is on its 4<sup>th</sup> year since implementation brings closer potential students in a move geared at informing them of the various scholarly opportunities available MMUST.





## MMUST FEATURES AT THE 6<sup>TH</sup> RUFORUM CONFERENCE IN NAIROBI

# A

As the dust settles on the 6<sup>th</sup> African Higher Education Week and RUFORUM Biennial Conference held in Nairobi from 22<sup>nd</sup> to 26<sup>th</sup> October 2018, students and staff of Masinde Muliro University of Science and Technology (MMUST) are celebrating their first ever participation in the event. MMUST was ably represented by three academic staff and nine students from SAVET, SONAS and SDMHA, who made oral and poster presentation. In the event, MMUST was listed as one of the co-organizers. The event, held every two years, brings together leading agricultural universities from across the African continent. This year, the Conference was attended by over 1,100 participants from 105 universities from 37 African countries and other organizations across the globe. The Theme of the Conference was *“Aligning African Universities to Accelerate Attainment of Africa’s Agenda 2063”*. The most resonating thematic areas across plenaries were

agricultural transformation, promoting innovations and intellectual property, entrepreneurial skills, youth and women empowerment, business incubation, multi-stakeholder engagement, strengthening African higher education and technical and vocational education (TVET). To MMUST staff and students, it was an experience to remember. One of the MMUST postgraduate students, Mr. Anthony Mabele, summed it all by stating as follows: “this is the largest scientific event I have ever attended, I am overwhelmed by the learning and networking opportunities offered to me, I am so delighted”. The most loud carry home message for the participants was that it has to be business unusual for research in African universities. The next conference will be held in the Republic of Benin in 2020.



## RESEARCHERS INVESTIGATE LEADING CAUSE OF LAKE TURKANA SHRINKAGE

**M**MMUST hosted representatives from Tohoku University on Wednesday, 31<sup>st</sup> October 2018 during an academic exchange forum. Tohoku University is amongst the leading research institutions in Japan.

Yoshiya Touge, Assistant Professor and Ms. Mbugua Jacqueline Muthoni (MMUST Alumni) from Tohoku University presented their research on terrestrial water circulation in the Aral Sea Basin considering human impacts and climate change. Ms. Mbugua said that satellite remote sensing can be used to detect irrigated lands in arid areas and presents an invaluable opportunity for agricultural water management.

Lake Turkana, which is a source of livelihood for thousands of Kenyans living in the arid Turkana region, is rapidly shrinking. Tohoku University, led by Prof. Yoshiya Touge, is, therefore, conducting a research to find out the leading cause of the shrinkage and provide possible solutions to the imminent crisis.

Prof. John Obiri, Directorate of Post Graduate Studies, said that Tohoku University and MMUST will identify new opportunities for research partnership in the near future.

# My Big 4 Action Plan

1. Food Security
2. Affordable Housing
3. Manufacturing
4. Affordable Healthcare for all

## MMUST In Pursuit of The Big Four Agenda (Part 3)

*This is a four part series highlighting the role the Masinde Muliro University of Science and Technology is playing in relation to the Presidential Big Four Agenda.*

**I** In this Issue, we follow up on the second thematic area where MMUST has set its sights on in pursuit of the Big Four Agenda.

### **THEMATIC AREA II: MANUFACTURING, EMPLOYABILITY AND ENTREPRENEURSHIP**

#### **Research Area 1: Skills Development and Career Exploration for the Big Four**

This research area addresses skills for manufacturing and affordable housing, agricultural value chain management for food security and affordable healthcare for a healthy nation with special emphasis on employability and job creation.

Finding a job can be a challenge for youth. They must determine what careers are available, what their interests are, and what skills they have or need to develop. Strategies are needed to help youth get a sense of their interest and skills as well as gain employment experience and learn about employment opportunities.

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The role of Technical and Vocational Training (TVET) in boosting employment in manufacturing as well as agricultural production with regard to the types of skills foreseen to be in high demand, the best approaches in delivering skills development to a significant number of people in a cost efficient way and the best way to sustain the delivery of skill development in rural areas over the long term.

Bridging the gap between the skills imparted in TVET and the expectation of industry is a major tool in delivering the national development agenda and enhancing Kenya's international competitiveness. Consequently, greater attention needs to be paid to bridging this gap, enhancing to support manufacturing, particularly in Small and Medium Enterprises (SMEs), sustaining agricultural value chains and increasing the productivity of the informal sector as part of a long-term strategy to formalize the informal sector and increase the marketability of goods and services for Kenya. Information is required on:

Connecting the youth to promising occupations based on their potential for reasonable wages, the required educational prerequisites, projected growth and demand in the labour market, work-based learning, career pathway programs and potential for individual advancement focusing on opportunities in infrastructure and healthcare fields.

Skills initiatives and programmes that can improve the outcome of training (i.e. earnings and decent work) and gender parity and social inclusion in urban and in rural areas and private sector participation in skills development.

Successful harnessing of modern information and communication technology (mobile phones, internet, interactive CDs and DVDs) to effectively deliver skills to people in rural areas, particularly in rural areas as part of an integrated strategy to deliver on the big four.

Strategies are also required to bring together businesses, nonprofit and faith-based organizations, to help create pathways to employment and connect young people with

jobs, internships.

## Research Area 2: Bridging the Digital Divide between Kenya and Industrialized Countries

ICT is rapidly changing. Youth, especially in rural areas are facing challenges in coping with the rapid change in digital technology. Further, the world is networked and this youth are missing out on global networks and opportunities. ICT has potential to empower the youth to compete globally and take advantage of the business opportunities offered by the dynamic digital space. Further, the youth will be able to interact and network with the global platform. Through demand-driven training, the programs will equip youth across the continent with the skills needed to secure ICT, ICT-enabled, and ICT services employment which will have a greater economic effect to the economy. Therefore the project aims to enhance youth capacity for communication in the modern era through ICT, equip the youth to engage in manufacturing, business transactions using E-Commerce skills, enhance the capacity of youth on innovation and intellectual products and services, train them on entrepreneurial skills in identifying and exploiting business opportunities and finally

Research is required on innovations and the appropriate mix of ICT and other technologies to increase the competencies of the Kenyan youth to effectively participate in the modern economy. It is envisaged that Masinde Muliro University of Science and Technology (MMUST) will complement the Kenya Government efforts towards bridging the digital divide between Kenya and industrialized countries to position the youth for international competitiveness. In doing so, greater attention will be paid to bridging the skills gap, enhancing relevant skills to support small and Medium Enterprises (SMEs), sustainable ICT innovations. This will in turn improve livelihoods and as part of a long-term strategy to increase job opportunities and the employability of Kenyan youths for Kenya.

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## Research Area 3: Nano-Sciences, Material Science and Nano-scale Manufacturing

Nano manufacturing is a growing area of research that has potential in generating highly strong, light but more durable nanomaterials for various application. The key concept is to adopt the already known properties and benefits of nanomaterials to generate scaled-up, reliable and cost-effective structures and devices. With the diverse applications in almost all fields, nanotechnology-enabled products range from antimicrobial products (health), nanopesticides and nanofertilizers (agriculture) to catalysts for crude oil refinery (mining). The manufacturing strategy for many of these products are straightforward and can easily be achieved by most scientific research institutions in Kenya towards actualization of the big 4 agenda.

Research in this area will support the effective application of nanotechnology in in the priority sectors of manufacturing and housing.

Special mention to the following contributing MMUST scholars and researchers; Prof. Dr. William A. Shivoga, (Executive Dean, School of Natural Sciences (SONAS) – Team Leader, Prof. Maurice Omolo (Director Quality Assurance), Prof. Hassan Were (Acting Dean, School of Agriculture Veterinary and Technology (SAVET), Dr. Kelvin Omieno (Acting Dean, School of Computing and Informatics (SCI), Prof Peter Shalo (School of Agriculture Veterinary and Technology (SAVET), Mr Owate Wambayi (Institute of Technology and Vocational Training (TVET), Dr. Anthony Sifuna (School of Medicine and School of Natural Sciences) Dr. Bernard Omogo (School of Natural Sciences) and Issa Kweyu (School of Public Health and Biomedical Sciences).



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