



MAKERERE UNIVERSITY

**COLLEGE OF AGRICULTURAL & ENVIRONMENTAL
SCIENCES (CAES)**

19TH PRINCIPAL'S QUARTERLYREPORT

OCTOBER-DECEMBER 2018

VISION

To be a leading institution of academic excellence and innovations in Africa

MISSION

To advance training, knowledge generation and service delivery in order to enhance agricultural development, sustainable natural resource utilization and environmental management

Abbreviations

AfDB African Development Bank

ARUA African Universities Alliance

CAES College of Agricultural and Environmental Sciences

DABE Department of Agricultural and Biosystems engineering

DANRE Department of Natural Resource Economics

DAP Department of Agricultural Production

DEIS Department of Extension and Innovation Studies

DEM Department of Environmental Management

DEM Department of Environmental Management

DFTHN Department of Food Technology and Human Nutrition

DGGCS Department of Geography, Geo-informatics and Climatic Sciences

DRGT Directorate of Research and Graduate Training

FBT Department of Forestry, Biodiversity and Tourism

FTBIC Food Technology and Business Incubation Centre

MAK Makerere University

MaRCCI Makerere University Regional Centre for Crop Improvement

MUARIK Makerere University Research Institute Kabanyolo

MUBFS Makerere University Biological Field Station

NBDB National Biodiversity Data Bank

NEF Next Einstein Fellowship

NFC Nyabyeya Forestry College

SAS School of Agricultural Sciences

SFEGS School of Forestry, Environmental and Geographical Sciences

SFTNB School of Food Technology, Nutrition and Bioengineering

USAID United States Agency for International Development

WSU Western Sydney University

Foreword



On behalf of the CAES Management, I congratulate all staff and students upon the achievements realized in this quarter of October-December 2018. I thank the Deans, heads of all units, staff, students and different stakeholders for the support rendered.

Under Teaching and Learning, the college prepared early enough and submitted the list of graduands for the 69th Graduation ceremony slated for mid January 2019.

In Research, our staff and students implemented low cost rain water harvesting, irrigation, postharvest technologies in that have impacted on small holder farmers' livelihoods.

The college using internally generated funds acquired another John Deere tractor to enhance production on the university farm at Kabanyolo. Under the DANRE/KSU Program, a teleconferencing facility was installed at the School of Agricultural Sciences and this has eased collaboration and communication with the concerned stakeholders.

Under the support environment, a number of staff ascended in their ranks while others were recognised for their scientific contribution to society. A case in point is Prof. Noble Banadda who scooped the *Pius XI GoldMedal* 2018 for his outstanding scientific work. Prof. Phinehas Tukamuhabwa the UBBC Biotechnology Award 2018 while Prof. Archileo Kaaya won AU Award 2018 as Agent of Change for aflatoxin control in Africa.

As a college, we also honored three professors (Prof. John Muyonga, Prof. Mnason Tweheyo and Prof. Phinehas Tukamuhabwa) for their distinguished services offered to Makerere University as Deans and Director, MUARIK. We also managed to get Christmas coupons for all staff as take home appreciation.

On the unfortunateside, a number of our staff were terminated and dismissed from the university service for various reasons including abscondment. In our effort to mobilise resources, we were able to generate funds to supplement government efforts to run the university through writing grant winning proposals and effectively managing the projects.

Management greatly appreciates Government of Uganda for the support in infrastructure development, research and innovation. We also thank our different development partners for the enduring support in various aspects of development-human, infrastructure and research.

Special thanks go to Makerere University top management for the support and conducive environment-without which, it would be impossible to undertake the core activities highlighted. As CAES, we are committed to undertaking our core mandate and strengthening our collaboration as we build for the future. I thank you.

Prof. Bernard Bashaasha,
PRINCIPAL

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1.0: INTRODUCTION

1.1: College of Agricultural & Environmental Sciences (CAES)

CAES is one of the ten colleges of Makerere University located within the Western part of Makerere University. Its main administrative center is in the Agriculture building located just opposite the University Main Library entrance. CAES has three Schools: School of Agricultural Sciences (SAS), the School of Forestry, Environmental and Geographical Sciences (SFEGS) and the School of Food Technology, Nutrition and Bioengineering (SFTNB).

The college has two institutes that handle research namely Makerere University Agricultural Research Institute Kabanyolo (MUARIK) and Makerere University Biology Field Station (MUBFS). The college has 14 centers serving as a base for knowledge transfer and partnerships. These are complemented by facilities located at Nyabyeya Forest College and Budongo Conservation Field Station that cater for Forestry students.

1.2: CAES Schools and departments

The School of Agricultural Sciences (SAS) is comprised of three Departments. The departments are: (i) Agricultural Production; (ii) Agribusiness and Natural Resource Economics; and (iii) Extension & Innovation Studies. These departments offer Undergraduate, Masters and PhD degrees in their respective disciplines.

The School of Forestry, Environmental and Geographical Sciences (SFEGS) is composed of three departments (i) the Department of Forestry, Biodiversity and Tourism; (ii) the Department of Environmental Management and (iii) the Department of Geography, Geo Informatics and Climatic Sciences.

The School of Food Technology, Nutrition and Bioengineering (SFTBN) comprises two departments. (i) the Department of Agricultural and Bio systems Engineering and (ii) the Department of Food Technology and Human Nutrition. The SFTNB hosts an e- learning center (Telematics receiving studio) fully furnished with equipment. The SFTNB also hosts the Food Technology and Business incubation Centre (FTBIC).

1.3: Research institutes

1.3.1: Makerere University Agricultural Research Institute Kabanyolo (MUARIK)

MUARIK is a public institution and an arm of Makerere University that interfaces with the National Agricultural research system (NARS). Seated on 650 hectares of land it is being managed as a multi-disciplinary facility for training, research, outreach and production under the CAES. It is located 19 kilometers North-West of Kampala off Gayaza Township on the Kampala-Ziobwe Road. The institute houses the center for Continuing Agricultural Education Centre (CAEC), the undergraduate student hostel and facilities for over 30 graduate students under the regional programmes. The Tissue Culture, Animal Science and the Biotechnology laboratories are also located at MUARIK. Other facilities at MUARIK include CURAD, staff residences, poultry, dairy, and piggery units among others.

1.3.2: The Makerere University Biological Field Station (MUBFS)

MUBFS is located in Kibale National Park in Kibale district. It is mainly involved in research but it is increasingly hosting short international courses in Tropical Biology. Originally, most of the research at MUBFS was primatology but over the years, the research agenda has broadened to include ecological and behavioral research on taxonomy, and socio economic studies. There is adequate dormitory and guest house space for groups ranging between 10 and 60 and catering services. In collaboration with national institutions, the institute provides consultancy services to the government and other organizations in Uganda. Consultancy services include tailor made training in different fields of environment and natural resources, assessment and monitoring of environment and natural resources therein environmental impact assessments and audits, project monitoring and evaluation and facilitation.

1.4: Research Centres

Recognizing the importance of outreach, the college established a fully-fledged outreach facility called the Continuing Agricultural Education Centre (CAEC). Through CAEC, the College operates outreach programs for various stakeholders (farmers, policy makers, students etc). The presence of the CAEC therefore makes the College a key player in development-impact oriented training and research.

Other centres include the Plant Breeding, Biotechnology and Seed systems research center, the Remote Sensing and GIS Laboratory, the Molecular Biology Laboratory and the Water and Wetlands research Laboratory. Others are the National Biodiversity Data Bank (NDBD), the Food Technology and Business Incubation Center (FTBIC), the Makerere University Climate Change research and Innovations (MUCCRI), Centre for Waste Management, Centre for Mountain Resources and Disaster Management, Rangeland Resources Centre and the Agricultural Policy Analysis Centre. All these operate at different capacities.

2.0: TEACHING AND LEARNING

2.1: Semester 1 2018-2019 Examinations

Semester 1 examinations started on 19th November to 8th December 2018. The exams were smoothly conducted in spite of the challenges incurred with the new system of AIMS. The Registrar's office was provided gadgets for reading examinations permit but within the first week, the system failed and students could not print permits. The problem was later rectified and stabilized in the second week the exams.

2.2: Preparation for the January 2019 Graduation

All the schools generated the graduation lists for the January 2019, approved and sent to the Academic Registrars Office. No major challenge was encountered. The table below shows the graduation statistics from the different schools. The 69th graduation ceremony is scheduled from

Graduation list for January 2019

School	Undergraduate students	Graduate		
		PhD	Masters	PGD
SFTNB	56	-	13	-
SAS	199	4	32	-
SFEGS	280	4	34	9
Total	535	8	79	9

3.0: RESEARCH AND INNOVATIONS

3.1: Technologies and Innovations developed

3.1.1: Platform to provide Agro-processing equipment for Small-Medium Scale Food Processors (PAEFP)

With the growth in the small-medium scale food industry, it has become of necessity to provide processors with alternatives for purchase of food processing equipment. Imported equipment are often expensive and so locally manufactured equipment provide a more affordable alternative. The Department of Agricultural and Bio systems Engineering, Makerere University as part of its research mandate led by Dr. Julia Kigozi embarked on developing a platform on which processors can access a variety of equipment, tailor made to their production capacity. The research so far has been funded by the funds from the Presidential initiative to the Food Technology Incubation centre. Central in the work is to; Design and fabricate equipment for tailor-made to meet processor specific needs, Provide training on the use of the equipment and Provide spare parts and maintenance services for the machines. Equipment that have been fabricated include; Batch Pastueriser, Soy milk machine, Fruit pulper, soya roaster, groundnut sheller, soya steamer, cocoa dehuller, Briquetting Machine, Pedal maize grain cleaner, 500kg capacity biomass dryer, rice planter.



(a) Soy milk machine (b) FruitPulper



(c)Batch Pasteurizer



(d) Soya Roaster



(e) Cocoa Dehuller



(f) Mulondo chopping machine

Other Equipment



Pedal operated grain cleaner,



Rice transplanter



24 piece Briquetting Machine



500kg capacity Biomass dryer

4.0: KNOWLEDGE TRANSFER AND PARTNERSHIPS

4.1: DRGT & DGGCS conduct Transformative Professional Development Training for early career Lecturers

On 10th Dec 2018 a one-day Professional Development Training Workshop titled, “How to become an effective academic and developing one’s full potential as an early career researcher”. was launched. The workshop was funded by the UK's Department for International Development (DFID) through the Association of Common Wealth Universities in partnership with the African Academy of Sciences (AAS). It is evident today that the academic path of early young scientists is riddled with many challenges and hurdles. Yet these challenges could actually be transformative opportunities for becoming a competent academic. This training focused on how to get it right in the midst of challenges experienced.

Cognisant of this challenge, DRGT and CAES/Geog joined the global drive to empower early career researchers to develop the research leadership skills and optimally contribute to the global discourse on climate change and viable mitigation. DRGT, cardinal mandate is to support the early career Lecturers to acquire the right tools and mindset to champion Transformative research programmes. This was part of a regional effort because for the last 6 years, CAES/Geog has been the national anchor of the continental research project under the theme “The Climate Impacts Research Capacity and Leadership Enhancement in Sub-Saharan Africa (CIRCLE)”. The CIRCLE Programme has adopted the dual approach of supporting individual academics to undertake research while also working with their institutions to develop better professional development systems for their researchers. Between 2014-2018, Makerere has hosted close to 100 CIRCLE Visiting Fellows (CVF) specializing in climatic sciences.

4.2: 18 researchers from 7 Sub-Saharan countries awarded on completion of the First GREAT Spin-off Course

18 researchers from seven (7) sub Saharan countries were on 1st December 2018, awarded Certificates of Attendance by Makerere University following the successful completion of the first GREAT Spin-off course on Gender Responsive Research and Reporting in Agriculture.

The course was organized under a five (5) year (2015-2020) Makerere University (Uganda) and Cornell University (USA) joint certificate program in applied gender training for agricultural researchers program titled, “Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT) funded by the Bill & Melinda Gates Foundation.

The GREAT Spin-off Course was funded by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Institute of Tropical Agriculture (IITA) and the International Center for Tropical Agriculture (CIAT).

The spin-off course, which was the first of the kind, was jointly organized by the College of Agricultural and Environmental Sciences (CAES) together with the School of Women and Gender Studies (SWGS) at Forest Cottages Bukoto-Kampala, from 26th November to 1st December 2018.

The purpose of the training was to offer skills in gender responsive research, tailored to assist agricultural researchers to address gender issues along the design, implementation, evaluation, and communication pathways of their research projects.

The course attracted social scientists and plant breeders working in NARs and Universities on various breeding programs under the Tropical Legumes III project from Uganda, Kenya, Tanzania, Ethiopia, Burkina Faso, Mali, Ghana and Nigeria.

The Tropical Legumes III project (TL-III) is a major international initiative that seeks to develop and deliver seed of improved cultivars of common bean, cowpea, chickpea and groundnut at scale to small-holders, while also fundamentally strengthening plant breeding programs to generate increased rates of genetic gains.

Participants were taken through a range of topics including: the importance of gender in agriculture, anchoring gender research questions in research projects, gender responsive plant breeding and setting breeding priorities, principles of quantitative and qualitative gender research, engendering data collection methods, and how to develop gender responsive product profiling tools. After an exhaustive and insightful training, participant teams drew and presented work plans for the next steps towards improving the breeding programs in their respective countries.



Participants posing for a group photo after the opening session

4.3: CAES Book Launch: Conservation and Development in Uganda

The CAES held a public book launch co-hosted by Nature Uganda and the Uganda Poverty and Conservation Learning Group on 26 November 2018 at the Uganda Museum. The co-edited volume entitled **Conservation and Development in Uganda** was published by Chris Sandbrook, Connor Cavanagh and Dr. David Mwesigye Tumusiime.

Chris Sandbrook is Senior Lecturer in Geography and Director of the Masters in Conservation Leadership at the University of Cambridge, UK. Connor Joseph Cavanagh is a Post-Doctoral Research Fellow in the Department of International Environment and Development Studies (Noragric), Norwegian University of Life Sciences. David Mwesigye Tumusiime is an Associate Professor, School of Forestry, Environmental and Geographical Sciences, [Makerere University](#), Kampala, Uganda, and Director, [Makerere University](#) Biological Field Station, Uganda.

4.4: The 2nd NARO-Mak Joint Scientific Conference successfully ends with 15 point Conference Communique tabled before the Agricultural Minister for policy guidelines.

The 2nd NARO-Mak Joint Scientific conference & 1st Feed the Future Innovation Lab for Nutrition Annual Scientific Symposium successfully ended on 15th November 2018 at the Speke Resort Munyonyo. The four day conference that started on 12th November 2018 under the theme “*Research for Innovative Agri-Food Systems and Nutrition*” was closed by the Minister of Agriculture Animal Industry and Fisheries represented the state Minister for Agriculture Hon. Christopher Kibazanga. The Conference Organising committee represented by Dr. Alice Turinawe tabled a summary of the conference proceedings culminating in a 15 point Communique for policy guidelines. They include:

- Integration of Information and Communication Technology (ICT) in agricultural value chains for detection and management of pests and disease and assessment and manipulation of soil characteristics for appropriate crop management eg use of drones.
- Policy and strategies for enhancing intake of quality and safety food, with emphasis on formulation and/ or implementation of appropriate standards and regulations.
- Supportive policy frameworks for comprehensive nutrition education of both the grassroots urban and rural consumers of agriculture based and other foods and food products backed by market power.
- Prioritise investments that improve quality of people through nutrition and health diets
- Strengthen implementation of strategies for reducing post harvest losses and waste along the value chain

- Need for embracing the spirit of multi-sectoral planning and implementation of government development programs along the value chain.
- Provision of adequate and reliable funding to research for timely delivery of technological solutions for the continuously growing and dynamic society needs. Similarly sustainable funding is required for science communication and user education so that results effectively get to the intended beneficiaries. There is need for a paradigm shift in methods of delivering information to farmers and related value chain actors.
- Develop and enact programs for mind frame change for transformation of the youth to actively engage in agri entrepreneurship.
- Enabling policy and strategies for transiting agricultural research so to industrial products via incubation and industrial parks.
- Policy measures to encourage the agro based private sector to support government in funding agricultural research to ensure the sustainability of research funding.
- The need to reconstruct our national extension system that is organic, wholistic, equitable and transformative.
- Need for a model of agriculture that is sensitive to economics, food security, and ecology and society issues. Not a one size fit all ie large scale farming may not be appropriate for everybody.
- Need to identify and pick good practices from both the traditional and modern concepts of agriculture and develop a model suitable for African situation. Otherwise the binary concept of traditional vs modern is misleading.
- The need for leadership/governance in every relevant sector to keep an eye on the evolution of gender and extension concepts and provide for adjustments as society needs change.
- Strengthen existing institutions to effectively protect the agricultural sector against counterfeits including inputs especially seeds.

The conference was officially opened on Monday, 12th November 2018 by the Prime Minister of the Republic of Uganda Rt. Hon. Dr. Ruhakana Rugunda who emphasized the need to promote post-harvest handling and value addition to boost Uganda's agri-business and nutritional sector.

A number of issues for policy action came up during the conference. One of these was that under nutrition and obesity in Uganda is a big concern. Under nutrition remains one of the biggest contributors to global child mortality linked to about 45% of deaths among children under the age of five. Meanwhile ten (10) million children are overweight with old people obesity on the rise especially amongst women. This was contained in a key note speech delivered on 13th November 2018, by the former African Union Commissioner for Rural Economy and

The other important aspect was on the need to integrate Sex and Gender in agricultural research and development programs. In her keynote address on 15th November, 2018 a Gender Mainstreaming and Training Consultant. Ms. Forough E. Olinga said redressing the balance is key to increasing productivity and reducing poverty.

A policy brief on preventing nutrient loss and waste across the food system was on 13th November, 2018 launched by the State Minister for Northern Uganda who is also Member of Parliament representing Zombo District Women Constituency Hon. Grace Freedom Kwiwucwiny. The policy brief was developed by the Global Panel on Agriculture and Food System for Nutrition – an independent group of influential experts with a commitment to tackling global challenges in food and nutrition security.



State Minister for Agriculture Hon. Christopher Kibazanga (2nd R) with L-R: Chairman Board of Directors-NARO, Prof. Joseph Obua, The Director General NARO-Dr. Ambrose Agona and Principal, College of Veterinary Medicine, Animal Resources and Biosecurity-Prof. John David Kabasa at the closing ceremony of the 2nd NARO-Mak Conference, 15th November 2018, Speke Resort Munyonyo, Kampala Uganda

4.5: Ugandan Journalists trained on Aflatoxins Communication and Reporting:

About 30 journalists from different media houses in Uganda underwent a two day training on Aflatoxins Communication and Reporting culminating in the establishment of a National Aflatoxin Journalist Network. The network will serve as an advocacy group to enhance public awareness and drive more actions to mitigate aflatoxin contamination of food and feeds. Professor. Archileo Kaaya is the Patron.

The training was sponsored by the Platform for Aflatoxin Control in Africa (PACA), a program of the Africa Union Commission (AUC). This media training was the second of its type that the commission was supporting member states in implementing. The first training took place in Senegal in September 2018.

The training was officially opened by the Director for Extension in the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) Mrs. Beatrice Byarugaba on 29th October, 2018 at Fairway Hotel in Kampala, attended by the AUC –PACA Program Officer Ms. Wezi Chunga – Sambo, Chair, Aflatoxin Technical Working Group Prof. Archileo Kaaya and members of the PACA Secretariat and the Uganda Mycotoxin Mitigation Steering Committee among others.

The journalists received Certificates of participation signed by the Africa Union Commission Officer in Charge and Head, Rural Economy and Agriculture Dr. Janet Edeme after induction through a series of topics on aflatoxins and responsible reporting. Topics included Aflatoxins; their impacts on public health, trade and Agriculture at national and continental levels; Aflatoxin stakeholders and their roles; Aflatoxin Research findings with emphasis on Groundnuts; Media /Research interface on Aflatoxin information packaging; Interventions by AU-PACA and a summary of the C-SAAP Report on the country among others.



Journalists posing for a group photographs after the training

4.6: Makerere University-Uganda Industrial Research Institute in partnership for potato Communities

Makerere University struck a partnership deal with Uganda Industrial Research Institute (UIRI) in a Community Action Research Programme (CARP+) to strengthening synergies and working relationships of the University (students and researchers) and the farming community to enhance the capacity of potato value chain actors. The initiative is funded by the MasterCard Foundation through RUFORUM. Working closely with UIRI, a government of Uganda incubation facility, the CARP+ Project is screening the major potato varieties grown in Uganda for processing qualities.

Located in the cultivated terraces and rolling hills of Kabale in South-western Uganda, the UIRI, in addition to the having technical personel in potato processing has an incubation plant with diverse and modern equipment and machines such as peelers, slicers, blanching, fryers, and driers, to produce a range of potato-based value added products such as crisps, French fries and potato flour. Having established the processing properties of the existing potato varieties in Uganda, the Makerere University-UIRI partnership will develop and test innovative potato-based value added products with potential for commercialisation.

One of the main research outputs expected from the CARP+ Project is characterization of the locally grown varieties in Uganda. This will provide the unavoidable information on the physicochemical and processing properties of these varieties, the cornerstone on which value addition and processing is based. Subsequently, the demand for and utilisation of the locally grown potato varieties will eventually increase, postharvest losses will reduce and the farm supply of potato will stabilise. The information generated will also benefit other researchers, processors in product development, market analysis and investment in other potato-based products



CARP+ Team visiting UIRI Incubation plant in Kabale

5.0: SUPPORT ENVIRONMENT

5.1: Human resources and capacity building

5.1.1: *Appointments / Promotions / Nominations*

At its 585th meeting held on 3rd December, 2018, the Appointments Board made the following decisions.

SN	Name	Post considered	Department	Decision
1	Dr. Robert Fungu	Lecturer	Food Technology and Nutrition	Appointed on probation
2	Dr. Denis Male	Lecturer	Food Technology and Nutrition	Appointed on probation
3	Dr. Ephraim Nuwamanya	Lecturer	Agricultural Production	Appointed on probation
4	Dr. Losira Nasirumbi	Lecturer	Extension and Innovation Studies	Appointed on probation
5	Dr. Sarah Akello	Lecturer	Extension and Innovation Studies	Appointed on probation
6	Dr. Dickson Biryomamaisho	Assist. Lecturer	Extension and Innovation Studies	Appointed on 4 year contract
7	Ms. Elizabeth Ahikiriza	Assist. Lecturer	Agribusiness and Natural Resource Economics	Appointed on 4 year contract
8	Mr. Francis Okori	Assist. Lecturer	Agricultural and Biosystems engineering	Appointed on 4 year contract
9	Ms. Prossy Nakawuka	Assist. Lecturer	Agricultural and Biosystems engineering	Appointed on 4 year contract
10	Mr. Joseph Waswa	Assist. Lecturer	Agricultural and Biosystems engineering	Appointed on 4 year contract
11	Mr. Sam Cherotech	Assist. Lecturer	Agricultural and Biosystems engineering	Appointed on 4 year contract
12	Mr. Tonny Obua	Assist Lecturer	Agricultural Production	Appointed on 4

				year contract
13	Dr. Henry Semakula Musoke	Lecturer	Geography, Geo informatics and Climatic Sciences	Appointed on Probation

At its 589th meeting held on 19th December, 2018, the Appointments Board made the following decisions.

SN	Name	Post considered	Department	Decision
1	Mr. Ronald Mukalazi	Administrative Assistant	University Service	Appointed
2	Ms. Pauline Kyarisima	Administrative Assistant	University Service	Appointed
3	Mr. Peter K Walusimbi	Driver	University Service	Appointed
4	Mr. David Ikomo	Assist Procurement Officer	Procurement and disposal unit	Appointed
5	Mr. Dismas Niyonzima	Assist Procurement Officer	Procurement and disposal unit	Appointed

5.2: Termination, Dismissal, suspension and reinstatement

At its 580th meeting held on 19th, 20th, 21st, 27th 29th November, 2018, the Appointments Board made the following decisions.

SN	Name	Post considered	Department	Decision	Reason
1	Ms. Sarah Aloba	Assist. Lecturer	Agribusiness and Natural Resource Economics	Dismissed	Abscondment
2	Mr. Gilbert Wuthman	Teaching Assistant	Forestry Biodiversity and Tourism	Terminated	Abscondment
3	Dr. George	Assist.	Agribusiness and Natural	Reinstated	Went for studies without

	Omiat	Lecturer	Resource Economics		permission
4	Dr. Haroon Sseguya	Lecturer	Agricultural Extension and Innovation Studied	Dismissed	Abscondment
5	Ms. Stella Maris Sendagi	Assist. Lecturer	Agricultural and biosystems engineering	Dismissed	Abscondment
6	Mr. Muhamad Bukonya	Assist. Lecturer	Agribusiness and Natural Resource Economics	Suspension lifted and warned	Abscondment
7	Mr. JamesKisoro	Web Administrator	CAES	Dismissed	Abscondment

5.3: Election of the new Dean SFTNB and SFEGS

The election of the new Dean for the School of Food Technology, Nutrition and Bioengineering was successfully conducted on 29th November, 2018. The outgoing Dean Prof. John Muyonga had served for two terms (8 years) as Dean ending December 31, 2018. We congratulate all the candidates for participating in the election whose results were as follows;

Total number of Voters; 29

Total votes cast 25

Proxy votes 03

Abstain 01

Number of candidates 02

Candidate 1 Dr Abel Atukwase No of Votes....15

Candidate 2 Prof Noble Banada No of Votes 13

According to the votes cast, Dr. Abel Atukwase takes the position of Dean School of Food Technology, Nutrition & Bio-Engineering replacing Prof. John Muyonga. Nominations for the Dean elect School of Forestry, Environmental and Geographical sciences were sent out and only one candidate Prof. Fred Babweteera showed interest passing as unopposed. Prof. Fred Babweteera replaces Prof. Mnason Tweheyo who has also served for two terms (8 years) ending December 31, 2018.

5.4: Prizes, Awards and Recognitions

5.4.1: Prof. Archileo Kaaya wins AU Award 2018 as Agent of Change for aflatoxin control

Senior nutritionist Prof. Archileo Natigo Kaaya won the *African Union Award 2018* as agent of change for aflatoxin control in Africa in the category of Research and Technology. Prof. Kaaya received the Certificate of recognition from the Commissioner for Rural Economy and Agriculture of the AU at the Third Partnership for Aflatoxin Control in Africa Partnership Platform Meeting, held on 2 to 4 October 2018, in Dakar, Senegal. Archileo Kaaya is a Professor of Food Science and Head, Department of Food Technology and Nutrition (FTN). His primary research interest areas are Mycotoxins in foods and feeds, Postharvest Technology of fresh and on farm processed produce and Community Nutrition. He has over 35 Research items on aflatoxins, 5,360 Reads and 368 Citations



Prof. Archileo Kaaya, the AU Agent of Change for Aflatoxin Control Award Winner 2018 displaying the award during the launch of the National Action Plan for Aflatoxin control on 31st October 2018 at Serena Horel.

Aflatoxins, are harmful substances produced by fungi in food. The outbreak comes as surprise for many due to lack of information. The patients have symptoms like abdominal pain, diarrhoea, vomiting, ascites and jaundice and these are similar to those associated with acute aflatoxin poisoning. In a bid to save lives that would be lost to liver cancer and a host of many diseases as well as disorders caused by aflatoxins, the African Union Commission enacted a continental scorecard to help monitor the progress made by different countries in controlling aflatoxins.

5.4.2: Prof. Noble Banadda wins the Pius XI Gold Medal 2018 for his scientific research

Prof. Noble Banadda became the first African to scoop the *Pius XI Golden Medal Award 2018*. The Holy See, Pope Francis personally presented the award to Banadda for his Scientific Excellence and publication on 12th November 2018 at the Vatican, Rome. Noble Banadda is a Professor of Agricultural and Biosystems Engineering and Chair, Department of Agricultural and Biosystems Engineering (ABE). His primary areas of interest are Mathematical modeling; Food Processing Engineering; Waste Engineering; Renewable Energy; Chemical reactor design and optimization.

In waste management research, Banadda is ranked 35th globally and 2nd in Africa according to Google Scholar rankings. He has worked on projects ranging from capacity building in Engineering in Africa, solid waste management in slums, and optimization of bio resources recovery and use. Major discoveries at Makerere University include:

- Invention of the solar powered irrigation pump for small scale farmers,
- Designing the cost effective Multipurpose farmers tractor -*MV Mulimi* (for ploughing, pumping water for irrigation, transportation, threshing and hauling maize and phone charging);
- Coming up with a new technology of making diesel fuel from hard plastics for motor vehicle engines, generators and lighting in the house;
- Recycling agricultural waste mainly bamboo waste into vinegar and other products



The Pope handing over the Golden Award to Prof. Noble on 12th November 2018 at the Vatican

The Pontifical Academy of Sciences was founded on 28 October 1936 by the Holy Father Pius XI, to honour pure science, wherever this may be found, to ensure its freedom, and to support the research essential for the progress of applied science.

The Pius XI Gold Medal was established on 28 October 1961 by His Holiness John XXIII to acknowledge outstanding scientific merit in the field of the natural sciences achieved by a young scientist. It was named after Pius XI who, in 1936, restored the Academy that had originally been founded by Federico Cesi in 1603, and gave it its international and global character.



5.4.3: Prof. Phinehas Tukamuhabwa wins the UBBC Biotechnology Award 2018

Plant breeder Prof. Phinehas Tukamuhabwa won the Biotechnology Award 2018 during the first Annual Biotechnology Awards ceremony by the Uganda Biotechnology and Biosafety Consortium (UBBC) on 19th September 2018. The award was in honor of his immense contribution to socio-economic development through biotechnology, scientific research and innovations.

Prof. Tukamuhabwa's research thrust is in Genetics of resistance to soybean rust disease and development of varieties that are resistant to soybean rust, groundnut leaf miners and Adzuki bean bruchids. These efforts are integrated with adaptation of soybean genotypes to farmers' conditions and research on soybean seed systems.

He is pioneering the development of glyphosate tolerant soybeans in Africa, in containment at Makerere University. He has spearheaded the development of six soybean varieties (Maksoy

6N, Maksoy 5N, Maksoy 4N, Maksoy 3N, Maksoy 2N, Maksoy 1N, Namsoy 4M, Namsoy 3 and Nam2) and the climbing bean varieties(Nabe 12C, Nabe 9C, Nabe 8C, Nabe 7C and Nabe 6C) all widely grown in Uganda and in the region at commercial level.



AU Award winner-Prof. Phinehas Tukamuhabwa

5.4.4: CAES honours three (3) Professors for their distinguished services to Makerere

Three professors at the CAES were on Friday 14th December, 2018 honored for their distinguished services offered to Makerere University after serving in leadership positions for many years. Prof. Mnason Tweheyo and Prof. John Muyonga were recognized for serving as Deans for the past 8 years since the university turned collegiate in 2011 in the School of Food Technology, Nutrition and Bioengineering and the School of Forestry, Environmental and Geographical sciences respectively. Prof. Phinehas Tukamuhabwa was honored for serving as Director Makerere University Agricultural Research institute from 2014 to 2018.

The ceremony held at the Forestry Gardens Quadrangle was presided over by the 1st Deputy Vice Chancellor (Academic Affairs) Dr. Umar Kakumba. Dr. Kakumba appreciated the great work done by Prof. Muyonga especially the commercialization of the School of Food

Technology, Nutrition and Bio engineering and agro processing at the Food Technology and Business incubation centre.

Kakumba credited Prof. Tweheyo for expanding the school of forestry, playing a role in entrepreneurship and building programs in terms of protecting natural resources, adding value and making them more important to the nation; and positively transforming human resources in different aspects like climate change.

Dr. Kakumba also thanked Prof. Tukamuhabwe for leading the Makerere University Agricultural institute for four years and facelifting it to an admirable institute not only in research but other mandates like production and outreach.

The Principal CAES Prof. Bernard Bashaasha applauded the outgoing professors for their great service to the university. “They have served with courage and acted with love, led with respect, integrity and passion. They have been value adding men and we are proud to have had them and hopefully, we will be guided in their way of management.” Prof. Bashaasha stated.





6.0: PHYSICAL INFRASTRUCTURE AND EQUIPMENT ACQUIRED

6.1: CAES acquires MASCOR John Deere agricultural tractor worth \$ 26,500 (approximately shs.98, 050,000)



The college acquired another MASCOR John Deere agricultural tractor worth \$ 26,500 (approximately shs.98, 050,000). The tractor was purchased using college resources mainly from the project overheads. The four wheel drive John Deere Agricultural Machinery, model 5075E with 75HP can be attached on a variety of farm implements including a plough, harrow, planter, bailer and forage harvester among others.

The machinery was supplied by John Deere MAS CORPORATION Company Ltd (MASCOR) and delivered at the Makerere University Agricultural Research Institute (MUARIK) on 2nd October, 2018. The suppliers were represented by Ms. Hellen Atuhaire and Mr. Lwanga Mande.

The handover ceremony was witnessed by University Bursar's representative Mr. Teefe Paul, the Principal CAES, Prof. Bernard Bashaasha, Ag .Director MUARIK Dr. Alice Turinawe, the Ag. Farm Manger Mr. Chrysestom Tweyambe, MUARIK security persons and other university

staff. The Principal CAES Prof. Bernard Bashaasha received the equipment. The John Deere agricultural machinery as a brand new machine that can do work in all situations.

The company provided the service kit for free , offered the first two tractor services and free training to the tractor operators before using the machine and a warranty of 2years or 2000hours whichever comes first.

6.2: A Video Conferencing facility worth \$ 9,148 acquired under the USAID Capacity Building project

A video conferencing facility worth \$ 9,148 was installed at the School of Agricultural and Environmental Sciences in the College of Agricultural and Environmental Sciences under the USAID Capacity Building project titled, “ Upgrading the institutional capacity of the Department of Agribusiness and Natural Resource Economics (DANRE). KSU is an abbreviation for Kansa State University -USA.

The facility was handed over by Prof. Allen Featherstone to the Head, DANRE Dr. Gabriel Elepu on 16th November, 2018. Also present were Prof. Vincent Amanusu Boado, Dr. Cosas Guvule, Dr. Simon Byabagambi and staff from Makerere University.

The major components of the system are the codec, camera, microphone array, network and power connections, air conditioning, wireless ports, dimmer lights, security system, projector and screen. This technology has addressed the challenge of poor communication system often with intermittent connectivity making communication and collaboration between DANRE and KSU easier and enhanced teaching and research experience.



The Head, DANRE Dr. Gabriel Elepu receiving keys to the facility from Prof. Allen Featherstone and Dr. Simon Byabagambi

FOR THESE AND MORE

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