On behalf of the Makerere University Council, I congratulate the Vice Chancellor, and the Management team, staff and students upon the milestones realized in the Year 2015. The University Council has continued to provide strategic oversight aligned to the University Vision - To be the leading institution of academic excellence and innovations in Africa. Taking stock of the Year 2015, the Makerere University Council has received and considered several proposals from the relevant Committees and other University organs as required. I therefore thank the Members of the Makerere University Council for the commitment, team work and service beyond self that have led us this far!

On 23rd October 2015, Professor George Mondo Kagonyera successfully completed an eight (8) year term of service as Chancellor. The University Council in great honour appreciated the dedicated service of Professor Mondo Kagonyera. In accordance with the law, the Makerere Council appointed a Search Committee for the next Chancellor of Makerere University. This Committee embarked on a process that involved the public in the nomination of qualified Ugandans with a high level of integrity, good public relations and possessed the ability to market and internationalise the University. The search process ended in the appointment of Professor Ezra Suruma by the President of the Republic of Uganda as Chancellor of Makerere University. I congratulate Professor Ezra Suruma and look forward to his successful term of office.

The year in question was characterized by students’ unrest. To enhance harmony and reduce discontent and disruptions of activities within the University, Council gazetted the Makerere University Student Rules and Regulations, 2015 thereby fulfilling Section 41(f) of the Universities and Other Tertiary Institutions Act which states that the University Council shall, in relation to its functions, provide for the welfare and discipline of students. The regulations apply to all students of the University. I therefore encourage all the students to read and adhere to the Rules and Regulations and for Management to ensure the regulations are compiled with.

The University is highly constrained in its developments and operations due to inadequate financing both from Government and fee paying students. The inordinate resistance by students to comply with the Fees Policy put in place by Council continues to be a major challenge for efficient service delivery. As Management in consultation with Council, endeavors to diversify the University resource base, I appeal to students and parents to ensure timely payment of tuition and other dues. It is therefore in the interest of each and every stakeholder to ensure that this premier University in Uganda remains functional. We are glad that Government considered the enhancement for both Teaching and Non-Teaching Staff of all Public Universities.

Finally, Council greatly appreciates the role of Government in the infrastructure development of the University. In particular we applaud H.E the President of the Republic of Uganda, Yoweri Kaguta Museveni, for the support given towards stabilizing the University. The on-going construction and renovations of the laboratories in the various Colleges through the funding from African Development Bank will contribute to better learning and research environment. Likewise the promise by H. E President for Government to fund the perimeter wall will contribute to the security of all persons and property within the main Makerere University Campus.

Eng. Dr. Charles Wana-Etyem
Chairperson of Council
The Makerere University Annual Report provides an overview of the developments undertaken, successes realised and challenges faced during the Year 2015. The Report is structured along the thematic areas outlined in the Makerere University Strategic Plan 2008/09-2018/19; especially the core functions of Teaching and Learning, Research and Innovations, as well as Knowledge Transfer Partnerships. The Report further articulates how the supporting environment was configured to provide quality education and nurture academic institutional development amidst economic challenges.

Under teaching and learning, we continue with our quest to expand access as well as nurture a quality graduate competitive in the national and global environment. To this end, new programmes have emerged and initiatives focusing on the versatility of the skills given to students deepened. Integration of ICT in Teaching and Learning, internships and international collaborations have played a significant role in our efforts to enhance the employability of our graduates. For Research and Innovations, the strategy to move towards a research led university predominates our focus. New developments have been realised in agriculture, health, policy and ICT research. Our dissemination and publications in international databases such as the Elsevier-Scopus and Web of Science have shown marked improvements.

I applaud the development partners who have greatly contributed to the research profile of Makerere University, notably the Swedish Government under Sida, the Norwegian Government under NORHED, USAID and the National Institutes of Health. At the national level, the Presidential Initiative for Science and Technology denotes Government commitment to research development at Makerere University. It is our prayer that this will be broadened to cover both the sciences and the humanities in a multidisciplinary manner.

We continue to experience challenges in the financial situation at the University. The public-private provision of University education has generated tension amongst the staff and students at Makerere University. Financial resources are inadequate, yet the capacity for timely payment of tuition and other revenue from private students remains problematic.

We have registered some milestones in our efforts to diversify the financial resource base. The Makerere University Holding Company has progressed with the engagement of a Transaction Advisor for the commercial developments of the university estate and land holdings into viable projects. The Makerere University Endowment Fund continues with its pursuit to receive, mobilize and grow resources for the benefit of the University current and future generations. Our offshore investments with Crown Agents Investments Management worth GBP 1m have been diversified to cover both equities and financial investments. I however, need to underscore that the benefits from these investment efforts are long term.

I wish to re-echo the need for the Alumni to support University development projects. I call on you-our Alumni, in whatever way you can; be it financial, intellectual, skills, and mentorship, to support University activities. We invite you to join Mak on social media sites, sign up for the different College newsletters, make a donation before the year ends, volunteer at an event, and respond to a survey. The smallest of the gestures is more than welcome to ensure that we move the institution to greater heights.

The year 2015 marks the end of the eight-year term of office Professor Mondo Kagonyera as the second non-Head of State, Chancellor of Makerere University. The University has tremendously benefited from his stewardship. We heartily congratulate and welcome the new Chancellor, Professor Ezra Suruma. We look forward to his Installation in January 2016.

We Build for the Future.

Professor John Ddumba-Ssentamu
Vice Chancellor
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<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACBF</td>
<td>African Capacity Building Foundation</td>
</tr>
<tr>
<td>AERC</td>
<td>Africa Economic Research Consortium</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral Therapy</td>
</tr>
<tr>
<td>CAES</td>
<td>College of Agricultural and Environmental Sciences</td>
</tr>
<tr>
<td>CDC</td>
<td>Centre for Disease Control</td>
</tr>
<tr>
<td>CEDAT</td>
<td>College of Engineering, Design, Art and Technology</td>
</tr>
<tr>
<td>CEES</td>
<td>College of Education and External Studies</td>
</tr>
<tr>
<td>CGC</td>
<td>Counselling and Guidance Centre</td>
</tr>
<tr>
<td>CGPA</td>
<td>Cumulative Grade Point Average</td>
</tr>
<tr>
<td>CHS</td>
<td>College of Health Science</td>
</tr>
<tr>
<td>CHUSS</td>
<td>College of Humanities and Social Sciences</td>
</tr>
<tr>
<td>CoBAMS</td>
<td>College of Business and Management Sciences</td>
</tr>
<tr>
<td>CoCIS</td>
<td>College of Computing and Information Sciences</td>
</tr>
<tr>
<td>CoNAS</td>
<td>College of Natural Sciences</td>
</tr>
<tr>
<td>CoVAB</td>
<td>College of Veterinary Medicine, Animal Resources and Biosecurity</td>
</tr>
<tr>
<td>CURAD</td>
<td>Consortium for Enhancing Universities Responsiveness to Agribusiness Development</td>
</tr>
<tr>
<td>Delp</td>
<td>Distance and Lifelong Learning</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>DICTS</td>
<td>Directorate for Information Communication Technology Support</td>
</tr>
<tr>
<td>DVC (AA)</td>
<td>Deputy Vice Chancellor (Academic Affairs)</td>
</tr>
<tr>
<td>DVC (FA)</td>
<td>Deputy Vice Chancellor (Finance &amp; Administration)</td>
</tr>
<tr>
<td>EPM</td>
<td>Economic Policy Management Programme</td>
</tr>
<tr>
<td>HESFB</td>
<td>Higher Education Students Financing Board</td>
</tr>
<tr>
<td>ICT</td>
<td>Information &amp; Communication Technology</td>
</tr>
<tr>
<td>KCCA</td>
<td>Kampala City Council Authority</td>
</tr>
<tr>
<td>KYU</td>
<td>Kyambogo University</td>
</tr>
<tr>
<td>Mak</td>
<td>Makerere University</td>
</tr>
<tr>
<td>MakSPH</td>
<td>Makerere University School of Public Health</td>
</tr>
<tr>
<td>MCF</td>
<td>MasterCard</td>
</tr>
<tr>
<td>MIT</td>
<td>Masters in Information Technology</td>
</tr>
<tr>
<td>MoESTS</td>
<td>Ministry of Education, Science, Technology and Sports</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Mak</td>
<td>Makerere University</td>
</tr>
<tr>
<td>MUARIK</td>
<td>Makerere University Agricultural Research Institute Kabanyolo</td>
</tr>
<tr>
<td>MUELE</td>
<td>Makerere University E-Learning Environment</td>
</tr>
<tr>
<td>MUPSF</td>
<td>Makerere University Private Sector Forum</td>
</tr>
<tr>
<td>OHCEA</td>
<td>One Health Central and Eastern Africa</td>
</tr>
<tr>
<td>PWD</td>
<td>Persons with Disabilities</td>
</tr>
<tr>
<td>RAN</td>
<td>Resilient Africa Network</td>
</tr>
<tr>
<td>RUFORUM</td>
<td>Regional Universities Forum for Capacity building in Agriculture</td>
</tr>
<tr>
<td>SoL</td>
<td>School of Law</td>
</tr>
<tr>
<td>SSP</td>
<td>School of Statistics and Planning</td>
</tr>
<tr>
<td>UMI</td>
<td>Uganda Management Institute</td>
</tr>
</tbody>
</table>
VISION
To be the leading institution for academic excellence and innovations in Africa

MISSION
To provide innovative teaching, learning, research and services responsive to National and Global needs

CORE VALUES
- Allegiance to the Institution
- Integrity
- Customer Responsiveness
- Professionalism
- Openness to Diversity
1 INTRODUCTION

Similar to all public agencies, Makerere University annually produces work plans and budgets to guide its activities; facilitate monitoring and evaluation as well as provide a benchmark against which to assess the success and challenges. For Makerere University, the work plans are derived from the thematic areas outlined in the University Strategic plan 2008/09-2018/19. The activities undertaken are in line with the overall goal to reposition Makerere University to meet emerging socio economic problems at national and global levels.

We acknowledge that engagement and dialogue with communities and environments is fundamental to the relevance of the University. The role of communities to influence academic provision and research manifests through such partnerships. During the year, knowledge transfer partnerships have included governance, public health as well as engineering, science and technology. These extend beyond local and national communities to international partnerships and MoUs that have defined Makerere University as an international brand.

Our support environment continued to improve over the year. The library collection and facilities improved, the ICT bandwidth improved from 170Mbps to 200Mbp through the RENU initiative. The human resource function is at the centre of the University activities. We have steadily improved the numbers of staff at the senior academic ranks of Professor (85) and Associate Professor (145) and Senior Lecturers (193). These demonstrate the capacity and quality of the academic provision of Makerere University. Equally important is the improvements in the physical space, plans for improving the road networks through a PPP arrangement was mooted; several research projects including the Presidential Initiative for Science and Technology embed improvements in laboratory facilities; the AfDB- HEST project is set improve lecture facilities and selected laboratories in five colleges. These developments notwithstanding, physical infrastructure status and space (academic & welfare) remains a key challenge to the University.
2 TEACHING AND LEARNING

Teaching and learning is one of the core functions of Makerere University. Our aim is to enhance access opportunities and meet the Higher Education requirements at national and, international levels. Mak strives to produce graduates that will be relevant in the work environment. This section highlights the 2015 milestones in this area.

2.1 Mak Statistical Profile

2.1.1 Student Admission

Fifteen thousand, four hundred and forty five (15,445) students were admitted to the undergraduate Mak Programmes for the academic year 2015/16. Of these, 11% were on government scholarship and the fee paying were 89% (private – 87% and international – 2%); Graduate admissions was 2,431 for programmes tenable at Mak. Affiliated Colleges/Institutions had 6,712 students admitted on the undergraduate programmes and 597 students admitted on the graduate programmes. This constituted 29% of the overall admission in the academic year 2015/16, female students represented 47% of the total admissions. Table 1 gives an indication of the admissions for the year.

Table 1: Student Admission 2015/16

<table>
<thead>
<tr>
<th>College</th>
<th>Under Graduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gov’t</td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>CAES</td>
<td>99</td>
<td>141</td>
</tr>
<tr>
<td>COBAMS</td>
<td>88</td>
<td>61</td>
</tr>
<tr>
<td>CoCIS</td>
<td>47</td>
<td>64</td>
</tr>
<tr>
<td>CEES</td>
<td>105</td>
<td>205</td>
</tr>
<tr>
<td>CEDAT</td>
<td>60</td>
<td>187</td>
</tr>
<tr>
<td>CHS</td>
<td>68</td>
<td>110</td>
</tr>
<tr>
<td>CHUSS</td>
<td>176</td>
<td>106</td>
</tr>
<tr>
<td>CoNAS</td>
<td>45</td>
<td>116</td>
</tr>
<tr>
<td>CoVAB</td>
<td>13</td>
<td>33</td>
</tr>
<tr>
<td>School of Law</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>Fort Portal Campus</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jinja Campus</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Mak</td>
<td>715</td>
<td>1,053</td>
</tr>
<tr>
<td>MUBS</td>
<td>264</td>
<td>111</td>
</tr>
<tr>
<td>MUBS0ARUA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MUBS0JINJA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MUBS0MBARARA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NSAMIZI</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Health Tutors’ College Mulago</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Uganda Institute of Bankers</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ggaba National Seminary</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Others</td>
<td>264</td>
<td>111</td>
</tr>
<tr>
<td>Total</td>
<td>979</td>
<td>1,164</td>
</tr>
<tr>
<td>Sub Total</td>
<td>2,143</td>
<td>19,609</td>
</tr>
<tr>
<td>Grand Total</td>
<td>25,185</td>
<td></td>
</tr>
</tbody>
</table>

Source: Academic Registrar & DRGT, January 2016
2.1.2 Student Enrolment

Table 2 gives the details on students registered within the University system across the different colleges as 48102. Twenty two percent (22%) registered for programmes tenable at MUBS. Undergraduates represented 94% of total enrolment; Females were 48% of total enrolment.

Table 2: Student Enrolment (Registered) 2015/16 by Level

<table>
<thead>
<tr>
<th>College</th>
<th>Undergraduate</th>
<th>Graduate</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
<td>S-Tot</td>
</tr>
<tr>
<td>Agricultural &amp; Environmental Sciences</td>
<td>816</td>
<td>1390</td>
<td>2206</td>
</tr>
<tr>
<td>Business &amp; Management Sciences</td>
<td>2287</td>
<td>2692</td>
<td>4979</td>
</tr>
<tr>
<td>Computing &amp; Information Sciences</td>
<td>1622</td>
<td>2255</td>
<td>3877</td>
</tr>
<tr>
<td>Education &amp; External Studies</td>
<td>3284</td>
<td>3786</td>
<td>7070</td>
</tr>
<tr>
<td>Engineering Design Art &amp; Technology</td>
<td>798</td>
<td>2366</td>
<td>3164</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>478</td>
<td>1016</td>
<td>1494</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Academic Registrar’s Department, 31st December 2015

2.1.3 Student Graduation

Mak held its 65th graduation in a colourful three-day ceremony where 13,762 students awarded with diplomas, degrees and PhDs. Forty nine percent (49.4 %), of these were females, and 12 % were at the postgraduate level. The number of PhDs was 57 compared to 51 in 2014.

Table 3: Summary of Student Output 65th Graduation January 2015

<table>
<thead>
<tr>
<th>Level/College</th>
<th>Diploma</th>
<th>Bachelors</th>
<th>PGD</th>
<th>Masters</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>College/Sex</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Agricultural &amp; Environmental Sciences</td>
<td>-</td>
<td>-</td>
<td>217</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Business &amp; Management Sciences</td>
<td>-</td>
<td>-</td>
<td>1,102</td>
<td>1,091</td>
<td>1</td>
</tr>
<tr>
<td>Computing &amp; Information Sciences</td>
<td>19</td>
<td>22</td>
<td>501</td>
<td>609</td>
<td>1</td>
</tr>
<tr>
<td>Education &amp; External Studies</td>
<td>57</td>
<td>58</td>
<td>512</td>
<td>503</td>
<td>5</td>
</tr>
<tr>
<td>Engineering Design Art &amp; Technology</td>
<td>4</td>
<td>12</td>
<td>173</td>
<td>477</td>
<td>1</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>4</td>
<td>7</td>
<td>87</td>
<td>160</td>
<td>-</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>2</td>
<td>5</td>
<td>1,404</td>
<td>824</td>
<td>60</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>162</td>
<td>-</td>
</tr>
<tr>
<td>Veterinary Medicine, Animal Resources &amp; Biosecurity</td>
<td>16</td>
<td>60</td>
<td>47</td>
<td>87</td>
<td>-</td>
</tr>
<tr>
<td>School of Law</td>
<td>-</td>
<td>-</td>
<td>155</td>
<td>104</td>
<td>-</td>
</tr>
<tr>
<td>Total Mak</td>
<td>102</td>
<td>164</td>
<td>4278</td>
<td>4331</td>
<td>68</td>
</tr>
<tr>
<td>Mak Business School</td>
<td>-</td>
<td>-</td>
<td>1,823</td>
<td>1,470</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>164</td>
<td>6,101</td>
<td>5,801</td>
<td>68</td>
</tr>
<tr>
<td>Grand Total</td>
<td>266</td>
<td>11,902</td>
<td>181</td>
<td>1,356</td>
<td>13,762</td>
</tr>
</tbody>
</table>

Source: Graduation Booklet January 2015


**Chancellor Mondo Kagonyera awarding Ms. Ruth Morris Keesling her honorary Doctorate**

Ms. Ruth Morris Keesling was awarded a Doctor of Science (Honoris Causa) of Makerere University during the 65th Graduation Ceremony, in recognition of her distinguished and selfless contribution to Makerere University, Uganda, the Eastern and Central Africa region and global communities. Ms. Keesling is a celebrated American wildlife conservationist who has dedicated her life, resources and purpose for living to the transformation of Makerere University, the advancement of Veterinary Medicine and Wild Life, animal health research and tourism in Uganda, Africa and world over.

### 2.2 New Programmes and Curricular Review

Mak aims at continuously reviewing and updating all her academic programmes to ensure relevance and elimination of duplication. To this end, the university initiated the process of curriculum restructuring and review. The programme restructuring committee will complete this process in 2016. The university strategy in developing curricular relevant to community development needs extends to joint degree programmes and partnership in academic offerings. During 2015, The Mak School of Public Health (MakSPH), Centre for Disease Control (CDC), and the Ministry of Health (MoH) partnership reviewed the Public Health Fellowship Programme. The programme aims to build leadership and management capacity for health programmes in Uganda. Review focus centred on Field Epidemiology, Laboratory Systems, Monitoring and Evaluation (M&E), Health Informatics, and Prevention Effectiveness (Health Economics) training. These will support various health interventions including surveillance and epidemic investigations/response, communicable and non-communicable diseases. Nevertheless, for the year under review, Colleges of Health Sciences, Humanities & Social Sciences and Agricultural & Environmental Sciences updated curriculum as highlighted in the table 4.

<table>
<thead>
<tr>
<th>College/Unit</th>
<th>Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocis</td>
<td>MSc. Record and Archives Management</td>
</tr>
<tr>
<td>Chs</td>
<td>Masters in Health informatics MSc Health Professions Education MSc. International Health Research Ethics</td>
</tr>
<tr>
<td>Chuss</td>
<td>Postgraduate Diploma in Gender and Local Economic Development</td>
</tr>
<tr>
<td>Chs</td>
<td>Master of Public Health</td>
</tr>
</tbody>
</table>

**Table 4: Programmes Reviewed**
2.3 Practical Orientation – (Internships)

The University strategy was to cultivate a leaner centred mode of instruction. Internships and field attachments create avenues for interaction between the students and the world of work before completion of the academic programme. Internship makes the classroom’s abstract theories and learned examples tangible by placing the student in a real life work situation. While there are formal engagements made by the University, the student community has initiated various activities that involve communities and enhance their appreciation of the interface between the university and its environment. For 2015, such initiatives included the College of Computing and Information Sciences Collaborating with New Vision and Mendex USA for systems development. The College of Engineering Design Art and Technology in partnership with KCCA focused on garbage management ideas in the Kitezi Project.

Twenty-six student interns from the CoCIS collaborated with New Vision on a digitalization to help in creation of different online systems among others included: Jobs auto for online posting of jobs and recruitment of workers; an online system for booking and monitoring of advertisements; and an online farmers system.

Kiteezi Project: Third year students in the Department of Architecture and Physical Planning undertook a 3-months research project at the landfill in Kitezi. The students in their dialogue and dissemination to KCCA noted that recycling and use of landfills for waste-disposal would not provide a permanent solution. They proposed that the landfills as an energy source would provide a new dimension to the concept of energy efficiency. Alternative uses proposed included making pipes out of the plastics at the site, plastic doors, tiles, gas, cards, and Bricks.
Brucellosis Control Conference

The School of Veterinary Medicine and Animal Resources (SVAR) organized and held a training on Brucellosis diagnosis and control. Experts from the Department of Microbiology and Parasitology, University of Navarra-Spain facilitated the training. Spain once held a world record of the most incidences of brucellosis but managed to bring the prevalence from 70% in livestock and 20% in humans to zero. It was for this reason that SVAR collaborated with the University of Navarra to train staff and students in the best practices in brucellosis diagnosis and control. This training had aspects of lectures, practical and a vaccination exercises. All 60 participants received a certificate of the University of Navarra and Mak.

Centre for Disease Control (CDC)
Support to graduate programmes for Scientific Writing

The MakSPH-CDC Co-operative Agreement continued to offer support to the Master of Public Health (MPH) programme by supporting students’ tuition, field training sites, outbreak investigations, manuscript writing and funds for field projects. By the end of 2015, 17 Year II MPH and 31 Year I students had attended the training.
2.4 ICT in Teaching and Learning

Mak is embracing the use of ICT in the delivery of its programmes using the Mak E-Learning Environment (MUELE). All the ten colleges have an online presence in MUELE. By December 2015, MUELE had 592 uploaded courses up from the 456 courses in 2013. College of Education and External Studies recorded a significant increase in uploaded courses from the 16 in 2013 to 82 in 2015. Deepening the MUELE experience in Mak, the KAYOKA project trained a number of staff to develop Multi-media E-learning Modules. Eleven (11) multidisciplinary staff from Mak have had an intensive two weeks training to build their capacity to develop multi-media supported e-learning materials. The training involved fieldwork, editing and organizing the materials for educational purposes in line with the course learning objectives. The project further procured modern state-of-the-art equipment installed at the Department of Extension and Innovations Studies. This equipment will enhance transfer of knowledge and boost the Distance Learning aspect of the institution while giving it competitive advantage in the region.

![Figure 1: Active Courses on the MUELE platform](source: Mak E learning unit January 2016)

College of Computing and Information Sciences (CoCIS) staff have finalised discussion on ways of cooperating with The Regional Universities Forum for Capacity building in Agriculture (RUFORUM) to incorporate ICT in boosting the agriculture sector. This support will inform curriculum development, build outreach and engagement platforms for increased reach, address commodity value as well as vibrant platforms that link universities to non-academic stakeholders at the National and International levels.
Annual Media Convention: The Department of Journalism and Communication hosted the Annual Media Convention to establish whether technology has enhanced communication and empowered people to be creative. The convention examined the use of platforms such as blogs, podcasts, wikis, and message boards in the production and sharing of media content.

Daily Monitor Managing Editor Carol Beyanga handing over the Tebere-Mudin award and a cash prize flanked by Professor Nawangwe (extreme left) and NTV Managing Director Agnes Konde (extreme right) who unveiled a new citizen journalism application NTVGO

Assoc. Prof. Aaron Mushengyezi, Dr. William Tayebwa and Eng. Godfrey Mutabazi (delivered a keynote titled; “Is Technology a Friend or Enemy?”)

The best performing Communication and Journalism Student, Samuel Kamugisha, who scored a CGPA of 4.49, was awarded with the Tebere-Mudin award and a cash prize of UGX 1 million during the event.
Mak Launches the Pioneer Mobile Application (Makapp)

The Quality Assurance Directorate (QAD), with support from the Swedish International Development Cooperation Agency (Sida), has developed the pioneer Mobile App with multiple platforms. This App empowers users to monitor activities, access information while allowing the University to show research evidence and other necessary functionality. Makapp integrates Courses Information, Makerere Publication Performance System, Graduate Tracking, Undergraduate Student Monitoring, Admissions cut-off and admissions information, equipment and facilities database, News and Student Guild Communication. The App has versatile attributes in mind extending to usability, effectiveness, efficiency, learnability, satisfaction, memorability and low-error rate. This app is available on the Google Play Store and www.qad.mak.ac.ug/makapp.apk.

2.5 Access to University Education

Since the inception of the private entry scheme, the University has adopted initiatives and partnerships to expand university education to both national and international students. Access opportunities target academic excellence, multidisciplinarity and students socio-economic backgrounds. Access focused programmes standing out in 2015 include the MasterCard Scholars Programme at Makerere University.

The ten-year programme that provides a comprehensive academic and social support package is in the second year of implementation. The MCF renewed their commitment to support 1000 youth from Africa. The programme awarded forty-six (46) scholarships for the academic year 2015/16. This brings the number of Scholars to ninety-five (95).

In similar provision, 173 students have benefited from the scheme to study in Mak for the Academic Year 2015/16 under the Higher Education Students Financing Board (HESFB), loan scheme introduced by the Government of Uganda in 2014. This compares with the 252 students admitted to Makerere University on the scheme in academic year 2014/15. The loan covers tuition, functional and research fees as well as aids & appliances for Persons with Disabilities (PWD).

Through the African Development Bank to Support the Higher Education, Science and Technology (AfDB-HEST) programme thirty-two (32) students from disadvantages backgrounds have scholarships to pursue undergraduate degree studies. In addition, Ten (10) students at Masters Level (research only) and 10 PhDs received AfDB-HEST scholarships.
Apart from the general scholarship, subject specific scholarships received during the year include the music Scholarship Fund by the Department of Performing Arts and Film; the Royal Kingdom of Saudi Arabia support to enhance the Arabic Language; the French Embassy to promote the French language in various disciplines; as well as the Chinese, Italian and Germany Embassies. These enhanced staff development, and instruction in their respective languages.

**Music Scholarship Fund:** Staff and students of the Department of Performing Arts and Film together with the performers of Uganda Heritage Roots held the inaugural Mak Music Scholarship concert. The Concert is a performance project intended to raise funds into a Music Scholarship Fund for academic sponsorship of talented students in Performing Arts and Film at Mak. The project a brainchild of staff from the Department of Performing Arts and Film and was born out of the realisation that several talented students could not afford tuition fees. Chancellor George Mondo Kagonyera, who presided over the concert, pledged to contribute UGX three million shillings towards the Fund.

**Saudi Supports Students to study Arabic**

The Royal Kingdom of Saudi Arabia provided a grant of USD 90,000 to support 20 Mak students to study Arabic language for a period of three years. The grant in addition will boost and promote the teaching of Arabic Language in the Colleges of Humanities and Social Sciences (CHUSS) and Education and External Studies (CEES).

### 2.6 Teaching and Learning through Visual Art

The Margaret School of Industrial and Fine Art, held several exhibitions during the year. The themes ranged from personal development and utilisation of local materials for construction to the ability to express divergent views through Art. The pictorial captures some of the **Exhibitions and Activities over** the year.
Artist/curator **Rebeka Uziel** from Israel organized this unique display of new works by lecturers from Margaret Trowell School of Industrial and Fine Arts at Makerere.

65 year old **Sanaa Gateja** is a Ugandan artist, whose practice focuses on creating environmentally conscious art, re-using found objects that many people would unthinkingly disregard as garbage. He also has a passion for using indigenous materials such as backcloth in his work.

His show took the audience on a journey exploring his artistic development through life, and also challenging his viewers to reconsider what they regard as having value. The exhibition comprised of wall hangings, sculptures and wearable art made out of bark cloth and paper beads.
The Exhibition was an outcome of the Art Work workshop in partnership with Margaret Trowell School of Industrial and Fine Arts, Maisha Foundation and lettera27. This workshop saw students questioning everything they thought they knew about themselves, their cultures, their identities. The certainties, the preconceptions, the conventions have been crumbling down like sand castles. Every posed question opened a new perspective, a new door, and a new interpretation of their daily artistic practices.

“Beautiful Imperfections” was an exhibition of sculptures by Ivan Allan Bwambale, Emmanuel Lwanga and Patrick Mulondo teamed up for an exhibition of their latest works. The art works are assemblages from various scrap metal pieces, forged metal and assembled slab technology; where each artist recycles, transforms and redefines the once rejected objects into beautifully thought through artworks that become a dialogue between the artist and his environment.

Permanent collection exhibition was an event that hosted over 10 Ambassadors of Uganda where important works including the finest paintings from the independence decade to the early 1990s from the permanent collection of Makerere Art Gallery/IHCR were temporarily displayed for viewing by the public.

Mathias Tusime is a staff member of the College of Engineering Design Art and Technology, where he has worked as a cleaner since 1999. Unlike other staff members who have stuck to their job boundaries, Tusime did not settle at being just a cleaner. With profound curiosity and a desire to learn, he interacted and engaged with art students and art teachers.

Without any formal education, the self-taught artist and paper maker has developed a personal style of painting which has seen him blossom in the art scene both nationally and internationally.
3 RESEARCH AND INNOVATION

Mak has uniquely positioned herself among universities in Uganda to differentiate by advancing basic and applied research in both humanities, science and technology and related innovations. The University continues with her quest to become a research led institution. Initiatives to improve the research thrust and strengthen research capacity include Doctoral Supervision and Mentorship Training as well as software driven anti-plagiarism developments. For the year in review, the volume of research output increased. A review of the research databases Elsevier -Scopus and web of science show a significant improvement in the number of research publications by Makerere University staff. As part of the research support system, Council approved the Research and Innovations Communication Strategy (RICS). The goal of the RICS is to institutionalize a coherent approach to communicate Mak’s research and innovation outputs to increase their relevance and uptake by various end-users.

At the institutional level, key developments have emerged in agricultural, health and ICT research. Two centres have evolved from University research activity, the Centre for Climate Change Research and Innovations based at the Colleges of Agriculture and Environmental Sciences, for Climate Change, the Lung Institute and Malaria Centre in the College of Health Sciences.

3.1 ICT Research

ICT research for the year focused on the areas of machine learning, security, ICT for development, model and web based systems, E-Learning, mobile computing and communication, Documentary heritage, education records management, information policy and publishing, knowledge management, ICTs for Libraries and LIS Curriculum. The main mode of generating ICT based innovations has been through competitive research grants and international networks. Foundations including the Bill and Melinda Gates Foundations, Google and USAID under the Resilient Africa Network have provided financial support to the College of Computing and Information Sciences to develop ICT applications that target community for agriculture, health and other day-to-day engagements.

Projects such as the AgShare have provided indigenous knowledge preservation in the areas of cattle keeping, banana, beans, cassava & maize growing and poultry. The research findings uploaded on the online OER database. Some of the developments were:

a) Traffic Monitoring App: a group of Mak PhD researchers at CoCIS have invented a traffic congestion monitoring app for developing cities which is cheaper compared to the prevailing technology and can help users to always predict their traffic time. The motivation for the research was the traffic congestion in Uganda, where people spend a good percentage of productive work time in traffic jams. Computer vision techniques is used to take a sequence of images, which will calculate traffic flow speeds through manual calibration.

b) Kudu-mobile: Mak in collaboration with UC Berkeley and UC San Diego has come up with Kudu – a mobile auctions system (http://kudu.ug) for agricultural produce Uganda. This mobile auction
system is used for buying and selling agricultural produce aided by free SMS exchanges between buyers and traders. The field trial attracted produce worth $1.7 million. The traders send a single text message, and the system takes into account price, location and other factors to find the best matches.

Using the Whitefly app cassava farmers can take a picture of the cassava leaves using the mobile phone camera and diagnosis is done via the app. The diagnosis allows for early discovery and treatment options before the diseases spread to other crops. The research aimed at boosting cassava production through disease diagnosis in early stages. This work is part of the a broader programme supporting work in the Artificial Intelligence and Data Science research group of the School of CIT.

d) Mak research has further enabled Prediction of Infectious Disease Spread in Uganda using Telecoms Data. The project involves analysis of statistics collected from telecoms companies in Uganda to monitor the movement of the population in order to predict the spread of threatening infectious diseases. The map here shows an example of population movement measurements which can be used for this purpose. The project is in collaboration with United Nations Global Pulse.

e) Mobile Laboratory Diagnostics through the Grand Challenges Grant, students in CoCIS have developed Mobile Laboratory Diagnostics using 3D-printed Microscope Adapters. The procedure uses 3D printing technology to produce adapters by which phones with cameras can be mounted on a microscope eyepiece. The software then carries out image processing in order to count parasites and pathogens. Work has focused on malaria diagnosis, and is expanding into identification of tuberculosis bacilli and intestinal parasites. The project is in collaboration with clinicians in Mulago National Referral Hospital.

f) E-Musawo Apps: Young innovators from the CoCIS and the School of Public Health displayed innovation products and processes that can provide access to safe water, health care and re-establishing family links. Among the innovations was the Ceramic Organic
Filter used to decontaminate water without boiling. This innovation is meant to help control water borne diseases in areas with infected water. An emergency Telemedicine system (E-Musawo), a mobile appliance used in examining patients’ pressure was exhibited along with Musawo Drugs, a mobile app that helps to authenticate drugs, show drugs’ details, identify the cheapest drugs and the nearest hospital from which people can access those drugs. This is to help people to access quality medical services at affordable prices. Other innovations include a Blind Mobile user app, RootIO -a community radio, which uses a mobile phone to broadcast- Low Cost Solar Pump and Gasifier Stoves for purifying water.

To highlight all these and other developments, CoCIS held the Innovation Exhibition ‘CoCIS connect’ with over 6,000 students. The College set new trends with regard to ICT education, research and innovations in Africa to help solve the ongoing national and global challenges such as climate change, food security, health, education and national transformation. The novelties were showcased in CoCIS connect under the theme; “From Invention to Innovation”.

3.2 Agricultural Research

In the area of agriculture, research milestones during the year included, low cost mechanised solutions, animal diseases and response to climate change.

a) The MV MULIMI Project College of Agricultural and Environmental Sciences under the Department of Agricultural and Bio- systems engineering (ABE) invented a three wheeled Farmers Multipurpose tractor code named the “MV Mulimi”.

MV MULIMI project is a multi-purpose low cost mechanized solution for small scale farmers in Uganda created from locally available materials. The project was supported under the Presidential Initiative for Science and Technology at a total cost of UGX 25 million. The tractor uses diesel fuel less than a half litre per day. The three-wheel vehicle was built completely out of parts and materials available in Uganda. Most of the main driveline and suspension parts are recycled from old cars. The MV Mulimi was designed with flexibility as to the type of cars and light trucks from which the parts are taken. The frame is designed with a large central power train “tunnel” that can fit a wide variety of transmissions and engines. The overall length, width, and height of the vehicle are respectively 3.7m, 1.5m, and 1.8m.
The bed is 1 m wide and almost 2 m deep, giving a total cargo area of 1.9 m². The wheelbase is about 2.5 m. MV Mulimi is designed to use a small diesel with an Engine of 13 HP.

**The tractor with the plough**

MV Mulimi has been tested for and is capable of performing five (5) tasks, namely; threshing maize to reduce post-harvest losses; pumping water for irrigation; charging phones to keep farmers informed of agricultural produce markets; hauling agricultural produce up to 1 ton and ploughing fields. The tractor can also transport up to 1.5 tonnes of agricultural produce from the farm to home or market. In terms of persons, the MV Mulimi can carry up to 18 people. Mulimi project was spearheaded by Professor Noble Banadda the Next Einstein Fellowship (NEF) 2015 Award winner. The NEF Scientific Program Committee lauded Professor Banadda’s scientific achievements, his potential for leadership as well as the number of scientific publications he has under his sleeve.

b) **Epidemiology and Characterization of Influenza Viruses in Animals in Uganda**: In partnership with Makerere Walter Reed Project (MUWRP), the College of Veterinary Medicine and Bio Security carried out research in the North, East, West and Central areas of Uganda with study sites that included 110 live bird markets, 18 wetland sites, and 664 farm households. The research was to establish the prevalence and molecular characteristics of Avian Influenza (AI) Viruses in poultry, swine and migratory birds. It was discovered that Influenza A Viruses are a threat to agricultural biosecurity and public health worldwide, including Uganda. Among the 20 migratory birds that visit Uganda, eight are high-risk species for spread of Influenza Virus.

c) **Agricultural research during the year extended to assessment of the use of indigenous plant and non-plant practices in goat farming.** The research focused on **Antihelminthic Resistance and Evaluation** among goats in Uganda. Specific attention was made to the oral aqueous leaf extracts of 3 plants adopted by farmers and found to be less toxic in mice. The study observed the need for validation, feedback, and conservation of endangered species. Of significant importance was the analysis of plant extraction compared against the conventional anthelmintics.

d) **Social-Economic Impact of African Swine Fever**: Mak’s CAES, with funding from ILRI-USAID-BEC carried out research at the Uganda – Kenya border in Busia District and Teso region respectively to assess the knowledge, perceptions and practices of smallholder farmers with regard to African Swine Fever (ASF). While was discovered that 60% of the farmers were aware of ASF risk factors, however, 65.3% did not know what to do when their pigs got infected. Outbreaks of ASF are characterised by food insecurity, loss of income and expenditure, loss of social obligations and inadequate response management practices. The inadequacies generate actions that facilitate rampant spread of the disease. Therefore highlighting the need for more vigilance from government through information dissemination, incentives, quarantines, equipment, laws and rules to reduce vulnerability.

e) **The 1st Climate Change and Opportunities for Sustainable Business in East Africa Conference** was organised to share ideas on how to strengthen the capacity of universities to address issues to do with climate
change, environment and natural resource management. The theme was “Supporting the 2015 Paris Climate Change Conference: Climate Change and Opportunities for Sustainable Business in East Africa". Participants developed a Communiqué that was presented at the United Nations Climate Conference (COP21) in December 2015 in Paris, France. The conference was organized in partnership with the University of Bergen and the Norwegian Embassy in Uganda. The conference resolved to establish the Centre for Climate Change Research and Innovations. 

The Vice chancellor’s representative Professor John Muyonga (3rd from right) and the PI (5th from right) pose for a group photo with participants

e) Centre for Climate Change Research and Innovations established (MUCRRI) in CAES. The centre is expected to transform MUCCRI into a leading centre for climate change education and research in the East Africa and entire Africa and to use it as a platform to develop the capacity of university staff, government officials, civil society, and private sector actors to better understand climate change, the impact, adaptation and mitigation.

Principal CAES, Professor Bernard Bashaasha addressing participants at the conference that endorsed MUCCRI
3.3 HEALTH RESEARCH

a) Mak-School of Public Health commissioned to carry out the first ever National Population-based Tuberculosis (TB) Survey. The 18-month survey was designed and conducted to determine the prevalence and burden of TB disease in Uganda. The purpose of the survey was to obtain data and evidence that was to be used to improve prevention and control of TB in Uganda. The survey enrolled 40,000 people in 56 districts of Uganda above the age of 15. The survey supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria and WHO was designed improve the accuracy of data regarding planning for TB control and prevention.

b) The Infectious Disease Institute (IDI) concluded its research on Specific Antiretroviral Therapy Drug-Drug Interaction and the impact it has on reproductive health. The study in collaboration with the University of Nebraska found that efavirenz, a commonly used HIV drug, could compromise efficacy of a family planning implant containing a drug called levonorgestrel. The study concluded that alternative contraceptive methods should therefore be considered for women on efavirenz.

Mak-College of Health Sciences Establishes a Lung Institute. The main aim of the Mak Lung Institute (MULI) is to stimulate high quality lung health research, training and clinical care programmes within the university in order to improve lung health of Ugandans and beyond. The MULI was established under the auspices of the Lung Consortium International. To support the smooth running of the MULI activities; two boards were established; the Board of Governors and Trustees and the Institute Technical Board.

3.4 Policy & Social Research

Policy research during the year centred on development of dialogue with key national and international stakeholders in the areas of economy, higher education, and reproductive health. These were organised by university units, namely, the Colleges of Business and Management Sciences, Humanities and Social Sciences as well the Makerere Institute of Social Research (MiSR).

a) National Economy Dialogue

The School of Economics in COBAMS, in collaboration with the Ministry of Finance, Planning and Economic Development and United Nations Development Programme organized a high-level policy dialogue on Uganda’s Economy under a Theme: “Directions, Prospects, and Challenges”. This dialogue was aimed at ear marking the best practices to ensure economic development while
ensuring sustainability. The dialogue drew participants from the industry, academia, policy makers and the international community. Within the realm of higher education and relevance to national development needs, MISR hosted a **Public Policy Forum on Higher Education**. This forum attracted participants from research institutional, Development agencies and Embassies in Kampala. There were representatives from the National Planning Authority, Civil Society, Swedish Embassy staff, National Council of Higher Education, and the general wider public.

b) **Launch of the Uganda History, Archaeology and Heritage Association:** The first ever Uganda History, Archaeology and Heritage Association was launched. The major goal of the Association is to promote the disciplines of History and Archaeology through intensive research and quality publications and support the current regime of Historians to “fit in the shoes of eminent scholars”.

c) Other policy oriented research initiatives involved research trying to establish the stalled fertility in Uganda and how to address the associated challenges; understanding the socio cultural context of birth experience for women in Uganda; assessing the capacity of 30 districts to integrate population factors in development plans at local government level; and developing a research agenda for the country population programme under The **Centre of Population and Applied Statistics (CPAS)** in the College of Business and Management Sciences.

d) The College of Humanities and Social Sciences, School of Women and Gender Studies was part of the **launch of UN report on status of women:** Uganda launched the flagship report highlighting the progress of women globally. The report titled; **"Progress of the World’s Women 2015-2016: Transforming Economies, Realizing Rights"**, was launched by the State Minister for Gender, Labour and Social Development, Hon. Rukia Nakadama Isanga. The evidence-based report provides ten key recommendations for action that Governments and other authorities can take in order to move towards an economy that truly works for women. It highlights non-discriminatory benefit in areas such as creation of more and better job opportunities for women; reducing occupational segregation and gender pay gaps; strengthening women’s income security throughout the life cycle; recognizing, reducing and redistributing unpaid care and domestic work as well as investing in gender responsive social services and maximizing resources for the achievement of substantive equality.

e) In the context of the ongoing political environment, Professor Sabiti Makara **et al** from CHUSS launched a book.
entitled *Elections in a Hybrid Regime: Revisiting the 2011 Ugandan Polls.* The book provides a multidisciplinary approach and a multifaceted analysis of the 2011 elections in Uganda. It provides field-based insights into critical, but often under-appreciated aspects of the electoral process. The publication was an outcome of a joint academic project between the French Institute for Research in Africa and Mak Department of Political Science and Public Administration, supported by the Democratic Governance Facility.

f) **CHUSS’ Borderland Dynamics in East Africa Project:**

Participants from the border communities in Kitgum follow the presentation by Aguto Above

PhD students from CHUSS sponsored by the NORHED held a dialogue with over 41 residents of Namokora and Orom sub-counties in Kitgum District to among other things discuss the livelihood of the Acholi people after the 20-year long LRA war. The dialogue brought together NGOs, security personnel, religious leaders and media practitioners under the theme “Acholi Experience of Belonging after the LRA War and Life across the Uganda-South Sudan Border”. The changing patterns of Acholi identities after resettlement were analysed; the influence of borders in defining an Acholi in the context of war, Internally Displaced Persons (IDPs) and resettlement; the clan and elder system in defining an Acholi today and the significance of religious practices in the post-war Acholi. The contributions of the local communities form part of the policy briefs to government.

g) **Early Childhood Education (ECE) and Care**

Developments in education have focused on early childhood and education. The College of Education and External Studies with support from UNICEF Uganda hosted the National Dialogue on Early childhood Care and Education under the theme: *Taking early childhood care education seriously.* Participants made recommendations and action points for a comprehensive integrated childhood care and education system involving government, parents, childcare centres, higher education institutions and health workers. The dialogue also advocated for an ECE integrated approach in higher education institutions where all students are trained on parenting and early childhood education.

In partnership with the Ministry of Education, Science, Technology and Sports and Early Childhood Development Training Institutions’ Associations Uganda (ECDTIA-U), The College of Education and External Studies has mapped out ways to strengthened Uganda’s Early Childhood Education, Development and Care. It is envisaged that through the Centre for Teaching and Learning Support over 100 Early Childhood Development Training Institutions in the country will be affiliated.
This partnership has multiple implications and directions pivoting on: collaboration in the assessment & certification of early childhood development and childcare trainees; capacity building for early childhood development and education trainers and other related stakeholders.

3.5 The Presidential Initiative For Science And Technology

The Presidential Initiative for Science and Technology at Makerere University commenced in 2010. The first phase of funding concluded in the year under review with remarkable contribution. The initiative has enhanced the platform for the University to contribute to national development through knowledge generation, innovations and transfer by integrating the community the academia and research. Some of the key achievements include innovations in food technology and agro processing; engineering and transportation technologies; community based value addition and networking. The initiative has extended to skills enhancement for youth in areas of animal production technology. The initiative supports three colleges at the University including the College of Engineering, Design Art and Technology (CEDAT), the College of Agriculture and Environmental Sciences (CAES), specifically the School of Food Technology, Nutrition and Bio-engineering; and the College of Veterinary Medicine, Animal Resources and Bio-security (COVAB).

The Food Technology and Business Incubation Center (FTBIC) at the College of Agriculture and Environmental Sciences (CAES) has six years of enterprise development and creation of opportunities in the food industry. Milestones under the FTBIC have been research in agro-processing and capacity built to accommodate more production processing and business incubation. More than 1300 students, staff and the general community has been trained in entrepreneurship. Business enterprises have flourished and staff and student capacity for developing commercial products enhanced.

Processing and Office Space: The FTBIC started from the Food Pilot plant an area of 460 m2 where all the process lines we installed. The first phase of the construction measuring 1200 m2 is complete and provides 2 separate process areas and office space for incubatees and incubator staff. This additional space has enabled the incubator to admit more incubatees and to undertake increased production. The second phase is planned. This will provide additional processing space as well as space for a variety of labs and teaching space.

Processing equipment: In addition to the fruits and vegetables line which previously existed, the centre has procured, installed and operationalised a meat processing line, a dairy line, bakery equipment as well as a gable packing machine. Using the meat processing line two incubatee SMEs are able to produce and market meat cuts, sausages, smoked meat, frankfurters and meat loaf to meet high-end market needs.

A diverse range of analytical equipment both for the food microbiology and food chemistry labs have been procured and are used for determining the nutritional content and safety of foods produced under the FTBIC. Equipping of the lab has also made it possible to expose Makerere University students to modern analytical techniques, enhancing their skills to internationally expected levels. Laboratory equipping has also enabled staff improve the quality of research outputs. Plans are under way.
to have the laboratories accredited with International Standards Organization.

In collaboration with a UK based firm, the FTBIC designed a mobile fruit processor, with the aim of facilitating value addition in fruit and vegetable processing areas, as a way of creating markets for farmers. The first Mobile Processing Plant was completed by 2012 and has since been deployed in different parts of Uganda. This would be a major boost to the local economy and a demonstration of the potential of agro-processing to contribute to wealth creation.

The Centre for Research in Transportation Technologies [CRTT] Kiira EV The Kiira Motors has evolved from the international collaborations to develop the Turin smart car in 2007. The research thrust has since developed the: The Kiira EV, The Kiira SMACK, & the Kayoola Solar Bus a heritage of African Science and Technology Innovation.

This program has been supported by a wide spectrum of artisans, craftsmen and technicians especially in the informal manufacturing sector. These skilled personnel have demonstrated readiness for fabrication of vehicle seats, body building from metal and fibreglass, mechanical and electrical system physical integration. This is a true testament of the availability of a labour pool in Uganda capable of supporting the Automotive Manufacturing Industry

SPEDA at the College of Veterinary Medicine, Animal Resources & Bio-security is imparting skills for production and development: The Presidential Initiative support through SPEDA and AFRISA has enabled the introduction and implementation of an innovative alternative model of delivering higher education through promoting skills, production, employment and development in animal resource value chains and industries (SPEDA). This initiative is spearheaded by the College of Veterinary Medicine Animal Resources and Bio-Security. The innovation is filling the gaps where the traditional models of tertiary education, research, outreach and human capital development had failed to transform the youth and common person and instead fueled youth unemployment and poverty. The College has continued to implement this alternative model of Higher Education under SPEDA among Post-Secondary School Leavers especially the youth in all regions of Uganda.
Clinical students at the college training at Nakyesasa Animal Farm

At the **College of Engineering, Design, Art and Technology (CEDAT)**, The Presidential Initiative has focused on improving research facilities especially the rehabilitation and modernisation of laboratories. Some of these include materials, thermodynamics, fluids, water resources, telecommunications, power, electronics, soil mechanics and the environmental laboratories as well as the public health lab among others. The fully equipped laboratories have placed the College as a regional hub for engineering research. They have further created a national resource to facilitate engineering research for the public and private sectors in Uganda.

**Laboratory Equipment Procured under the Presidential Initiative**

**The Computer Lab**
Other components under the College of Engineering Design Art and Technology include:

1. Innovation Systems and Clusters Programme; Enhancing Innovation and competitiveness in business among SMEs, 75 cluster initiatives have been launched country wide, representing different sectors of Uganda’s economy.

2. The ARMS Project has created a blend of relevant pedagogical experiences and industry-grade information system solutions

3. The Centre for Research in Energy and Energy Conservation (CREEC); has enhanced access to modern types of energy through applied research, training and consultancy within Uganda and the East African region.

4. The Center for Technology Design and Development, (CTDD) is at the forefront of facilitating technology development and transfer activities in the college.

5. Low Cost Irrigation Schemes Project which has promoted adoption of irrigation technologies by smallholder farmers to irrigate crops and guarantee all year production and hence improve food security of the country. For the year in review, the project established a Demonstration Irrigation System at Makerere University Agricultural Research Institute Kabanyolo with three facets of Institutional water supply, Irrigation and Water for animals under the zero grazing scheme.

6. The MakaPads; addressing the plight of girl child in rural schools

3.6 Support To Research Function (Grants)

External funding has significantly to the research profile of Makerere Universities. The University had more than USD 50m worth of running projects in 2015. Several of these are multi-year projects from partners in health, notably, the National Institutes of Health, Welcome Trust, USAID and Carnegie Corporation of New York. At the institutional development level, the Makerere-Sida Bilateral Research Programme stands out as a predominant player in the University research process. Sida support to Makerere spans more than 15 years and captures, basic and applied science as well as research capacity and support systems.

**Makerere-Sida Bilateral Research Programme-Sida Phase III (2010 -2015)**

Mak has been implementing the Makerere–Sida Bilateral Collaborative Research Support programme 2000-2009. The overall goal of the programme is to assist Uganda in its efforts to promote research for attainment of new knowledge. In support of an environment conducive for research and research training, the programme coined the slogan “To support the supervisor to supervise” through collaboration with universities and scientists in Sweden and elsewhere. The research programme now in the fourth phase of implementation is coordinated by the Directorate of Research and Graduate Training (DRGT). The fourth phase running from 2015-2020.

The Sida bilateral collaborative research programme has been the largest so far at Mak. The planning phase of the bilateral research support programme was in 2000-2001 to a tune of SEK 15.0 million, followed by Phase I (2002-2005) for a total research support of SEK 104.110 million; Phase II (2005-2009) supported with SEK 181.0 million; Phase III (2010 –2015) supported with 215 million and Phase IV (2015-2020) to a tune of 267.816 million SEK making the total Sida support to Mak for the period 2000 – 2020 of SEK 782.926 million equivalent to USD 112 million.
Cambridge Africa Partnership for Research Excellence (CAPREx)

The CAPREx Project is a partnership of Mak, the University of Ghana Legon and the University of Cambridge. The Project inaugurated in October 2012 supports the development of African academic research, research management and internationalization. The three-year US $ 1.2 million grant from the Carnegie Corporation of New York (CCNY) built on and complemented existing initiatives in both Universities to ensure sustainability. The Carnegie Corporation of New York has awarded CAPREx a successor grant to the tune of USD 1,000,000 to support 24 Academic Fellows from Mak and the University of Ghana in the period 2015 to 2017.

Consortium of Advanced Research Training in Africa (CARTA)

As a member of the Consortium of Advanced Research Training in Africa (CARTA), Makerere University had by 2015 more than 300 Faculty and Administrators who had undergone the CARTA training. The CARTA Initiative aims at strengthening doctoral training, supervision and developing the institutional capacity of participating universities to conduct and lead internationally competitive, cutting-edge research. CARTA among other programmatic activities procured the Turn-It-In research software meant to improve research ethics and the quality of PhD supervision.

College of Health Sciences Set to Develop a Research Support Centre

Wellcome Trust (through Training Health Researchers into Vocational Excellence in East Africa (THRiVE), NACCAP II – University of Amsterdam, National Institutes of Health and Mak) has given generous support to CHS to set up a Research Support Centre (RSC). The Centre will bring together existing geographically scattered research management functions (research support, legal, finance, grants and contracts, research training, knowledge translation, scientific and ethical review of research, procurement) on the two CHS campuses (MakCHS-Mulago campus and Mak main campus). This is meant to reduce delays in processing requests or applications and encouraging emerging and established researchers as users of the services. It will also provide space to add key research administration and management (RAM) services to the college research management system including: monitoring and evaluation, research integrity/compliance, legal and intellectual property management, consultation services for RAM and innovations and knowledge translation that are critical for proper management of grants at the College. The RSC will further provide space to undertake private study to the expanding pool of doctoral and research fellows to improve their performance and productivity.

The Alliance for a Green Revolution in Africa (AGRA)

funded acquisition of the modern state-of-the-art equipment for the Microbiology laboratory at Kabanyolo (CAES) under the new project dubbed, “The Improved Masters Project in Caltivar Development (IMCDA)”. The acquired equipment includes the Geno grinder, an automated system to study genetics and DNA. The grinder has a capacity to grind 380 plant samples in three minutes. Previously, lab scientists used a manual motor to grind and this would take three weeks to grind the same amount of plants. The other equipment
acquired are the Polimeris Chain Reaction (PCR) that allows the multiplicity of DNA and the Enzyme Linked Immuno Sombet Assay (ELISA) for routine detection of pathogens that affect plants like bacteria, fungi and viruses. Additional support to MUARIK was from the Office of the Prime Minister (OPM) for new equipment for the rehabilitation of the weather station, funding for fencing and the purchase of vital equipment at the station at Kabanyolo.

Developing Value Chain Innovation Platforms for Food Security in Eastern and Southern Africa (VCIP4FS) launched:

VCIP4FS is a four-year project (2015-2019) whose overall objective is to identify principles and drivers that can support innovation platforms to improve food security by connecting smallholder farmers with markets. It will focus more on enabling youth and women improve their livelihoods. This initiative is funded by the Australian Government through the Australian Centre for International Agricultural Research (ACIAR). It is coordinated by the World Agro forestry Centre (ICRAF) in partnership with the governments of Uganda and Zambia. The total project budget is 4.2 million Australian dollars. Of this, 3 million Australian dollars is from the Government of Australia and the other 1.2 million Australian dollars is a contribution from partner governments of Uganda and Zambia, University of Adelaide and ICRAF. In Uganda, the project is implemented in Kapchorwa and Manafwa Districts.
COVAB in National Integrated Surveillance of Antimicrobial Resistance

Uganda was selected by the World Health Organization (WHO) Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR) to implement the two-year project entitled “Movement pathways of antimicrobial agents and occurrence of antimicrobial resistance in humans, food producing animals and retail foods in Uganda”. The competitive grant won by Makerere University represents the institutional capacity. It further signifies strengthened laboratory capacity for undertaking conducting research that will guide policy making in the country. The concept of antimicrobial resistance call for a multi-faceted, multi-disciplinary approach generated from different stakeholders. The success of this project may ultimately put Uganda in a more informed position to develop a national programme on integrated surveillance for resistance. The College of Veterinary Medicine, Animal Resources and Bio-security (COVAB) will be at the forefront in the implementation of the project.

Resource Mobilisation and Grant Capacity Development at the College of Health Sciences

The CHS Grants & Contracts Office identified and circulated over 250 relevant funding opportunities; supported 17 teams in proposal development and submitted 14 proposals. During the period under review, CHS received seven new grants including:

- A five-year National Institutes of Health grant entitled, ‘Building Implementation Science Capacity in HIV at Mak.
- A six-year sub-contract from the University of Bergen, Norway for the project, ‘Malaria Chemoprevention for the post-discharge management of severe anaemia in children in Malawi, Uganda and Kenya: Moving towards policy.
- A five-year sub-contract from the University of Oxford entitled, ‘The Pathogenesis and treatment of nodding syndrome.’
- A five-year National Institutes of Health grant entitled, ‘NURTURE: Research training and mentoring programme for career development of faculty at Mak College of Health Sciences.’
- A one-year subcontract from the University of Yale entitled, ‘Mobile Health for Implementation of home-based TB contact investigation in Uganda.
- A three-year fellowship grant from MQ- Transforming mental health for a project entitled, ‘The effects of group psychotherapy delivered by lay health workers on depression among persons living with HIV in rural Northern Uganda.
- A three-year National Institutes of Health grant entitled, ‘Reducing stroke burden in Uganda,’ an award to Mak College of Health Sciences in collaboration with the Case Western Reserve University.

3.7 Research Dissemination & Publications

Research dissemination and output defines the productivity of Makerere University in this core area. Dissemination over in 2015 included, conferences organised by University Colleges, seminar series, workshops, dialogues and exhibitions. While these dissemination mechanisms place Makerere University research in the national public domain to influence policy, research publications in international refereed journals give Makerere University the academic competitive edge, which has placed it among the best universities in Africa. Research profile and competence further manifests in the number of PhDs enrolled by the different Colleges. The University undertook a research audit to assess research productivity and impact volume of research, research outputs, research funding. The data from the audit will provide a baseline for assessing productivity and impact of research and innovations at Mak in future. The year in review marked the rebirth of inaugural lectures when Professor Oloka Onyango gave his Ghosts and the Law. This section presents the different avenues in which Mak has been able to interact and disseminate its research findings.
Fig 2: Makerere University Research Output captured in the Elsevier- Scopus Database 2015

FIG 3: Authors with the Largest Number of Publications in the Scopus Database
In this highlight of academic excellence and contribution to knowledge, Professor Joe Oloka-Onyango gave an inaugural lecture titled, Ghosts and the Law, not at the beginning of his career but rather closer to its twilight. During the lecture, Professor Oloka-Onyango revealed that ghosts, which take on varied shapes, had long haunted the Ugandan law and sizes as the common law itself. He highlighted scenarios in which court declined to hear cases because they fall under the “political question doctrine” hence failure to call on the government to act on the aggrieved matters. He nevertheless remained hopeful that one day, Public Interest Litigation (PIL) will eventually triumph, leading to reconciliation between the two ghosts; one backward-looking in support of extra-constitutional overthrow of government, and another which aspires for the protection of fundamental human rights, with the hope that the good one will prevail. The Vice Chancellor awarded Professor Joe Oloka-Onyango a plaque and certificate in commemoration of his fundamental duty as a full Professor of Mak.

Inaugural Professor William Ssendeza Kajubi Memorial Lecture
Launch of RUMPELHA at COVAB

The Regional Universities Mediated Partnerships for Enhancing Livelihoods and Health in Africa (RUMPELHA) was launched during the fourth International Scientific Meeting on Sustainable Livelihoods and Health in Africa. The theme was “Sparking Innovations for Sustainable Livelihoods and Health Security in Africa”. The international scientific meeting marked the end of Capacity Building in Integrated Management of Trans-boundary Animal Diseases and Zoonoses (CIMTRADZ) project, and the beginning of RUMPELHA. RUMPELHA comprises University led partnerships structured at regional levels with the summit housed at The African Union (AU) and it emphasizes food security, global health security and transformative higher education for development.

2nd International One Health Conference

COVAB participated in the 2nd International One Health Conference in November. The conference, brought science, policy and practice together. It aimed at framing effective strategies necessary for prevention, early detection and control of emerging infectious diseases now and in the years to come. The One Health Conference focused on three sub-themes; 1) Emerging Diseases: Pathogens and their Interface, 2) Innovative Multidisciplinary Intervention Strategies and 3) Emerging Pandemic Threats Preparedness and Response. Participants included scholars, One Health practitioners and policy makers, development partners, students from different disciplines in institutions of higher learning, private sector players who shared experiences and craft recommendations to advance One Health approaches in the region.

Eastern African Literary and Cultural Studies Conference

Literary and cultural scholars from across the globe converged at Mak for the second Eastern African Literary and Cultural Studies Conference to discuss ways of enhancing literary exchanges and dialogue in the Eastern African region as well as celebrating artistic productions. Organized under the theme: “Textualities of Space: Connection, Intricacies and Intimacies”, the Conference attracted participants from the East African region, Southern Africa, West Africa, Europe and North America. Participants discussed a wide range of issues including; East Africa in the global arena; trans-culturalism, trans-nationalism and regionalism; theorizing popular imaginaries; language and ideology; cultural identities; gender identities and masculinities; poetics of violence; mixed race relations; childhood narratives; print culture and digitization as well as diasporic and migrant narratives.

Participants in a group photo with the High Commissioner of Trinidad and Tobago who officially closed the conference
International Research and Innovations Dissemination Conference – April 2015

The Mak International Research and Innovations dissemination conference took place at Hotel Africana, Kampala Uganda. The primary objective of the Swedish Embassy in Kampala supported funded conference was to disseminate results and outcomes of the research and innovations supported by the Swedish Government to Mak. It was attended by over 500 guests comprising of international and national delegates.

The conference under the theme ‘Community transformation through research, innovations and knowledge translation’, brought together scholars from different parts of the world to share their research findings. This was the biggest research and innovations dissemination event organised by Makerere. The conference focused on five parallel research theme covering the University research agenda and embodied in her strategic plan. The themes were:

(i) Health and Health Systems
(ii) Natural Resource Utilization, Conservation and Environmental Sustainability
(iii) Food Security, Safety and Value Addition
(iv) Culture, Socio-Economic Transformation, Social Justice, Governance, Conflict and Disaster Management
(v) Advances in Education, Science and Technology

The managers of the Sida Phase III Bilateral Programme received awards for their outstanding performance and programme success. Other awards included: Mak Management, Sida Steering Committee members, Sida Sub-Programme Coordinators and administrators as a token of appreciation.
4 KNOWLEDGE TRANSFER PARTNERSHIPS

Introduction
The University Strategic plan envisioned a paradigm shift from outreach to Knowledge Transfer Partners (KTP) as a means of cultivating and fostering of symbiotic relationship between the University and her stakeholders. KTP has been the avenue through which Mak has shared knowledge with the public and private sector. Most importantly, the University has gained mileage and exposure to real life situations that enhance learning by staff and students. For the year under review, developments included:

The Royal Enclosure
College of Engineering Design Art and Technology Architecture students developed the design for the proposed Ekisaakaate Kya Nnabagereka Centre of Excellence (The Royal Enclosure). James Kalyango designed the project. The foundation promotes local talents, values, culture, Architecture hence the choice of having a Mak student design the project. The site is located on 25 –acres of land at Ssisa, Wakiso District and the master plan sits on 15.7 acres. It comprises of the main building, dormitories for both male and female students, gardens, music and dance auditorium, art studios, swimming pool, playgrounds and offices among other things. The project will have a permanent home with these efforts.
The Infectious Diseases Institute (IDI): IDI Outreach Programme gets another Five years:

Mak IDI Outreach Programme has been supporting HIV/AIDS prevention, care and treatment services in the seven districts of mid-Western Uganda (Kiboga, Kyankwanzi, Kibale, Hoima, Masindi, Buliisa and Kiryandongo) using the Health Sector Support approach since 2008. The districts have been supported to provide an enriched HIV prevention care and treatment package that includes HIV prevention messages; risk reduction counselling for HIV negatives; positive health, dignity and prevention for the HIV positives. At the end, the expanded Kibaale, Kiboga Project in March 2015, 30,837 HIV-positive clients were active in HIV care (compared to 3,678 at inception). The upcoming five year phase (2015-20) titled “Accelerating Comprehensive HIV/AIDS Service Delivery through Health Systems Capacity Building and Technical Assistance to District Health Teams and Health Facilities in the Western Region of Uganda”, is focusing on Bunyoro region.

Figure 3: Patients receiving HIV/AIDS care and treatment across the seven districts (2009-2015)

IDI Building Capacity through the IDI-Kampala Capital City Authority Twinning Programme

The twinning programme is an innovative mentorship approach that was started by the PCT Programme to specifically strengthen the capacity of Kampala Capital City Authority (KCCA) nursing staff to manage HIV-infected special patient populations consisting young adults, the elderly, discordant couples as well as TB/HIV co-infected and integrated HIV sexual reproductive services. The programme is running in the KCCA clinics of Kitebi, Komamboga, Kisugu, Kiswa, Kisenyi and Kawempe Home Care.

Maternal and Neonatal Implementation for Equitable Systems (MANIFEST):

is a project aimed at improving maternal and newborn indicators in the districts of Kamuli,
Kibuku and Pallisa using locally available resources. The study largely implemented community mobilisation and sensitization, as well as health systems strengthening activities. The trained 1,691 community health workers have continued visiting homes to educate families on birth preparedness and how to take care of mothers and newborns in their respective communities. The community dialogues have moved from village level meetings to the smaller saving groups to facilitate meaningful dialogue. The MANIFEST radio talk shows were integrated into existing talkshows. By November 2015, all the formed 1500 savings groups had funds for supporting maternal and child healthcare needs including payment for routine and referral transport.

The Resilient Africa Network makes Innovation in-roads in African Universities and Communities

The Resilient Africa Network (RAN) onboarded University of Nairobi, Muhimbili University and Bule Hora University as part of the network of 20 African Universities in 16 countries. With the Community at the core of RAN’s resilience and innovation agenda, RAN has on-boarded 10 more communities, bringing them to 28, the total number of targeted communities who have so far participated in assessment, analysis, and evaluation of innovations, technologies, and approaches supported with HESN Development Lab. Four Intervention Strategy Workshops (ISWs) and two Collaborative Resilience Intervention Design workshops were conducted, resulting in completion of all ISWs targeted under the current award. These together with the Deliberative Polls resulted into translation of resilience assessment findings into 21 priority intervention pathways for resilience building across target communities in Africa. At least 20 innovative ideas received indirect support through RAN’s innovator outreach activities across the network including pitch sessions, involvement in international events, and co-creation sessions. RAN’s first State of Resilience Report for Africa was published and launched in three countries: United States of America, Uganda and Nairobi. Its dissemination boosted RAN’s status as a key player in understanding resilience in the region. The report provided the impetus for a growing strategic relationship with Inter-Governmental Authority on Development (IGAD).
Africa Institute for Strategic Services and Development

Mak’s efforts to impart Skills in Ntungamo District, Africa Institute for Strategic Services and Development (AFRISA) in partnership with Ntungamo Transformation Initiative (NTI) equipped farmers of Rukoni sub county, Ntungamo district with various relevant skills to enable them increase productivity, improve quality and create demand for their produce. The training took place over an eight month period where a total of 169 farmers were awarded general artisan certificates in six disciplines of Fish industry and business, pig industry and business, Poultry industry and business, bee industry and business, dairy industry and business and zootechnics and agro entrepreneurship.

Efforts to Comprehend Gender Dynamics:

The School of Women and Gender Studies launched an outreach training programme aimed at creating a formidable force of intellectuals with the ability to comprehend gender dynamics, plan and advocate for gender equality from an informed position. The programme was unveiled at a ceremony to award certificates to 11 Isis-WICCE staff who had successfully completed a three-month training in feminism and gender analysis. The gender capacities of Isis-WICCE staff in feminist knowledge, analysis, planning, research, documentation and advocacy to enable them to effectively execute their organizational mandate of promoting women’s leadership in conflict and post conflict settings.
CoCIS and Family Tree; the College collaborated with familysearch.org to boost usage of its Family tree platform to help people create lineages of their families. A team from familysearch.org met the Principal CoCIS and discussed a working partnership. The familysearch.org platform will use innovations in ICT by CoCIS to make it widely adopted and used in Uganda.

From the governance perspective, the Department of Political Science held a series of seminars to discuss the national political environment within the general election discourse. The seminars brought together a group of policy makers, politicians, academics, independent researchers, and representatives of NGOs in an informal intellectual environment. Areas covered included intra-party democracy, the role of money in elections and party ideologies.
4.2 Community Service

Involvement in community initiatives extends beyond collaborative research to include community service and give back. This participation exposes the students to real life situations. It further enhances networks between the University the Community, the Public and Private Sectors. For the year in review, implemented initiatives in partnership with government ministries and agencies, local governments and international partners include:

1. The School of Public Health (MakSPH) - Young Disaster Resilience Leadership Programme (YDRL) in collaboration with Kampala Capital City Authority (KCCA) for community clean up in Makindye;

2. Mak Centre for Research in Energy and Energy Conservation (CREEC) working with rural communities in Uganda on the Rural Electrification Project. In an effort to reduce the usage of candles and fuel lamps, CREEC is working with the Ministry of Energy to extend the usage of solar to rural communities. The centre has put solar kiosks in four different districts. The kiosk has rechargeable solar lamps, which communities hire at only Shs500. This has reduced the number of people using fuels lamps, accidents due to fires and created employment for some youth.

3. Science Education Students’ Community Outreach: Students from CEES’ Department of Science, Technical and Vocational Education held a series of practical lessons to senior four students of Ruvuma College in Buvuma Island. The aim of the practical lessons was to give back to marginalized communities. Senior four students were being exposed to practical science lessons for the first time.

4. The Mak Students’ Entrepreneurship Club was launched at the School of Agricultural Sciences. The club is an initiative under the project, “Solve the Equation East Africa” (SEE) funded by the MasterCard in the United States. SEE is a collaborative project within the member universities in East Africa trying to change the mind-set of University graduates from thinking about job seeking to job creation by imparting several skills including entrepreneurship. The programme will train students and support them to commercialize ideas and linked to banks to enable them get loans.

5. Short Courses by CEES: The Centre for Lifelong Learning conducted a variety of needs based short courses to build the capacity of personnel in areas such as: Administrative Law, Public Administration and Management, Monitoring and Evaluation, Project Planning and Management, Human Resource Management, Educational Leadership and Management; Strategic Procurement and Logistics Management. Over 380 participants have undergone the training in districts such as Kabale, Hoima, Mbase, Iganga, Yumbe, Arua, Soroti, Kampala, Masaka, Buwenge, Gulu, Mbarara, Rukungiri.
6. **ARI and AgTrain PhD Students hold Two Weeks Field Based Module in Nkozi**

The students of PhD in Agricultural and Rural Innovations (ARI) and the European partner universities undertook a course in Agricultural Transformation through Innovations (AgTrain). This is a Field based module on Participatory Research Methods in Nkozi sub county Mpigi district. Students were dispatched to Bukunge and Ggolo parishes in Nkozi Sub-County, Mpigi district to learn about smallholder farmers, farming systems and challenges.

![Some of the students reading the GPS to locate where they were](image)

![Community Health Workers display their training certificates](image)

7. **Mak School of Public Health supports Community Health Workers in Wakiso District.**

This two and a half year project is based at the Department of Disease Control and Environmental Health. It was designed to strengthen the Community Health Workers programme in Ssisa sub-county, Wakiso district. The main focus is supervision and motivation of all village health team (VHT) members in the sub-county. It is expected that improving these three components of the VHT work will increase their motivation, satisfaction and performance in primary health care and public health. Other project partners are Ministry of Health, Collaboration for Health (UK), and Wakiso District Local Government.

8. **Voluntary Medical Male Circumcision for HIV Prevention**

Voluntary medical male circumcision (VMMC) services are offered as part of a comprehensive package of male reproductive health services that includes HIV testing and counselling; prevention messaging; STI screening and management; and safe male circumcision. The package also strengthens linkages with existing services at facilities such as HIV care and ART services, reproductive health and family planning. By June 2015, IDI had circumcised over 190,064 adult males for HIV prevention. Innovative approaches have been utilized to generate demand for VMMC services including: conducting outreaches in communities, involvement of VHTs, local leaders, and women in mobilization.
campaigns; and transportation models used to reach men in hard-to-reach areas. A total of 71 government health workers (26 clinical officers, 39 nurses & 6 counsellors) participated in the safe male circumcision surgical training. This aimed at ensuring that qualified Ministry of Health healthcare workers engage in VMMC activities, as a way of sustainability for project interventions.

4.3 International Partnerships
Partnership with the international community covers both development partner support in the implementation of core university functions. Internationalisation was identified by the University Strategic Plan as one of the cross cutting areas. International partnerships for the year 2015 cut across areas of teaching, learning and scholarship, research and innovations as well as KTP.

The Turkish Cooperation and Coordination Agency (TIKA) through Sabanci University’s Istanbul Policy Centre donated equipment worth UGX 100M to the Mak Peace and Conflict Studies Centre. The equipment is meant to help the project fulfil its role of contributing to culture of peace through teaching, learning, research, publication and community outreach in the Great Lakes Region.
### 4.4 MOUs signed in 2015

<table>
<thead>
<tr>
<th>PARTNERING INSTITUTIONS</th>
<th>DATE SIGNED</th>
<th>DETAILS</th>
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<tbody>
<tr>
<td>Mak and North Carolina State University</td>
<td>16th September 2015</td>
<td>Five year collaboration in the areas of research and student exchange in seven colleges</td>
</tr>
<tr>
<td>Mak-CoBAMS and Kobe University</td>
<td></td>
<td>An academic exchange agreement for the purpose of promoting cultural transfer and mutual understanding as well as contributing to the progress of learning and the advancement of research and development through academic exchange and collaboration</td>
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<tr>
<td>Mak-CoBAMS and Stellenbosch University</td>
<td></td>
<td>Joint research, PhD Training and publication, Short-term capacity building, seminars and conferences.</td>
</tr>
<tr>
<td>Mak -CoBAMS and Mak Private Sector Forum</td>
<td>September 2015</td>
<td>Launched the Professor Emanuel Tumusiime- Mutebile Endowed Chair in Monetary Policy, Banking and Finance and Centre for Private Sector Development to provide an avenue for financing of the College in the areas of staff development and resources, Improve the visibility of the College and increase its interactions with Private Sector, provide an avenue for mentoring of staff and graduate students at the College</td>
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<tr>
<td>Mak-CAES and FAO Global Climate Change Alliance(GCCA)</td>
<td>May 2015</td>
<td>Uganda Agriculture Adoption to Climate change</td>
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<tr>
<td>Mak-CAES and Tegemeo Institute of Agricultural Policy and Development, Egerton University</td>
<td>March 2015</td>
<td>Collaboration in research and provision of measurement learning and evaluation (MLE) Services</td>
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<tr>
<td>Mak-CAES and University of Western Sydney Austria</td>
<td>February 2015</td>
<td>Academic cooperation</td>
</tr>
<tr>
<td>Mak- CAES and Ministry of Agriculture, Animal Industry and Fisheries(MAAIF)</td>
<td>February 2015</td>
<td>Increase Uganda’s agricultural production and productivity</td>
</tr>
<tr>
<td>Mak -CAES and the International Potato Centre(CIP) Molina, Lima</td>
<td>February 2015</td>
<td>Establish the basis for technical and scientific cooperation for purposes of exploiting complementary research skills to further their missions</td>
</tr>
<tr>
<td>Mak and Africa Rice Centre Conou Benin</td>
<td>January 2015</td>
<td>PhD research project funded by SARDSC to bridge the yield gap for low land rice production ecologies among small holder farmers in Uganda</td>
</tr>
<tr>
<td>Mak -CoVAB and North Carolina State University (NCSU)</td>
<td>2015</td>
<td>Staff Exchanges, Research projects, Study Abroad programmes, Global Health Training programmes, Joint teachings through e-learning platforms</td>
</tr>
<tr>
<td>Swedish Government and Government of Uganda – Institutional Support</td>
<td>November 2015</td>
<td>The 32 million USD five year (2015-2020) agreement will significantly contribute to the transformation of Uganda through supporting the higher education sector, multi-disciplinary research, training of 337 academic staff and institutional development.</td>
</tr>
<tr>
<td>Mak’s MTSIFA and US Embassy in Uganda</td>
<td>April 2015</td>
<td>The US Embassy embarked on supporting the preservation of Art and culture so that generations to come can better understand their cultures</td>
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<td>PARTNERING INSTITUTIONS</td>
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<tr>
<td>Mak and Duke University</td>
<td>May 2015</td>
<td>Students of Biomedical Engineering (jointly taught by CEDAT and CHS) will get a chance to access online resources from Duke University.</td>
</tr>
<tr>
<td>Mak and Kalsa Development Uganda Limited</td>
<td>July 2015</td>
<td>To renovate two parking sites of Nkrumah Hall and JICA as a way of increasing the parking space within the university.</td>
</tr>
<tr>
<td>Mak and Drexel University</td>
<td>February 2015</td>
<td>The five year agreement is to furnish collaboration in training and research; Staff in community outreach and education; exchange of materials in education, research, publications and academic programming under the School of Public Health, College of Health Sciences.</td>
</tr>
<tr>
<td>Mak and The Royal Kingdom of Toro</td>
<td>November 2015</td>
<td>(MoU) to enhance each other’s areas of interest and development in order to stimulate growth of each party and contribute to societal transformation and national development</td>
</tr>
<tr>
<td>Mak – CHS and Karolinska Institutet</td>
<td>Renewed Agreement</td>
<td>This partnership, which was initiated in 2003, renewed in 2011 and again in 2015, has resulted into 44 PhD students from Uganda and more than 500 peer reviewed articles. Some of the bilateral exchange programmes have been in the field of Dentistry, Medicine, Midwifery, Nursing, Occupational therapy, Physiotherapy, Public Health Sciences and Speech and Language Pathology</td>
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5 ACADEMIC SUPPORT ENVIRONMENT

The university core functions fit within a broader institutional framework. While the academic functions of teaching and learning, research & innovations as well as knowledge transfer partnerships define the functions of the university, library services, human resource, physical infrastructure, ICT provide the support systems. The organisational structure binds the two facets together. For the year in review, the library facilities and collection improved, the ICT facilities registered marked improvement and the development of centralised lecture facilities under the AfDB- HEST programme began.

5.1 Library Services

Library resources and facilities define academic provision of Universities worldwide. Within Makerere University, the strategy adopted has been a cumulative improvement of library resources. Through the traditional, print resources but most especially access to e-resources available for teaching and research across the globe. There are currently 280,984, 10,890 journal holdings and 4,332 authority records accessible by users via MAKULA. For the year under review, the Library progress in its pursuit to digitise available resources. To this, end the Library in 2015,

a) Acquired a growing collection and this has been preserved where 1130 titles of books compared to 839 copies in 2014. 45 titles of print journals, 273 titles of Government publications, 193 dissertations, 1308 e-books, 3 e-book databases, 40 e-journal databases, 3 online audio visual lecture databases and 1300 music files. One hundred and fifty five (155) titles acquired through legal deposit; 396 titles were repaired; 83 dissertations and 14 microfilms digitized and 5 rare titles but highly on demand were reproduced.

b) Procured library infrastructure for automating library functions that support optimal utilization of library resources. These included 10 wireless routers as backup for internet failure especially during trainings; Computers

c) Library trainings were conducted for users, 1198 students were trained in optimal use of library resources; 62 internship students were supervised and 24 academic staff were trained in E-Resources access and use. Sixty two (62) library staff have gained knowledge in handling library activities. The library has provided outreach and publicity services to a number of institutions, by offering information literacy session to 25 institutions including: Bank of Uganda, Kyambogo University and Uganda Management Institute.

5.2 ICT Support Service

The Directorate for ICT Support (DICTS) was established to handle information management functions at Makerere University. Basing on the University ICT Policy and Master Plan, the unit has provided sustainable, available, quality ICT services through quality management, control and maintenance processes. For the year under review, some of the milestones achieved include.

a) Services Creation and maintenance of MAK based domain names for the respective services and Enforcing MAK public domain IP management and port security. This has enhanced web visibility and ranking of Makerere University

b) Increase bandwidth capacity and improved management from 170Mbps to 200Mbps through the RENU initiative

c) Improved troubleshooting for better services and accountability through Network Monitoring and Accounting services (NFSEN, CACTI, SMOKEPING, NAGIOS)
d) The Nettap system was upgraded from FAS2050 to FAS2552

e) The Oracle licenses for the database core systems was renewed- this component expanded to consolidation for the system architecture for data mining

f) ICT services survey was conducted to establish the perception of users about current services and recommendations for new services

g) Increase access to ICT facilities; Implement and extend wired LANS in academic and administrative buildings
   o A total of 140 data points were added to the network infrastructure in the College of Health Science
   o Procure computers for colleges and kiosks in hall of residence (Thin Clients) and DICTS staff
   o A total of 40 computers and 2 server were added to college of education and external studies. A total of 30 thin clients and 1 server were distributed to different internet kiosk for students in the following building Education, Senate and College of health Science

h) Implementation, Monitoring and Evaluation of ICT facilities in the university extending to:
   o MakPay in Finance Department to establish real time tuition and other payments; This has further enabled the finance department to access Full Cashbook Journals
   o Documentation of Makerere University Undergraduate dissertations under the Ezproxy system in the Library;
   o Makerere University E-learning environment improved;
   o Staff and Student Email systems upgraded;
   o Monthly Payslips data loading operationalized; and
   o CEMAS system development and requirement specifications

5.3 Physical Infrastructure and Planning

Physical infrastructure, learning facilities and lecture spaces define the quality of education. The bulk of physical spaces in Makerere University date as far back as the 1970. Focus for the year therefore, was hinged on rehabilitation of existing structures and expanding the space to accommodate the number of on-campus students. This section therefore highlights the milestones achieved in the provision of requisite teaching, learning and research environment in the year under review.

Teaching Spaces- The AfDB- HEST Programme at Makerere University

Through the Government of Uganda support, Makerere University has benefited from the African Development Bank-Higher Education Science and Technology Programme. The year under review concluded the procurement process for the civil works to be undertaken. Excel Company Limited was selected as the contractor through a procurement process by the Ministry of Education, Science, Technology and Sports. The supervising consultant for facilities development was identified as Arch Design. The construction process for the two centralised teaching facilities, and rehabilitation of nine laboratories is expected to last eighteen (18) months.
Apart from expansion under the AfDB-HEST, other developments include, rehabilitation of former dining facilities in the halls of residence (Lumumba, Mitchell, and Livingstone Halls and Bamboo House) have been redesigned to lecture places. The facilities have been equipped with the necessary facilities to provide a conducive environment for learning.

Traffic Control Management Services at Mak Main Campus

Mak contracted Kampala Access and Parking Services (KAPS), for the provision of traffic control management at the Main Campus. The partnership under the contract will include a) The Traffic Control, b) Provision of Parking as a Revenue Source c) Improved Security using d) Automated Parking Equipment and Cameras. The KAPS system is implemented on a “design, build and operate” for a period of five years, after which the installed infrastructure and equipment will be transferred to Mak. The contract further stipulates that 60% of the total revenue collected will be retained by the University. Mak Management agreed to channel this 60% through the Estates and Works Department Account to fund Road Network Maintenance within the Main Campus- to this end several parking spaces and roads have improved within the University.

Property Status Report

Land remains one of the key assets that define Makerere University as the premier public university in Uganda. For the year under review, boundaries opened for several of the university properties include:

i) Katalemwa property boundaries opened and pillars erected to demarcate the boundaries.
ii) Buyana Farm land boundaries successfully opened and deed plans for the same processed.
iii) Veterinary land and valuation undertaken in view of renewing the lease agreement with Church of Uganda.
iv) Sir Apollo Kagga quarters, Mak primary school and Bwaise junior staff quarters valuation undertaken for the purpose of compensation to Makerere Retirement Benefit Scheme.
v) The joint impact assessment between Kampala City Council Authority (KCCA) and Mak for the property along Makerere Hill road needed for the expansion of this road. The site was handed over to the Contractor and Mak Management has completed negotiations with KCCA on compensation for the University land that will be affected by the project. KCCA will re-build dilapidated roads within the compensation amount determined by the Government Valuer, which is estimated at about UGX 6 billion.
5.4 Human Resources

Staff recruitment and retention has played a critical role in the fulfilment of Mak’s mission. It is for this reason that Mak has nurtured an environment of positive work with a culture to achieve optimum performance. This section highlights the milestones achieved under the Human Resource function for year 2015.

Table 6: Academic Staff Status by Rank

<table>
<thead>
<tr>
<th>College</th>
<th>Prof</th>
<th>Assoc Prof</th>
<th>Sen Lect</th>
<th>Lect</th>
<th>Asst Lect</th>
<th>TA</th>
<th>Part Time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAES</td>
<td>18</td>
<td>22</td>
<td>35</td>
<td>42</td>
<td>44</td>
<td>0</td>
<td>0</td>
<td>161</td>
</tr>
<tr>
<td>CEDAT</td>
<td>2</td>
<td>10</td>
<td>17</td>
<td>40</td>
<td>74</td>
<td>6</td>
<td>30</td>
<td>179</td>
</tr>
<tr>
<td>CEES</td>
<td>3</td>
<td>11</td>
<td>12</td>
<td>39</td>
<td>52</td>
<td>3</td>
<td>0</td>
<td>119</td>
</tr>
<tr>
<td>CHS</td>
<td>16</td>
<td>32</td>
<td>44</td>
<td>113</td>
<td>62</td>
<td>20</td>
<td>2</td>
<td>289</td>
</tr>
<tr>
<td>CHUSS</td>
<td>14</td>
<td>29</td>
<td>36</td>
<td>91</td>
<td>101</td>
<td>13</td>
<td>62</td>
<td>346</td>
</tr>
<tr>
<td>CoBAMS</td>
<td>1</td>
<td>7</td>
<td>11</td>
<td>25</td>
<td>64</td>
<td>2</td>
<td>27</td>
<td>110</td>
</tr>
<tr>
<td>CoCIS</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>23</td>
<td>45</td>
<td>15</td>
<td>0</td>
<td>96</td>
</tr>
<tr>
<td>CoNAS</td>
<td>13</td>
<td>13</td>
<td>18</td>
<td>50</td>
<td>54</td>
<td>7</td>
<td>6</td>
<td>155</td>
</tr>
<tr>
<td>CoVAB</td>
<td>9</td>
<td>16</td>
<td>8</td>
<td>15</td>
<td>41</td>
<td>11</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>FORT PORTAL CAMPUS</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>JINJA CAMPUS</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>LAW</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>145</td>
<td>193</td>
<td>446</td>
<td>559</td>
<td>77</td>
<td>146</td>
<td>1651</td>
</tr>
</tbody>
</table>

Fig 5: Human Resource Movements 2015

Probation appointment, 6
Promotions, 84
Contract Appointment, 69
Confiramations, 93
Leadership, 20
Transfers, 2
Retirement, 2
Resignation, 9

KNOWLEDGE TRANSFER PARTNERSHIPS
Staff Retirements/ Promotions

Professor Maria Musoke Hands over Mak Librarianship to Dr Helen Byamugisha

Mr. Bazanye (R) together with his wife receive the recognition plaque from VC Ddumba-Ssentamu and Mrs. Mary Tizikara (L)

5.4.1 New Appointments

Recruitment of Members of Top Management

Mr. Charles Barugahare
University Secretary

Mr. Augustin Tamale
University Bursar

Mr. Alfred Masike Namoah
Academic Registrar

Mr. Cyriaco M. Kabagambe
Dean of Students-

Dr. Charles Ibingira
Principal CHS

Dr. Isaac Okullo
Deputy Principal CHS

Deans in Colleges

Dr. Josephine Ahikire
Dean School of Women and Gender Studies (SWGS)

Dr. Ronald Bisaso
Dean East School of Higher Education Studies and Development

Dr. Andrew Elias State
Dean School of Social Sciences

Dr. Julius Kikooma
Dean, School of Psychology

Dr. Patrick Mangeni
Dean School of Liberal and Performing Arts

Dr. Paul Birevu Muyinda
Dean School of Distance and Lifelong Learning
5.5 Organization and Management

As provided by the Universities and Other Tertiary Institutions Act (UOTIA) 2001, Mak is mandated to harmonise her governance structures and functions, plans and policies to those of the Government. The main goal of this provision is to attain an efficient and effective organisational and management environment.

5.5.1 The Search for Chancellor

The Search for the new Chancellor was concluded with Dr Ezra Suruma taking on the mantle from Professor Mondo Kagonyera who concluded his eight-year term as the second non-head of state Chancellor of Makerere University. The Search Committee comprised of Chairperson Mr. Bruce B. Kabaasa, Mr. Stephen B. Maloba, Mr. John Chris Ninsiima, Dr. Euzobia Baine Mugisha and Dr. Sarah Ssali.

5.5.2 Endowment Chairs in Economics

Keeping in tradition with Universities worldwide, the year 2015 marked the commencement of endowed chairs at Makerere University. Two endowment chairs based at the College of Business and Management Sciences were instituted to promote economic research. In both cases the Chair goes hand in hand with development of research and library facilities that will service distinguished professors undertaking research as well as the wider university community. The occasion of announcing the Chairs was further used to celebrate distinguished alumni of Makerere University and especially the School of Economics. These are His Excellence President Mwai Kbaki of Kenya and Professor Emanuelle Tumusiime Mutebile, Governor Bank of Uganda.

Professor Emanuelle Tumusiime Mutebile Chair in Monetary Policy, Banking and Finance

The distinguished Professor Emanuelle Tumusiime Mutebile Chair in Monetary Policy, Banking and Finance will be hosted by Makerere University School of Economics under the College of Business and Management Science (COBAMS). The Chair estimated at USD 5 million will be occupied by a distinguished Professor with a task of building Programmes and mobilising resources to sustain and uphold it.
The Prime Minister of Uganda, Rt. Hon. Ruhakana Rugunda, laid the foundation stone for the construction of a multi-billion complex in honour of the Governor of Bank of Uganda, Professor Emmanuel Tumusiime-Mutebile at Mak Private Sector Forum grounds. The Centre of Excellence estimated at USD 20million.

**H.E Mwai Kibaki Endowed Chair in Economics, E.A**

Mak chose to celebrate distinguished alumnus H.E Mwai Kibaki, in recognition of his achievements, with a modern state-of-the art twin-tower library estimated to cost US $50m. The project will host the Mwai Kibaki Endowed Chair in Economics, and the East African Mwai Kibaki Centre for Leadership, Public Finance and Policy, as well as the Presidential Library in Mak. The Government of Uganda pledged US $5m towards the construction of the H.E Mwai Kibaki Presidential Library at Mak.

**Professor Apolo R. Nsibambi Launches Mak Convocation Sustainability Projects**

The former Prime Minister of Uganda and former Chancellor of Mak, Rt. Hon. Professor Nsibambi launched two sustainability projects initiated by the Mak Convocation (MUC); the Annual Chancellors’ Dinner and the Ivy League Alumni Register. The Ivy League Alumni Register will be signed (amidst full institutional honours) by alumni who will have significantly contributed to Mak causes.

The Mak convocation will give special recognition to the individual as having been an important Alumna or Alumnus.

**King Oyo of Toro visits Mak**

King Oyo Nyimba Kabamba Iguru Rukidi IV visited Mak and received recognition for his inspirational and noble leadership of Toro Kingdom as well as socio-cultural transformation of society through inculcation of cultural ideals and principles. The King toured the Food Technology and Business Incubation Centre as the College of Agriculture and Environmental Sciences and planted a tree to commemorate his visit.

VC Ddumba-Ssentamu hands over the recognition plaque to HRH King Oyo Nyimba

**5.5.3 Gender Mainstreaming: Mak Policy and Regulations Against Sexual Harassment**

The Gender Mainstreaming Programme of Makerere University has the mandate to mainstream gender in the University functions of Teaching and Learning; Research and Innovations; Knowledge Transfer Partnerships and Networking, and Support Services. Since 2000, Institutionalization of gender as a cross cutting theme, has been a priority area in the University’s Strategic Plans. Makerere University has made deliberate efforts to integrate gender into both her core and support functions while providing an environment that ensures growth and consolidation. For the year under review, the Directorate of Gender Mainstreaming moved towards implementation and sensitisation about the University anti-Sexual Harassment Act (2006).
The workshop on the Mak Policy and Regulations against Sexual Harassment, (2006) attracted Mak College Principals, Deputy Principals, Deans, Deputy Deans, Directors, Deputy Directors, College Registrars, College Communication Officers, and Representatives of Mak Academic, Administrative and Support Staff Associations. One of the objectives of the workshop was the need to re-align the Mak Policy and Regulations against Sexual Harassment to the collegiate system. A few of the expectations emphasized the need to formulate strategies to publicize the policy widely in order to create awareness among all categories of staff and students, as well as explore the requirements for gazetting the Mak Policy and Regulations against Sexual Harassment (2006) and the Mak Gender Equality Policy (2009).

5.6 Student Report

The University philosophy is to provide a holistic experience to the students that come through the gates of Makerere University. Student life at University expands beyond the academic environment to governance, leadership, sports and other life experiences. Student leadership and governance as well as community based initiatives and awards were part of the students milestones for the year 2015 as highlighted below.

Students Governance

81st Guild Champions First Ever Mak Varsity Awards: The Students body unveiled the first ever ‘Mak Varsity Awards’ in which the institution annually recognizes public personalities, organizations, staff and students with exceptional achievements. The awards will recognize the persons behind the institution’s success as well as increasing the university’s visibility to its stakeholders and the public The 2015 theme was “Motivate to Inspire”

Annual Cultural Gala 2014/2015: The Students Guild in conjunction with the Dean of Students Office held the annual Students’ Cultural Gala where students from different tribes show cased their cultural activities like traditional wear, dances, foods, poetry, among others. This year's cultural Gala took place on 5th-6th November 2015 with more than 25 groups that participated.

Project of the Year Award: A group of Mak College of Health Biomedical Engineering Students outstandingly won the 2015 Project of the year award. Hopitrack, a solution to help securely, safely and effectively track patients, medical personnel and medical equipment, beat off competition from other innovations; to scoop the award. Julius Mugaga, the group leader said that the solution will help in mitigating the problems that arise from patients not knowing where certain facilities or medical personnel are situated and guard them against masquerading guides that ask for money in exchange for directions.
5.6.1 Student support systems

New Equipment at Mak hospital:
The Mak Hospital received a donation in form of medical equipment from the Mak Joint AIDS program (MJAP). The equipment included a microscope and a Pima CD4 machine; a simple effective point of care to measure CD4 count. This machine will make it possible for patients to receive their CD4 results in less than 20 minutes. These machines supplement AIDS support services at the University Hospital.

Counselling and Guidance Centre (CGC):
Mak is dedicated to collaborating and giving back to the community and the country in general. The CGC in an effort to create awareness of counselling services opened to all persons. Referrals have continued to grow over 900 to date, an indicator that the Centre is doing something right. The Centre has held a couple of group counselling sessions, these are offered to people facing similar challenges and hence through group counselling, it is hoped that they support each other to go through challenges. The Centre continues to collaborate with a number of organizations and universities such as Florida State University, Human Resources Association of Uganda, Association of University and College Counselling Centre Directors. The Centre received a grant worth $5000 to provide career services to newly admitted students for academic year 2015/16.
6 FINANCIAL MANAGEMENT AND RESOURCE MOBILISATION

The Makerere University Endowment Fund (MAKEF)

<table>
<thead>
<tr>
<th>Fund</th>
<th>Fund As at 31 Mar 2016</th>
<th>Fund As at 31 Dec 2015</th>
<th>Composite Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US$</td>
<td>%</td>
<td>US$</td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash at call or deposit</td>
<td>301,788.60</td>
<td>29.77</td>
<td>96,157.03</td>
</tr>
<tr>
<td>FRN(Sov/Corpor)</td>
<td>130,080.85</td>
<td>13.41</td>
<td></td>
</tr>
<tr>
<td><strong>Total Cash</strong></td>
<td>301,788.60</td>
<td>29.77</td>
<td>226,237.88</td>
</tr>
<tr>
<td>Bonds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>694,231.43</td>
<td>71.55</td>
<td></td>
</tr>
<tr>
<td>Corporate</td>
<td>49,820.13</td>
<td>5.13</td>
<td></td>
</tr>
<tr>
<td><strong>Total Bonds</strong></td>
<td>744,051.56</td>
<td>76.68</td>
<td></td>
</tr>
<tr>
<td>Equities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Cap</td>
<td>608,128.02</td>
<td>59.99</td>
<td></td>
</tr>
<tr>
<td>Medium Cap</td>
<td>103,727.25</td>
<td>10.23</td>
<td></td>
</tr>
<tr>
<td>Small Cap</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Equities</strong></td>
<td>711,855.27</td>
<td>70.23</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,013,643.87</td>
<td>100.00</td>
<td>970,289.44</td>
</tr>
</tbody>
</table>

The MakEF instituted in 2014 to help in the diversification of the University financial resource base. MakEF’s main objective is to receive, mobilize and grow resources for the benefit of the University current and future generations. The Fund established the Management structures for the local fund. GenAfrica formerly Genesis Kenya Limited was procured as the local Fund Manager and Standard Chartered Bank confirmed as the Custodian of the Fund. In recognition of the need for maximum return on investment, the Board of Trustees have diversified the offshore investments under Crown Agents Management Limited to include equities.

In addition to the offshore investments made by Crown Agents Management Limited, MakEF prioritised the Students Centre as the flagship project. The Students’ Centre will serve as the collective place that reflects the dynamism of the 21st century student in the digital age. It will correct the imbalance in access to socio-cultural amenities that was created by the increase in student numbers. As part of resource mobilisation, the Fund approached different entities including the Parliament of Uganda, dfcu Bank, Centenary Bank and the Architects Association of Uganda.

The 3D Artistic impression of the Students Centre designed by Architecture Students from the College of Engineering Design Art and Technology.
6.2 The Makerere University Holding Company (MakHoldings)

The Makerere University Holding Limited (Mak Holdings) was instituted as the entrepreneurial arm of the University to develop, manage and oversee her commercial entities; this was the second year of operation for the Company. Mak Holdings focus for the year was the need to establish an operational benchmark. A diagnostic study was undertaken to:

1) Evaluate the financial health of the existing commercial entities and their future prospects; and
2) Determine potential commercial investments that can be established to will enhance resource mobilization.

To release value from both under and undeveloped existing University assets as well as expand them, Mak Holdings retained the services of a Transaction Advisor as required by the newly enacted PPP act. ENS Africa was procured to undertake transaction advisory services for the flagship real estate investment projects including:

(i) University Hotel and Convention Centre;
(ii) Mixed- Use Development in Kololo with a 5 Star Hotel;
(iii) Mixed- Use Development in Makindye with a upscale apartments and a 5 Star Hotel; and
(iv) New Student Hostels

6.3 Financial Performance

<table>
<thead>
<tr>
<th>PARTICULARS</th>
<th>BUDGETED</th>
<th>ACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants from foreign governments</td>
<td>6,163</td>
<td>7,176</td>
</tr>
<tr>
<td>Transfers received from the Treasury</td>
<td>79,780</td>
<td>81,477</td>
</tr>
<tr>
<td>Non-Tax Revenues</td>
<td>89,640</td>
<td>113,226</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>8,903</td>
<td>9,365</td>
</tr>
<tr>
<td>Total operating revenue</td>
<td>184,486</td>
<td>211,244</td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee costs</td>
<td>101,277</td>
<td>135,990</td>
</tr>
<tr>
<td>Goods and services consumed</td>
<td>35,456</td>
<td>34,239</td>
</tr>
<tr>
<td>Consumption of property, plant &amp; equipment</td>
<td>30,282</td>
<td>24,816</td>
</tr>
<tr>
<td>Transfers to other Organizations</td>
<td>2,032</td>
<td>1,633</td>
</tr>
<tr>
<td>Social benefits</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Other expenses</td>
<td>15,439</td>
<td>14,561</td>
</tr>
<tr>
<td>Foreign exchange losses (gains)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>184,486</td>
<td>211,244</td>
</tr>
<tr>
<td>Net surplus/ (deficit) after extraordinary items</td>
<td>149</td>
<td>1,750</td>
</tr>
</tbody>
</table>
7 PUBLICATIONS

These are used as a core research performance indicator. For the year under review, the Colleges have performed exceptionally as shown below.

**College of Health Sciences**


60. E. Okello et al. Gaps and gains from engaging districts stakeholders for Community Based Health Professions Education in Uganda: a qualitative study Accepted for publication in Perspectives on Medical Education


70. Francis Ocheng, FreddieBwanga, MosesJoloba, AbierSoftrata, MuhammadAzeem, KatrinPütsep, Anna-KarinBorg-Karlson, CelestinoObua, and Anders Gustafsson; Essential Oils from Ugandan Aromatic Medicinal Plants: Chemical Composition and Growth Inhibitory Effects on Oral Pathogens. Hindawi Publishing Corporation Evidence-Based Complementary and Alternative Medicine Volume 2015, Article ID 230832, 10 pa


95. Herbert Muyinda, James Mugisha; Stock-outs, Uncertainty and improvisation in access to healthcare in war-torn Northern Uganda, Social Science and Medicine, 146(2015) 316-323.


123. Kamya, Moses; Arinaitwe, Emmanuel; Wanzira, Humphrey; Katureebe, Agaba; Barusya, Chris; Kigozi, Simon; Kilama, Maxwell; Tatem, Andrew; Rosenthal, Philip; Drakeley, Chris; Lindsay, Steve; Staedke, Sarah; Smith, David; Greenhouse, Bryan; Dorsey, Grant. Malaria Transmission, Infection and Disease at Three Sites with Varied Transmission Intensity in Uganda: Implications for Malaria Control. Am J Trop Med Hyg, 2015. 92(5): p. 903-12.


165. Marie Klingberg-Allvin, Amanda Cleeve, Susan Atuhairwe, Nazarius Mbona 
Comparison of treatment of incomplete abortion with misoprostol by physicians and midwives at 
district level in Uganda: a randomised controlled equivalence trial. The lancet. Published Online 
26th March 2015.

166. Matovu JK, Todd J, Wanyenze RK, Wabwire-Mangen F, Serwadda D. Correlates of previous 
couples’ HIV counseling and testing uptake among married individuals in three HIV prevalence 

167. Mazigo HD, Dunne DW, Morona D, Lutufyo TE, Kinung’hi SM, Kaatano G, Nuwaha F. Periportal 
fi brosis, liver and spleen sizes among S. mansoni mono or co-infected individuals with human 
immunodeficiency virus-1 in fishing villages along Lake Victoria shores, North-Western, Tanzania. 

malaria rapid diagnostic tests (RDTs) for initial diagnosis and treatment monitoring in a high 
ajtmh.14-0180. Epub 2015 Jan 26. PubMed PMID: 25624399; PubMed Central PMCID: 
PMC4350543.


associated with health-related quality of life among perinatally HIV-infected adolescents in 

171. Mbalinda SN, Nakimuli A, Nakubulwa S, Kakaire O, Osinde MO, Kakande N, Kaye DK. Male 
partners’ perceptions of maternal near miss obstetric morbidity experienced by their spouses. 

JP. Malaria care in infants aged under six months in Uganda: an area of unmet needs! PLoS One. 
25860016; PubMed Central PMCID: PMC4393291.


hypertensive patients attending Kiambu district Hospital, Kenya: A cross-sectional study. Pan 
African Medical Journal, November 2015

175. Meya D, Rajasingham R, Nalintya E, Tenforde M, Jarvis JN. Preventing Cryptococcosis-Shifting 
Review. PubMed PMID: 25960942; PubMed Central PMCID: PMC4412515.

176. Michael Ediau, Joseph KB Matovu, Raymond Byaruhanga, Nazarius M Tumwesigye, and Rhoda K 
Wanyenze. 2015. Risk factors for HIV infection among circumcised men in Uganda: a case-control 


249. Rhoda K Wanyenze, Joseph KB Matovu, Moses R Kamya, Nazarius M Tumwesigye, Maria Nannyonga and Glenn J Wagner. 2015. Fertility desires and unmet need for family planning among HIV infected individuals in two HIV clinics with differing models of family planning service delivery. BMC Women's Health 2015, 15:5.


Book chapters:


**College of Business and Management Sciences**

1. Barriers to male involvement in contraceptive uptake and reproductive health services: a qualitative study of men and women's perceptions in two rural districts in Uganda: the launch of Reproductive Health. Co-authors: Allen Kabagenyi, Larissa Jennings, Alice Reid, Gorette Nalwadda, James Ntozi and Lynn Atuyambe
   Reproductive Health, 11:21 (05 Mar 2014) http://www.reproductive-health-journal.com/content/11/1/21


**Book Chapter**

Monograph

ECONOMICS: Demand, Supply, the Market, and Business, Kampala, Uganda, Summer, 2015.


College of Veterinary Medicine, Animal Resources and Biosecurity


2. D Kahwa, J Rutaisire & H Kaiser. The use of clove oil to induce anaesthesia, and its effects on blood chemistry, in Lates niloticus from Lake Victoria, Uganda, 23rd Nov 2015 http://dx.doi.org/10.2989/16085914.2015.1102121


College of Education and External Studies

Electronic Book

BOOK CHAPTER


JOURNAL ARTICLE


CONFERENCE PAPERS


37. Bakkabulindi, F. E. K., & Mpirirwe, R. (2015). Individual characteristics affecting the adoption of electronic banking services by graduate students in Makerere University. Paper read at the five-day International Conference on Governance and Service Delivery in Developing Countries, organised by the Uganda Management Institute (UMI), held in Kampala, Uganda, August 24 to 28, 2015.


52. Muyinda, B. P. (2015). Evolution of and Innovations in Education Methodologies: Can we apply them in Epidemiology/Biostatistics Department? A paper presented at the Epidemiology/Biostatistics Department, School of Public Health, Makerere University Staff Retreat, 16th April 2015, Hotel Afrique, Kampala, Uganda.


PhD Thesis


College of Agricultural and Environmental Sciences


Publications in refereed and professionally recognized Journals


35. L. Musoke, N. Banadda, C. Sempala and J. Kigozi. The migration of Chemical Contaminants from Polyethylene Bags into food during cooking. The Open Food Science Journal, 9: 14-18, 2015


37. L. Musoke, N. Banadda, C. Sempala and J. Kigozi. The migration of Chemical Contaminants from Polyethylene Bags into food during cooking. The Open Food Science Journal, 9: 14-18, 2015


**College of Engineering, Design, Art and Technology**


38. P.W. Olupot, A. Candia, E. Menya, R. Walozi, “Characterization of Rice Husk Varieties in Uganda for Biofuels and Their Techno-economic Feasibility in Gasification” (Article in Press), Chemical Engineering Research and Design. DOI: http://dx.doi.org/10.1016/j.cherd.2015.11.010


College of Computing and Information Sciences


12. Julianne Sansa Otim , Celestino OBUA, Grace KAMULEGEYA, Alex MWOTIL, Perez MATSIKO , “Field Testing a Drug Management Application at Ugandan Health Facilities,” LNICST 147, pp. 198-206, 2015, ISBN: 978-3-319-16885-2 (Print) 978-3-319-16886-9 (Online).


Book Chapters


College of Humanities and Social Sciences


8. Muhanguzi F.K 2015 “Sex is sweet”: Women from low-income contexts in Uganda talk about sexual desire and pleasure, Reproductive Health Matters: Volume 23 No. 46

9. Bantebya G.K; Muhanguzi F.K and Watson C 2015. ‘This is not the work of a day’: Communications for social norm change around early marriage and education for adolescent girls in Uganda. Overseas Development Institute: London


20. The Social-Political Dynamics of Anti-Homosexuality Legislation in Uganda, Stella Nyanzi, Andrew Karamagi, Vol.29, 2015, Number: 24, Taylor and Francis


College of Natural Sciences


21. Dr. Dan Isabirye Use of accelerometers in measurement of Physical activity, organised by IAEA 14 – 18th December 2015, Department of Food Science and Nutrition, Makerere University.


MAKERERE UNIVERSITY ANNUAL REPORT 2015

- Change MasterCard logo to the one attached and move it to fit under the Master Card story heading.
- Move tomatoes picture to Pg.28 after paragraph beginning and ending “In collaboration with the UK...wealth creation.” (Additional reference to picture sent via WhatsApp if necessary.)
- Move the building picture (with van parked at the front) to Pg.27 after the paragraph starting and ending “Processing and office space:...variety of labs and teaching space.” (Additional reference to picture sent via WhatsApp if necessary.)
- The Publication Sub Headings should be in full as below (do not indicate the short version in the sub title):
  - CHS change to College of Health Science
  - CoBAMS change to College of Business and Management Sciences
  - CoV AB change to College of Veterinary Medicine, Animal Resources and Biosecurity
  - CEES change to College of Education and External Studies
  - CAES change to College of Agricultural and Environmental Sciences
  - CEDAT change to College of Engineering, Design, Art and Technology
  - CoCIS change to College of Computing and Information Sciences
  - CHUSS change to College of Humanities and Social Sciences

General Comment: the sub headings have case issues which I have highlighted in the hard copy.
Research and Innovations - MV Mulimi Multipurpose Tractor by CAES

Drone Innovations by CEDAT Students

Makapp
Info at your finger tip

Aim of the Intervention:
To develop the mobile app. To leverage best implementation of and access to information by the students, staff, and key stakeholders of Makerere University.

Objectives:
1. Integrate the mobile strategy into the university communication strategic plan as a proof of concept.
2. Develop a university resource that offers extra-curricula opportunities.
3. Improve information sharing among staff and students.
4. Empower the monitoring of planned activities by getting data accessible in commonly used hand devices.

President visits Mak 23rd May 2015.

CAES Student Internship Exhibition 8th August 2014

CAES Students Exhibition 9th April 2015
Makerere University P.O. Box 7062 Kampala, Uganda