MAKERERE UNIVERSITY

ANNUAL REPORT 2016
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

1. Allegiance to the institution.
2. Integrity.
3. Customer responsiveness.
4. Professionalism.
5. Openness to diversity.
On behalf of Makerere University Council, I congratulate the Vice Chancellor and the Management team, all staff and students upon the achievements realized in the Year 2016. My special appreciation goes to Members of Makerere University Council for the commitment and teamwork in steering this institution. The University Council has continued to provide strategic oversight aligned to the University Vision - To be the leading institution for academic excellence and innovations in Africa. The University Council warmly welcomed Professor Ezra Suruma who was installed as Chancellor of Makerere University on 18th January 2016. Professor Suruma succeeded, Professor George Mondo Kagonyera who successfully completed his eight (8) year term of service as Chancellor. Prof. Ezra Suruma, is a renowned scholar of Economics and Management. I look forward to his dedicated service to this great institution.

Taking stock of the year 2016, Makerere University Council received and considered business from the relevant Committees and other University organs. Council deliberations underscore the core functions of the University whose key highlights include: A major restructuring of Academic programmes undertaken in response to the national development needs. The review was necessitated by the need for curricula to remain relevant to the ever changing environment, response to the Visitor to focus on priority program areas and the NCHE requirement for periodic curriculum review.
Several academic programmes were harmonised and restructured. The review phased out some programmes and reconstituted them into cross cutting course units. This also followed the two previous comprehensive reviews for the restructuring to the collegiate system of governance and the Omaswa Task Force Report on Job Evaluation and Re-Organization of the Staff Structure of Makerere University.

In response to the changing ICT dynamics, the Council considered and approved The Open – Distance and e-learning (ODeL) Policy: The policy aims to mainstream open, distance and eLearning into academic programmes of the University so as to increase access to flexible and quality technology supported learning. To operationalize the policy, an Institute of Open and Distance Learning was established. University Council also reviewed the ICT Strategic Plan 2016-2021 and approved the new ICT Policy to ICT provision and support across the entire university.

In an effort to improve staff welfare, a Staff Medical Insurance Scheme (SMIS) was approved. The scheme will enable the University staff access medical care and reduce on the University financial requirement towards health care.

While several milestones were realised, the year was characterized by staff and student unrest whose climax was a two months’ closure towards the end of the year. We are cognisant that this put strain on real time operations and processes not only for the University but for all our stakeholders. As we wait for the outcome of the Visitation Committee instituted by the Visitor to find long-term solutions to the problems facing Makerere and other Public Universities, we are glad that Government has continued with its promise to enhance the salaries of both Teaching and Non-Teaching Staff. We are optimistic that these developments will minimise future disruptions of activities within the University. Council and Management will continue to engage Government in this effort to enhance harmony and reduce discontent among staff.

As part of efforts to streamline the functioning of the University, the Makerere University Fees Policy that was reviewed with wide stakeholder consultations. The Fees Policy outlines the general provisions for all fee-paying students. The incentives for early payment of fees and the alternative payment plans were clearly articulated in the policy. It is anticipated that the Fees Policy, if followed, will reduce student unrest at Makerere University.

The University is still constrained in its developments and operations due to inadequate financing, both from Government and fee-paying students. The delay by students to adhere with the Fees Policy put in place by Council continues to be a major challenge for efficient service delivery. I encourage Management to continuously engage and sensitise students to comply with the Fees Policy. I also appeal to students and parents to ensure timely payment of tuition and other dues to ensure that the University remains functional. I also continue to encourage all the students to adhere to the Rules and Regulations gazetted by Council and to encourage Management to develop a student compliance framework to the rules and regulations.
In our endeavour to diversify our sources of income, I am glad to report that our efforts for resource mobilisation have begun to be visible with the Makerere University Endowment Fund and the Makerere University Holding Company representing the University’s quest for financial sustainability. We appeal to all stakeholders to embrace these initiatives.

Council greatly appreciates Government support in the infrastructure development of the University. The construction of the Centralised Teaching Facilities with support from the AfDB-HEST programme has not only changed the landscape of Makerere University but will go a long way to improve the learning environment. The renovations of the laboratories in the various Colleges provide the appropriate environment for both undergraduate skills development and post-graduate research. Areas such as biotechnology and plant breeding as well as Geographical Information Systems (GIS) deserve mention under the programme. These will underscore Makerere as a premier University in Uganda and a force to reckon with at the international level. The University has also had a new facelift with the revamping of the road network and the street lighting system under the MoU between Makerere and Kampala City Council Authority (KCCA). We are proud of the partnership with KCCA that has made this possible. We look forward to the conclusion of the developments on the University entrance and its environs along the Makerere Hill Road. We continue to appeal to government and other stakeholders for additional support in improving the University infrastructure, particularly in the science based colleges as the AfDB-HEST support was restricted to one laboratory per science based college.

I finally address myself to issues of students’ welfare and security. The halls of residence continue to be an eye sore both to the students who are expected to live in them and other University visitors because the University does not have adequate resources to refurbish many of the aged facilities in them. The porous nature of the University makes free movement at night particularly dangerous as there is no control and exit into and out of the University. The University is still banking on the pledge by H.E The President for Government to fund the perimeter wall construction that will improve the security of all persons and property within the main Makerere University Campus.

I trust you will find this Annual Report both informative and interesting to read, As We Build for the Future.

Eng. Dr. Charles Wana-Etyem
Chairperson of Council
2016 was a time of further strengthening and consolidation for Makerere University by contributing to the national and international agenda through its 10-year Strategic Plan 2008/09-2018/19. In a bid to attain our Vision to be the leading institution of academic excellence and innovations in Africa, the University has continued to place emphasis on providing quality higher education. The University has reviewed the curriculum, developed new programmes relevant to national and global needs aimed at responding to emerging development challenges.

Special thanks go to the Government of Uganda for the support and contribution towards infrastructure development that has resulted into additional built up space of 12,467m² and rehabilitation of existing laboratories through the AfDB-HEST Programme. This is a major reform aimed at improved performance in teaching, learning and research.

The University has continued to advance the frontiers of knowledge through research and innovations. We are grateful to the development partners and the Government of Uganda through the Presidential Initiative for science and technology. Through their support, the University has tremendously improved on her research infrastructure with re-equipped laboratories leading to increase in research output and dissemination to meet the country’s development needs.

Progress has been registered in the support environment to facilitate our focus on the core functions of the University. In addition to infrastructure development, the support to the human resource component improved the Academic staff profile as evident from the many promotions to higher ranks and this is an indicator of the advances we are making in teaching and research.

We are proud of the key milestones we have registered to diversify the financial resource base of the University. We are hopeful that Makerere University Holding Company Ltd. and Makerere University Endowment Fund, although with medium to long term benefits, will continue to intensify efforts to mobilize and grow resources of the University for the current and future generations.

I would like to warmly thank the whole University community – both staff and students – for your valuable work in the past year. I am also very grateful to the University’s many partners, funders and other stakeholders for the cooperation. It is therefore my appeal to the alumni (nationally, regionally and internationally), friends, well-wishers and partners to support the efforts of our initiatives by contributing the little you can to your Alma Mater.

Professor John Ddumba-Ssentamu
Vice Chancellor
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6.2 Makerere University Endowment Fund

6.3 Makerere University Holdings Limited

6.4 Grant Funding Solicitation

7 Publications

7.1 College of Engineering Design Art and Technology

7.2 College of Education and External Studies

7.3 College of Agriculture and Environmental Sciences

7.4 College of Humanities and Social Sciences

7.5 College of Natural Sciences

7.6 College of Health Sciences
**ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACBF</td>
<td>African Capacity Building Foundation</td>
</tr>
<tr>
<td>ADA</td>
<td>African Doctoral Academy</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 and 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>IDI</td>
<td>Infectious Diseases Institute</td>
</tr>
<tr>
<td>KCCA</td>
<td>Kampala City Council Authority</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
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</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 Foundation</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>MUARIK</td>
<td>Makerere University Agricultural Research Institute Kabanyolo</td>
</tr>
<tr>
<td>MUBS</td>
<td>Makerere University Business School</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>MUST</td>
<td>Mbarara University of Science and Technology</td>
</tr>
<tr>
<td>NCHE</td>
<td>National Council for Higher Education</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>PGD</td>
<td>Post Graduate Diploma</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>Sida</td>
<td>Swedish International Development Agency</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>
<tr>
<td>URSB</td>
<td>Uganda Registration Services Bureau</td>
</tr>
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</table>
1 INTRODUCTION

The Universities and Other Tertiary Institutions Act 2001, stipulates that all public universities produce annual performance reports as accountability to the stakeholders. Correspondingly, the Makerere University Strategic Plan 2008/09-2018/19 envisaged an annual review process as part of the Monitoring and Evaluation Framework to track implementation. The plan outlined performance indicators to guide annual assessment and inform institutional learning. The 2016 report provides updates on progress in the implementation of the University Strategy. Makerere University annually produces work plans and budgets to guide its activities, so as to provide a benchmark against which it assesses the successes and challenges.

The 2016 reporting is against the thematic areas, specifically focusing on the core functions of Teaching & Learning; Research & Innovations; and Knowledge Transfer Partnerships. It further captures the support functions including organisation & management, library services, physical facilities, human resource management, financial management & resource mobilisation which are crucial for a conducive academic environment.

The report acknowledges continuous engagement of the University with its environment as a fundamental tenet to its relevance. It further acknowledges the role of institutional networking and collaboration with communities and their influence to academic provision and research that manifest through such partnerships. For example, the April 21 2016, Times Higher Education World University Rankings of universities in Africa, indicate Makerere University as number 4. These rankings underscore the University Vision: To be a leading institution of Academic Excellence in Africa. Makerere University emerged among the top ten universities in Africa across the different league tables and university ranking systems.

### Best Universities in Africa 2016: top 15

<table>
<thead>
<tr>
<th>Rank</th>
<th>Institution</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University of Cape Town</td>
<td>South Africa</td>
</tr>
<tr>
<td>2</td>
<td>University of the Witwatersrand</td>
<td>South Africa</td>
</tr>
<tr>
<td>3</td>
<td>Stellenbosch University</td>
<td>South Africa</td>
</tr>
<tr>
<td>4</td>
<td><strong>Makerere University</strong></td>
<td><strong>Uganda</strong></td>
</tr>
<tr>
<td>5</td>
<td>University of KwaZulu-Natal</td>
<td>South Africa</td>
</tr>
<tr>
<td>6</td>
<td>University of Pretoria</td>
<td>South Africa</td>
</tr>
<tr>
<td>7</td>
<td>University of Ghana</td>
<td>Ghana</td>
</tr>
<tr>
<td>8</td>
<td>University of Nairobi</td>
<td>Kenya</td>
</tr>
<tr>
<td>9</td>
<td>Suez Canal University</td>
<td>Egypt</td>
</tr>
<tr>
<td>10</td>
<td>Alexandria University</td>
<td>Egypt</td>
</tr>
<tr>
<td>11</td>
<td>Cairo University</td>
<td>Egypt</td>
</tr>
<tr>
<td>12</td>
<td>University of Marrakech Cadi Ayyad</td>
<td>Morocco</td>
</tr>
<tr>
<td>13</td>
<td>University of South Africa</td>
<td>South Africa</td>
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<tr>
<td>14</td>
<td>University of Ibadan</td>
<td>Nigeria</td>
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<tr>
<td>15</td>
<td>Mohammed V University of Rabat</td>
<td>Morocco</td>
</tr>
</tbody>
</table>

CORE FUNCTIONS

Research and Innovations

Teaching and Learning

Knowledge Transfer Partnership

Support Environment
Teaching and learning is one of the core functions of Makerere University. In response to the changing context and landscape in the demand and provision of higher education, Mak aims at enhancing access opportunities so as to meet the higher education requirements at national, regional and international levels. A number of initiatives have been embraced to support teaching and learning to enable the University produce graduates who will be relevant in the work environment.

2.1 Student Statistics

Enrolment

Table 1 presents the total students registered in University system across the different colleges. Makerere University main campus accounts for eighty-five per cent (85%) of the total students and fifteen per cent (15%) of the students are registered for programmes tenable at affiliate institutions including MUBS.

Table 1: Student Enrolment (Registered) by College, Level and Sex 2016/17

<table>
<thead>
<tr>
<th>College/ Sex</th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Agricultural &amp; Environmental Sciences</td>
<td>763</td>
<td>1,283</td>
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<tr>
<td>Business &amp; Management Sciences</td>
<td>2,300</td>
<td>2,482</td>
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<td>Computing &amp; Information Sciences</td>
<td>1,370</td>
<td>1,877</td>
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<td>Education &amp; External Studies</td>
<td>3,101</td>
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<tr>
<td>Engineering Design Art &amp; Technology</td>
<td>804</td>
<td>2,254</td>
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<tr>
<td>Health Sciences</td>
<td>475</td>
<td>1,091</td>
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<tr>
<td>Humanities &amp; Social Sciences</td>
<td>4,492</td>
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<tr>
<td>Natural Sciences</td>
<td>318</td>
<td>752</td>
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<tr>
<td>Vet Med Animal Resources &amp; Bio Security</td>
<td>329</td>
<td>768</td>
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<tr>
<td>School of Law</td>
<td>410</td>
<td>823</td>
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<tr>
<td>Fort Portal Campus</td>
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<td>30</td>
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<tr>
<td>Jinja Campus</td>
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<td>38</td>
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<tr>
<td>Mak Main Campus Total</td>
<td><strong>14,423</strong></td>
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<tr>
<td>Makerere University Business School</td>
<td><strong>4,033</strong></td>
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<tr>
<td>Grand Total</td>
<td><strong>18,456</strong></td>
<td><strong>20,077</strong></td>
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</table>

Source: Academic Registrar’s Department as at 30th January 2017
**Admissions 2016/17**

In the Academic year 2016-2017, the University continued to have a strong demand for undergraduate courses. The admission for undergraduate programmes tenable in Makerere University was 14,110 and 2,710 for graduate programmes. Affiliate institutions including MUBS, Nsamizi, Ggaba National Seminary, Health Tutors College, Kinyamasika National Seminary, Senior Command & Staff College Kimaka and Uganda Institute of Banking & Financial Services were 8,353 proportionately distributed as eighty-four per cent (84%) undergraduate and 16% graduate admissions (see Table 2).

### Table 2: Student Admission by College and Level 2016/17

<table>
<thead>
<tr>
<th>College/Level</th>
<th>Undergraduate</th>
<th></th>
<th></th>
<th>Graduate</th>
<th></th>
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<th>Grand Tot</th>
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<tr>
<td></td>
<td>Gov’t Private</td>
<td>Int’al</td>
<td>Sub-Tot</td>
<td>Private</td>
<td>Int’al</td>
<td>Sub-Tot</td>
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<td>Agricultural &amp; Environmental Sciences</td>
<td>250</td>
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<td>11</td>
<td>978</td>
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<tr>
<td>Business &amp; Management Sciences</td>
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<td>2,324</td>
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<td>Computing &amp; Information Sciences</td>
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<td>Education &amp; External Studies</td>
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<td>2,324</td>
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<td>2,504</td>
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<td>192</td>
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<tr>
<td>Engineering Design Art &amp; Technology</td>
<td>310</td>
<td>654</td>
<td>20</td>
<td>984</td>
<td>261</td>
<td>5</td>
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<tr>
<td>Health Sciences</td>
<td>259</td>
<td>479</td>
<td>56</td>
<td>794</td>
<td>450</td>
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<td>Humanities &amp; Social Sciences</td>
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<td>2,668</td>
<td>51</td>
<td>2,957</td>
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<td>714</td>
<td>106</td>
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<tr>
<td>Veterinary Medicine Animal Resources &amp; Bio Security</td>
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<td>676</td>
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<td>751</td>
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<td>School of Law</td>
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<td>244</td>
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<td>306</td>
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<td>Jinja Campus</td>
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<td>233</td>
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<tr>
<td>Mak Total</td>
<td>2,033</td>
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<td>14,110</td>
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<td>6,429</td>
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<tr>
<td>Nsamizi Institute</td>
<td>-</td>
<td>117</td>
<td>-</td>
<td>117</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Ggaba National Seminary</td>
<td>-</td>
<td>37</td>
<td>-</td>
<td>37</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Health Tutors’ College Mulago</td>
<td>-</td>
<td>38</td>
<td>-</td>
<td>38</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Kinyamasika National Seminary</td>
<td>-</td>
<td>23</td>
<td>1</td>
<td>24</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Senior Command &amp; Staff College, Kimaka</td>
<td>-</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Uganda Institute of Banking &amp; Financial Services</td>
<td>-</td>
<td>32</td>
<td>-</td>
<td>32</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Affiliates Total</td>
<td>403</td>
<td>6,546</td>
<td>71</td>
<td>7,020</td>
<td>726</td>
<td>28</td>
<td>754</td>
</tr>
<tr>
<td>Grand Total</td>
<td>2,436</td>
<td>18,401</td>
<td>293</td>
<td>21,130</td>
<td>3,124</td>
<td>258</td>
<td>3,382</td>
</tr>
</tbody>
</table>

*Source: Academic Registrar’s Department & Directorate of Graduate Training and Research March 2017*
**Graduation**

In his inaugural graduation ceremony, the 3rd non-head of state Chancellor, Dr Ezra Suruma presided over the 66th Graduation held in January 2016. A total of 14,318 graduands were awarded degrees and diplomas. Sixty-four (64) candidates attained Doctorates and 286 graduated with first class degrees. This compares to 13,762 for the 65th graduation held in 2015. The number of PhDs increased from 57 for the previous year.

**Table 3: Summary of Student Output Graduation January 2016**

<table>
<thead>
<tr>
<th>Level</th>
<th>Diploma</th>
<th>Bachelor</th>
<th>PGD</th>
<th>Masters</th>
<th>PHD</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>
<td>M</td>
</tr>
<tr>
<td>Agricultural &amp; Environmental Sciences</td>
<td>0</td>
<td>0</td>
<td>239</td>
<td>303</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Design Art &amp;Technology</td>
<td>0</td>
<td>6</td>
<td>188</td>
<td>463</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Education &amp; External Studies</td>
<td>45</td>
<td>40</td>
<td>591</td>
<td>540</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>11</td>
<td>4</td>
<td>99</td>
<td>207</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>0</td>
<td>1</td>
<td>1452</td>
<td>860</td>
<td>55</td>
<td>85</td>
</tr>
<tr>
<td>Business &amp; Management Sciences</td>
<td>0</td>
<td>0</td>
<td>770</td>
<td>833</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Computing &amp; Information Sciences</td>
<td>43</td>
<td>30</td>
<td>686</td>
<td>892</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>0</td>
<td>0</td>
<td>82</td>
<td>214</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veterinary Medicine &amp; Biosecurity</td>
<td>10</td>
<td>40</td>
<td>61</td>
<td>110</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>School of Law</td>
<td>0</td>
<td>0</td>
<td>164</td>
<td>118</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tot –Mak</td>
<td>109</td>
<td>121</td>
<td>4332</td>
<td>4540</td>
<td>59</td>
<td>113</td>
</tr>
<tr>
<td>Mak University Business School</td>
<td>0</td>
<td>0</td>
<td>2032</td>
<td>1593</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grand Tot</td>
<td>109</td>
<td>121</td>
<td>6364</td>
<td>6133</td>
<td>59</td>
<td>113</td>
</tr>
</tbody>
</table>

Source: Graduation Booklet 2016
2.2 New Programs, Curriculum Review and Accreditation

In an effort to respond to emerging development challenges in 2016, the University continued its efforts to review the curriculum and develop new programmes relevant to national and global needs. All colleges have had to review their curriculum to match the changing nature of the community development needs that was emphasized by the University strategy. The reviews were further designed to harmonise curriculum across the academic units and anchor programmes along disciplinary focus. The University Quality Assurance mechanism decrees that all academic programmes are reviewed every three years to respond to new developments in content, pedagogy and technology. The ideal situation further enhances stakeholder participation majorly the industry, public and private sectors.

All Mak programs have been accredited by the National Council for Higher Education (NCHE). The School of Law was accredited by the Law Council as a legal aid service provider to the University community and surrounding areas. Subsequent to that, the Environmental Law Centre at the SoL is now a regional training centre in water, law and policy.
### Table 4: New Programs responding to national development needs

<table>
<thead>
<tr>
<th>College</th>
<th>Program</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS</td>
<td>Masters in Monitoring and Evaluation Technical Support (METS) Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Masters and PhD programs in Health Informatics Approved</td>
<td></td>
</tr>
<tr>
<td>COCIS</td>
<td>Master of Science in Records and Archives Management. Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master of Science in Agricultural Information and Communication Management Presented to Board of Graduate Studies</td>
<td></td>
</tr>
<tr>
<td>CEES</td>
<td>Bachelor of Youth in Development Work (BYDW) External degree programme Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master of Instructional Design and Technology External degree programme Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master of Education in Education Psychology Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSc Meteorology Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSc Water and Irrigation Engineering Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSc. Bioprocessing Engineering Approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSc. Animal Science and Husbandry Awaiting Senate approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSc. Watershed Management Fully implemented</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master of Disaster Risk Reduction and Management Approved by Senate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSc. Horticulture Awaiting Senate approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSc. Natural Resource Economics Awaiting Senate approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Certificate course Environmental Impact Assessment Awaiting Senate approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSc. Climate Change and Sustainability Awaiting Senate approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSc. Applied Meteorology Awaiting Senate approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short courses on Climate Awaiting Senate approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSc. Integrated Animal Production Systems Awaiting Senate approval</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Academic Registrar’s Department 2016*
<table>
<thead>
<tr>
<th>College</th>
<th>Programme</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHUSS</td>
<td><strong>PGD in Gender and Local Economic Development</strong></td>
<td>Reviewed</td>
</tr>
<tr>
<td>CEDAT</td>
<td>Diploma in Civil Engineering Survey</td>
<td>Phased out</td>
</tr>
<tr>
<td>CHS</td>
<td><strong>Master of Public Health</strong></td>
<td>Reviewed</td>
</tr>
<tr>
<td></td>
<td>BSc in Conservation Forestry and Products Technology and Bachelor of Social and Entrepreneurial Forestry were merged into BSc of Science in Forestry, with four options:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Forestry Products Engineering,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Agroforestry,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plantation Forestry,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Natural Forest and Biodiversity Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MSc Agricultural Economics and MSc Applied Economics were merged</strong></td>
<td>Reviewed and merged</td>
</tr>
<tr>
<td></td>
<td><strong>PhD (Plant breeding) and PhD (Plant breeding and Biotechnology) were merged</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MSc Applied Human Nutrition similar to the MSc Public Health Nutrition offered by College of Health Sciences was merged.</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Bachelor of Tourism programme was changed to BSc in Tourism and Hospitality Management.</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BSc in Agricultural Engineering in CAES, BSc in Mechanical Engineering in CEDAT and BSc in Biomedical Engineering in CHS were reviewed and recommended to be taught jointly</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MA in Geography restructured to Master of Geographical sciences</strong></td>
<td>Reviewed</td>
</tr>
<tr>
<td></td>
<td><strong>Master of Land-Use &amp; Regional Development, PGD in Meteorology, PGD in Environmental Impact Assessment</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MSc. Forestry and Biodiversity Management revised with three options:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plantation Forestry,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Forest Products Engineering &amp;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Natural Forest and Biodiversity Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MSc Agro-forestry was revised to MSc. Agro-forestry and community development with two options:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Agro-forestry Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Community Development &amp; Outreach</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Master of Science in Environment and Natural Resources created new options with new specializations in:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Natural Resources Conservation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Environmental Pollution and Waste Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Environmental Monitoring and Assessments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Environmental Governance and Policy Dropped Plan B (Coursework + Project)</td>
<td></td>
</tr>
<tr>
<td>CAES</td>
<td><strong>Reviewed</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Reviewed</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Reviewed</strong></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>Programme</td>
<td>Status</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CAES</td>
<td>PGD in Environment and Natural Resources to be awarded after successful completion of first year of taught courses and the diploma is upgraded to MSc upon completion of the research project</td>
<td>Reviewed</td>
</tr>
<tr>
<td>SoL</td>
<td>Bachelor of Law</td>
<td>Reviewed</td>
</tr>
<tr>
<td></td>
<td>Master of Laws reviewed with specialities in international and regional Human Rights, commercial Law, oil and gas, Human rights Law in the domestic perspective, civil society law and Disability Rights law, Comparative environmental law policy, Environmental law &amp; policy and civil society law.</td>
<td>Reviewed</td>
</tr>
</tbody>
</table>

Source: Academic Registrar’s Department 2016

2.3 Innovations in teaching and learning using ICT

The University strategic plan recognizes Open, Distance and E-Learning (ODeL) as the number one strategy for increasing access to flexible education for prospective students. The University Council approved the ODeL policy in 2016. The policy aims to mainstream open, distance and eLearning into academic programmes of the University so as to increase access to flexible and quality technology supported learning. It is on the basis of the policy that the University set up an Institute of Open and distance Learning.

The Institute of Open, Distance and e-Learning received a donation for e-Teaching 1 (The International Online Tutor Course) and e-Teaching 2 (E-Course Development and Implementation) courses from the University of Agder, Norway. The collaboration with University of Agder (UiA) enables Mak to adapt and run the e-courses as its own. Twenty out of 40 staff received hands-on experience in online learning through the e-teaching courses.

ICT pedagogical enhancement has been used to prepare the platform for improved access through distance learning. During the year under review, this extended to human capacity skills for the creation and use of video and audio content for online and distance education, as part of the NORAD funded Distance Education Leapfrogging Project under the Institute of Open, Distance and E-Learning. Areas of focus included Quality video in teaching: pedagogical considerations, Hands-on use of Camtasia studio to edit the videos, video camera recorders, and portable/ adhoc video recording (Smart phones).

The deployment of ICT tools in teaching and learning has continued to improve on the Makerere University E-learning Environment (MUELE). The platform has enabled staff in the different colleges to upload their e-content. To-Date, cumulatively, 637 courses have been uploaded in 2016 compared to 592 interactive courses in 2015.
ICT tools have been installed in lecture theatres to provide flexibility and to adhere to the new demands in education delivery. Wireless internet access points have been fixed to address the challenges of internet connectivity. Thirty one (31) internet laboratories (iLabs) were developed and deployed in the Department of Electrical and Computer Engineering, in the College of Engineering Design Art and Technology as part of the Presidential Initiative for Science and Technology.

2.4 Practical Orientation (Internship) and Exhibitions

The University strategy highlights and emphasizes the learner centred mode of instruction. Internship and field attachment provide the first opportunity for students to apply their knowledge to the real world of work before completion of their programmes. The University has continued to make formal engagements with different stakeholders so as to provide students with interpersonal skills and confidence in their own abilities. In 2016, under the AfDB-HEST Programme in partnership with Uganda Manufacturers Association (UMA) and Ministry of Education and Sports, the mode of internship training was changed so as to target a bigger number of students. Makerere University had a two-day internship training program to prepare students for the work marketplace. The training targeted final student from the Colleges of Agricultural and environmental Sciences (CAES), Veterinary Medicine, Animal Resources and Biosecurity (CoVAB), Engineering Design Art, & Technology, (CEDAT) Computing and Information Sciences (CoCIS) and Natural Sciences (CoNAS). A total of 540 students were trained in soft skills.
The College of Health Sciences, the School of Public Health Field Supervisors’ annual review meeting in October 2016 brought on board several stakeholders who included: District/ Field Supervisors, MakSPH Faculty, MPH Program Secretariat, MPH (DE & FT) students and the Uganda Medical and Dental Practitioners Council representative among others. The main objectives of the meeting were: i) to receive feedback from Field Supervisors, MPH Officers and Faculty Supervisors on the June – August 2016 field attachment; ii) to discuss strategies on improving MPH field training; iii) to review the draft MPH Field Attachment Manual; and iv) To strengthen capacity of Field Supervisors in supporting/ mentoring MPH Officers during field training.

Further to enhancing the student’s relevance in the world of work, over 200 Ugandan students were flagged off to Israel for a one-year Agro-Studies internship program from the CAES and CoVAB. This is the fourth cohort of students from Uganda to be sent to Israel. The First Lady and Minister of Education and Sports Hon. Janet Kataha Museveni flagged off the students.

The School of Law introduced the Community Law Program and Mobile Law Clinic (CLAPMOC) to promote the University’s commitment to promoting community outreach activities and to train students in a practical and hands-on manner. The program aims at providing hands-on training, expose students to the legal needs of the vulnerable and marginalized and provide legal advice to communities.

The Refugee Law Project expanded into new areas and new methodologies in which the Media for Social Change Team established live streaming of the first steps of the Kwoyelo pre-trial at the International Crimes Division of the High Court of Uganda.

For the other Colleges, students were deployed in various organisations such as Government Ministries, Parastatals, NGOs to mention but a few for their internships, CHUSS sent out 2,635 students; School of law sent out 350 third year students and CoCIS sent 930.
2.5 Access to University Education

The University continued to adopt initiatives and partnerships to expand University education at international and national levels, targeting academic excellence, the social economic backgrounds and multidisciplinarity. Makerere University is part of the global network under The MasterCard Foundation Scholars programme. At Makerere University the MasterCard Foundation Scholars Programme was designed to target 1000 academically bright but economically disadvantaged youth from Africa to access quality University education. The Foundation committed USD 20,989,968 grant for successful implementation of the Program. For the third cohort in 2016/17, one hundred and ninety-nine (199) students from six countries namely; Uganda, Rwanda, Kenya, Somalia, Burundi and South Sudan were awarded scholarships. Of the 199 selected Scholars, 72 % are female, 11 % are international students. This brings the total number of Scholars to 294 over the three academic years.
Within the mainstream private and government scholarships scheme the University continues with the 1.5-point scheme for females. The total female enrolment for Semester one 2016/17 academic year stood at 44% female. In line with the government policy for equitable access, students admitted on the district quota and disability scheme are 448 and 37 respectively in 2016/17. The total number of students registered under these schemes is 1,252 and 94 respectively accounting for 22% of the government enrolments of which 12% are females in 2016/17.

Under the Higher Education Students Financing Board (HESFB) Loan Scheme, the Government initiatives coordinated by the Ministry of Education and Sports to expand access to university education, 168 students in Makerere University were approved to access financing through the loan scheme in 2016/17. This brings the total number of students under the scheme to 571 over the past three academic years.

The Mak Female Scholarship Foundation (FSF), coordinated under the Gender Mainstreaming Directorate (GMD) supports students from disadvantage backgrounds under four categories of scholarships; The Carnegie Corporation of New York, MS. JD, dfcu and Mak Tuition Waiver. The Carnegie Grant that commenced in 2011 to sustain the Female Scholarship Foundation reached its target of 2550 Scholars by 2016/2017 academic year. GMD recruited a total of 35 Carnegie Scholars that covers tuition, functional fees and living out allowance. MS. JD Scholarship educational trust supports two female students offering the Bachelor of Laws. The Development Finance Company of Uganda (dfcu) Bank supports one scholar in the College of Humanities and Social Sciences and for the Mak Tuition Waiver a total of 15 Scholars were recruited to benefit from the support.
Mak Strategy is focused on becoming a research driven University where research and teaching/learning are mutually reinforcing.
Makerere University is defined by the continued quest to become a research led institution bringing together the best minds to conduct cutting-edge research. Evidence of this manifests in the high and growing volume of research output in the international research databases. During the year under review, Mak’s research focus is evident in the key disciplines of health, technology, agriculture, environment, arts and humanities. Figure -2 shows the publication by subject area as listed in the Elsevier Scopus database for the 2015-2016 period.

**Figure 2: SCOPUS Research Publications by Subject Area**

To enhance the research capacity and output, University staff at the ranks of senior management, senior researchers, Principals, Deputy Principals, Deans, Directors, and Heads of Units were trained on Intellectual Property Rights. This was done by Uganda Registration Services Bureau (URSB). The primary aim was to sensitis staff about intellectual property rights in order to maximise future prospects and benefits to both the individual and the institution.

### 3.1 Graduate Training and Post-Doctoral Research

One of the indicators for the Research thrust of the University is the graduate enrolment. The University had 587 PhD registered students (See table 6). These define the future of knowledge generation and uptake. Several initiatives have been designed to enhance doctoral and the post doc research. Examples of such initiatives are the African Doctoral
Academy (ADA) a collaborative arrangement between Makerere University and Stellenbosch University (SU) in South Africa. The second Joint Doctoral School on two courses; Doctoral Supervision and Becoming a Lecturer: Teaching and Learning in Higher Education. The training was attended by 40 and 50 participants respectively. Participants were drawn from Makerere University, Muni University, Kyambogo University, Gulu University, Ndeje University, Mbarara University of Science and Technology (MUST) and Busitema University.

Table 6: Admitted and Registered PhD students- 2015/16

<table>
<thead>
<tr>
<th>College</th>
<th>Registered</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Agricultural &amp; Environmental Sciences</td>
<td>39</td>
<td>116</td>
</tr>
<tr>
<td>Engineering Design Art &amp; Technology</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Education &amp; External Studies</td>
<td>36</td>
<td>74</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>22</td>
<td>39</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>32</td>
<td>63</td>
</tr>
<tr>
<td>Business &amp; Management Sciences</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Computing &amp; Information Sciences</td>
<td>25</td>
<td>46</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Veterinary Medicine Animal Resources &amp; Bio Security</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>173</td>
<td>414</td>
</tr>
<tr>
<td>Makerere University Business School</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>428</td>
</tr>
</tbody>
</table>

Source: Directorate of Research and Graduate Training December 2016

Other post-doctoral initiatives include the Next Generation of African Academics and the CAPREx Programme supported by the Carnegie Corporation of New York.

3.2 Key Research and Innovations highlights

In addition to publications in peer reviewed journals, University research and innovations output has targeted national development needs. Innovations in agriculture, public maternal and new-born health, ICT and social sciences dominated the research agenda for 2016.
3.2.1 Agricultural and Agricultural Engineering Research

Mak in partnership with Perdue University Indiana USA developed a Solar-powered Irrigation pump as a cheap and reliable solution for small scale farmers. This innovation was embraced by the Government of Uganda as a solution for providing cheap means of water for farmers and can be easily moved. The system is able to source water within 100 metres and 8-10 meters above the ground. The system is able to pump 450 litres of water per hour. In a day, a farmer will be able to pump 3600 litres of water for 8 hours (working day).

The advantage is that harvested water can be used for humans and animals. The entire system can be assembled at a cost of UGX 6.5 million. It is anticipated that if adopted the water system will improve the resilience of farming communities to droughts and the attendant challenges. This prototype joins the earlier pump developed under the Presidential Initiative for Science and Technology.
Other innovations include recycling diesel from plastics by CAES in partnership with University of Kentucky USA. The innovation is an attempt to utilize waste polythene bags/plastics to address the problem of hazards caused by poor disposal of polythene bags.

Researchers have also ventured into the manufacture of organic pesticide from agricultural waste for use by farmers to control pests like the red ants which are common threat to Ugandan farmers. The pesticide was made from eucalyptus saw dust, which has no human health and environmental effect. The research break-through presents business opportunities for organic farming and export. The research was a partnership between Mak research team and University of Kentucky USA. The organic pesticide was tested and sprayed on various insects and red ants at MUARIK where results were impressive.

Research to develop milk replacer diet for piglets is in advanced stages. This is in line with the scaling up of the technology of artificial insemination in pigs. This is a follow up of research conducted on pig production, feeding and breeding in the previous years.

The earth worm breeding research has been on-going since 2012. Commercialisation of Earthworm breeding is to provide alternative cheaper sources of protein to livestock farmers in the face of escalating prices of conventional silver fish or Mukene as a major source of animal protein. The plan is to upscale earthworm production for commercial purposes and job creation for the youth and women through value addition to the earthworms as animal feeds. The intervention will focus on mimicking nature as observed in the wilderness in order to improve on farm efficiencies among smallholder farmers engaged in local poultry production as a business enterprise and source of employment to the youth that should be engaged in production of ecologically produced organic poultry.

The Research Centre for Ticks and Tick-borne Disease Control (RTC) was established at CoVAB with support from the Japan International Cooperation Agency. The centre is aimed at broadening the research in the ticks so as to provide a solution to ticks and related diseases, to address the outbreaks of animal diseases specifically the tick borne diseases that are a common occurrence.
3.2.2 The Resilient Africa Network (RAN)

The **Resilient Africa Network (RAN)** [www.ranlab.org](http://www.ranlab.org) a USAID funded project in Makerere University College of Health Sciences, School of Public Health was designed to *strengthen resilience in Africa through university-led local innovative solutions using evidenced-based approaches*. The programme is operational in 18 Universities spread across 13 African Countries. The 2016 achievements include:

1. Working with multidisciplinary students, faculty and the communities, the RAN team translated knowledge generated in the classrooms into innovations. The innovations portfolio expanded to over 150 potentially transformative innovative solutions in the fields of agriculture, health, engineering, financial inclusion and governance that address community needs. Some of these innovations include;

   a. *The Low Cost Solar Irrigation Pump* used by small holder farmers to supply water to their gardens thus improving harvest. The Irrigation Pump is currently being used in Mukono and Palisa districts, Uganda.

   b. *Pedal Tap*, a Non-Touch Water Dispensing System currently being used in several of the Kampala City Council Authority public washrooms and Mulago National Referral Hospital, Uganda.

   c. *The Maize thresher*, a low-cost optimized post-harvest technology for mechanized threshing and winnowing of maize. It has eased labour costs among farmer groups in Nakasongola, Kasese and Hoima districts.

   d. *The Solar Dryer*, an efficient, express dryer that uses solar technology to facilitate faster drying of a broad range of agricultural produce retaining the food aroma, colour and nutrients. This technology has been used in Matugga a suburb in Luwero district and currently being used in parts of Kampala Uganda.

   e. *Community Radio in a bucket*, a technology that uses a transmitter and telephony to replace a conventional radio studio for broadcasting. This is currently serving in Northern Uganda (Oyam, Kitgum and Agago districts).

   f. *Improved Push and Pull Technology*, an innovative approach to inter-cropping that dually suppresses nuisance weeds and pests. This has been tested in Eastern Uganda areas of Iganga district.

   g. *Village Egg Bank*, a model that encourages savings among small holder farmers. This concept thus becomes the ‘currency’ in the community. This ‘bank currently operates in Yumbe district, West Nile region of Uganda.
Over 120 multi-sectoral key stakeholders engaged for innovation including development partners in the private sector, government and NGOs. Some of the stakeholders engaged include; Rockefeller Foundation, UNDP, UN Women, UNFPA, UNHCR, NUCAFE, Parliament of Uganda, Agha Khan Foundation, Humanitarian Leadership Academy, IGAD, Save the Children and Uganda Communications Commission.

2. RAN has cultivated an Innovation Culture through engagements with students, faculty and the community to creatively think in order to respond to community needs. Some of the activities which aid this include;

   a) Trainings in the Human Centred Design processes to promote innovating for, with and by the end users,

   b) Community co-creation sessions engaging community members to think differently and

   c) Engaging the girl child in the innovation process through initiatives like the annual Technovation Challenge and RAN4Gals among others. Innovation is now a buzz word for many.

   d) Business development support to all innovators.

3.2.3 Presidential Initiative for Science and Technology

The initiative continues to enhance the platform for the University to contribute to national development through knowledge generation, innovations and transfer by integrating the community the academia and research.

The College of Agricultural and Environmental Sciences saw an increase in processing space, installation of processing equipment and equipping of laboratories in the Food Technology & Business Incubation Centre (FTBIC). The Centre commenced with the preparatory processes for expansion of incubator space.
Partnerships developed to expand agro processing capacity include:

1) Collaboration with Imuka Ventures to develop a Business Development Service (BDS) model to support FTBIC Incubatees. The partnership is supported by Bocconi University of Italy. The project is carrying out random controlled trials in which a large population of aspiring entrepreneurs in Uganda will interact in order to improve their business ideas. It is also assisting them in generating empirical evidence on whether access to rich social networks is a key component of successful entrepreneurship as well as explore the mechanisms through which relevant social networks can be enhanced in an effective and scalable manner.

2) Collaboration with the Fisheries Department at the Ministry of Agriculture Animal Industry and Fisheries sponsored a Post-Harvest Handling of fish seminar for all stake holders in the Lango sub-region as part of the fish value chain community development in the Lango sub-region. This was aimed at sensitizing the stakeholders on the economic importance and development of the Fish Industry in the sub-region.
At the **College of Engendering Design Art and Technology**, The Centre for Research in Transportation Technologies [CRTT] that produced the famous Kiira EV & the Kayoola Solar Bus have embarked on research for the drone transportation technologies. The Centre for Technology Design and Development (CTDD) is at the forefront of facilitating technology development and transfer activities. CTDD is committed towards commercialisation of two projects the solar food drier and the collapsible boda boda helmet. The design improvements for both the solar food drier were finished.

**Prototype of a movable solar hood thermal drier**

The irrigation project continued improving the design of the pumps and testing prototypes of solar water pumps. These were exhibited at the CEDAT open day during November 2016. Farmers in Zirobwe, Kayunga, Mityana, Buyende, Nyabushozi and other areas requested for demonstrations and are already benefitting from the pumps. The irrigation of coffee farms using the Makerere solar water pumps is under way and UCDA have agreed in principle to fund some trial irrigation sites on coffee farms before full scale roll out. The project will soon be supplying water to farming communities to mitigate the effects of drought. The feasibility study for manufacture of solar water pumps developed by the Project was also presented to Parliament for funding.
Demonstrating the solar water on-farm

CREEC set up Solar Kiosks and a 1.62kW solar mini-grid to provide clean, cheap and efficient lighting solutions for the rural population in Kiboga, Arua and Mukono. In the Solar Kiosks, the locals rent solar lanterns at a price of 300/- which is equivalent to their daily expenditure on kerosene. This has reduced risks associated with kerosene usage such as fire hazards and air pollution. The solar mini-grid also provides affordable lighting solution for businesses. This has increased their working hours and the livelihood of the people.

The Innovation Systems and Clusters Programme- Uganda (ISCP-U) conducted research and developed a pilot of the relevant appropriate technologies for salt purification. It upgraded 50 solar hybrid dryers for Kayunga Pineapple Cluster to improve on heat content and designed a fully scaled up Industrial Project for the Kaliro Fish processing to deal with seeds multiplications, productions, feeds making and processing units. This has been submitted to United Nations Capital Development Fund and is also being marketed among the individual firms.

The College of Veterinary Medicine, Animal Resources & Bio-security through the AFRISA platform has continued to impart skills for production and development especially in animal resource value chains. In 2016, training of artisans was commissioned a total of about 550 Artisans have trained in goat rearing, poultry, piggery and Apiary. The results have been (i) students in dairy technology developed a low-cost yoghurt production to cater for millions of schools going children; (ii) students in Pig technology developed a technology from indigenous micro-organisms (IMO) which is used to promote odourless pig-farming. The IMO technology is available in form of a paste.

The innovation is regaining popularity and many farmers are changing from the traditional system to the IMO system of pig production and piggery; iii) students in the leather technology have also developed affordable durable and quality shoes from pure
leather developed from local hides and skins. The innovation is a move to have a net saving in household expenditure and reducing on money spent on importing counterfeit synthetic leather and plastic products.

SPEDA carried out training of students (600) with assistance from UPDF in Atiak, Northern Uganda. The training was in goat rearing, poultry, piggery and Apiary. The exercise was partially supported by the office of the first lady and the UPDF who provided the necessary security and sensitization of the population.

Atiak Trainees in House Hold Enterprises

The SPEDA model is now operating industrial cottage enterprises, which have taken off at Nakyesasa incubation centre. The centre is being upgraded into an industrial enterprise and skilling centre. The dairy, piggery, apiary and fish enterprises have been initiated. These are enterprises for skilling, they are not large scale agro processing. The project embarked on pasture/ Legumes development. A variety have been planted (Napier grass (Elephant), Brachiaria, Panicum, Chloris, Lablab) and these are used to feed the animals in the dairy value chain.

3.2.4 Health Research under the College of Health Sciences

Capacity for Vaccine Economics and Financing: The Makerere University School of Public Health partnered with The International Vaccine Access Centre (IVAC) at Johns Hopkins Bloomberg School of Public Health, USA, as well as other institutions to build capacity for Vaccine Economics and Financing in the region through a new two-year project funded by the Bill & Melinda Gates Foundation. The purpose of the new project is to improve the efficient use of resources by vaccine delivery programs in low and middle-income countries (LMICs). The programme targets improvement in resource allocation and priority setting for vaccine delivery programmes.

Map of PHFP-FET Investigations (2016)
3.3 Research Dissemination

Research dissemination and output remains the core area that contributes to the University’s productivity. This has been done through holding of conferences, lecture series, seminar series, workshops, dialogues and exhibitions. Research dissemination has made the University to remain afloat in the national public domain to influence policy and research publications has given it an academic competitive edge that continue to place it among the best universities in Africa. The year under review has had an increase in dissemination activities and this section presents the different avenues in which the University has interacted and disseminated its research findings.

3.3.1 Professorial Inaugural Lecture Series and Public Lectures

Mak takes cognisant of the growing need to hold professorial inaugural lectures. The inaugural lecture series is a platform for professorial staff to contribute to the academic life of the University. **Professor Sylvia Tamale** a leading feminist, who combines academia with activism and adopts a critical approach to Law that aims at enhancing students 'transformative personal growth and agency. Professional Inaugural Lecture titled "Nudity, Protests and the Law in Uganda". The inaugural lecture was an analysis in the past years, how Women in Uganda have had several incidents of women stripping naked as a way of
protesting what they perceive as gross injustice which is an age-old strategy from the perspectives of law, gender and power. She concluded that women are attempting to re-write the script on their bodies by using nakedness as an instrument of power and to subvert the law in order to effect justice.

Professor Maria Musoke launched her book entitled; *Informed and Healthy: Theoretical and Applied Perspectives on the Value of Information to Health Care*. The book is an asset focusing on the value attributed to information by users and its effect on health care. It also provides a new model of information behaviour in which the value of information drives various information activities.

The College of Humanities and Social Sciences held two public lectures by i) Renowned Historian, Professor Holly Hanson, who recounted the 1945 strikes in Buganda based on new evidence obtained from the National Archives of England. In her presentation titled; "*Rethinking Uganda in the 1940s with New Evidence*", she explained how newly available evidence in the National Archives of England changes the perception of Uganda in the 1940s; & ii) A public lecture on *Land Governance and Boundary Disputes in South Sudan and Northern Uganda* by Cherry Leonardi (Durham University) and Martina Santschi (swisspeace) was based on historical and empirical research in South Sudan and Northern Uganda. The findings report that tensions, contradictions and effects of these hybrid land governance mechanisms, have the potential, paradoxically, to contribute both to the causes and to the resolution of boundary disputes.

The College of Education and External Studies held a public lecture on, *Climate Change and its impact on agriculture in Africa* by Professor Ransom Lekunze. The lecture provided the evidence of climate change in Africa and the vulnerability of the continent to climate change and the effects it has on agriculture. He reiterated the need for individual and collective responsibility in finding solutions to climate change problems.

The 1st Memorial Lecture in honour of the Late Dr Festus Bagoora was held under the theme “*Environmental Regulatory and Institutional Framework in Uganda: Practical Challenges to Sustainability*.” Dr Festus Bagoora served the academic fraternity for over 30 years. He was one of the more polished and accomplished geomorphologists in the country and region at large. He taught and supervised many staff members at Masters and PhD level. He also worked as The National Environment Management Authority (NEMA)’s Natural Resources Management Specialist (Soils and Land Use).
Makerere University Celebrated the 70th Anniversary of the Fulbright program under the theme **70 years of partnership and achievements**. In Uganda, the Fulbright program has contributed tremendously to the development of the education system. Through its various scholarship opportunities; it has strengthened Ugandan’s university lecturers’ competence by sponsoring higher degree of training, provided research grants to scholars, encouraged academic exchange programs, provided professional enrichment studies, offered fully funded fellowships. The programme has been instrumental in promoting international linkages between U.S. and Ugandan scholars.

### 3.3.2 Exhibitions and Dissemination in the Fine Arts

The Margaret School of Industrial and Fine Arts plays a key role in promoting the visual and fine arts as a discipline. Key activities range from exhibition in contemporary, cultural and comparative themes. Exhibitions held for the period under review include:

1. **City Remixing** exhibition presented five different perspectives on Kampala by five different photographers coming from different places and times.

2. **Kabbo ka Muwala – The Girl’s Basket**: is an idiom in Luganda, referring to a tradition in East Africa where a transport presents in a basket to her new family and her parents in turn. This was based on the theme “**Migration and Mobility in Contemporary Art in Southern and Eastern Africa**”. This exhibition was conceived as an itinerant project taking place in Zimbabwe, Uganda and Germany.

3. **Narratives of Body and Shape**: Portrayed the diverse stories in and about Africa. This was drawn from the African and Islamic arts, storytelling, and on African American experiences to explore the obvious tragedies and highlight other silenced stories, experiences, and narratives. The artist a Sudanese who has migrated to the United States uses the art as a forum to teach and to bring issues of the civil war in Sudan to his Sudanese community all over the world as well as to citizens of other nations.

4. **“Let’s Talk About Omweso”**: ‘Omweso’ is a board game played in many rural and semi-urban communities of Uganda. “Let’s Talk about Omweso” was aimed at raising interest, questions and collate literature in order to add more knowledge about Omweso. The exhibition is conscious of the mathematical principles of strategy and counter strategy, the social-cultural memories and competitive rules of engagement in this game.
5. **The Biennale program “(Hi)Stories of Exhibition Making / 1960 – 1990”** is part of the research project “African Art History and the Formation of a Modern Aesthetic” at Iwalewahaus, University of Bayreuth in cooperation with the Weltkulturen Museum in Frankfurt and Makerere Art Gallery (IHCR) in Kampala. This research seeks to examine not only the singular collections of African Modernisms that are housed today in the collections but also to look at past, present and future connections between them.

6. **Faces up Art Exhibition** was aimed at creating a platform for youths to interact with people they admire and feel are influential. Many people in this world live their lives with inspiration basing from others (role models), and yet these people have so much they contribute to the lives of the people who look up to them. This is aimed bringing hope to some of the pressing issues among the youths including unemployment and crime prevention and above all drug abuse.

### 3.4 Research Funding and Internationalisation

Research Funding at Makerere University also defines the internationalisation thrust of the institution. The external funding has continued to significantly improve the research profile of Makerere Universities. In the year under review, the University had more than USD 25m worth of running projects in 2016. Whereas several of these are multi-year projects from partners, the Makerere-Sida Bilateral Research Programme and NORHED stand out as a predominant player in the University research process at an institutional level.

The Regional Universities Forum (RUFORUM) has continued to provide research funding to agriculture. Over the review period, **College of Agriculture and Environmental Sciences** has received research funds to the tune of US$ 1,2 million to support, both research and training that contributes to agricultural development, smallholder holder agricultural enterprises, increased productivity and market linkages (e.g. cassava, cowpeas, potatoes), increased food security, and nutritional health.

**Makerere-Sida Bilateral Research Programme**

Government of Sweden has been supporting Makerere University Research thrust since 2000. To date over 200 university staff have attained PhDs and more that 300 research projects have been undertaken in the areas of heath, engineering and technology, agriculture and the humanities in collaboration with Universities in Sweden. Research infrastructure has been boosted with several laboratories, including the biotechnology laboratory in the College of Health Sciences, the water resources and the GIS labs in CEDAT as well as the Demographic Surveillance Site in Mayuge. Total investment over the 15-year period is to the US$ 73.3 million. The fourth phase of Sida support to Makerere University worth US$ 32million commenced with the signing of the agreement on 3rd November 2015. The focus of the five-year programme is human resource development...
at Post–doctoral, PhD and Master level targeting staff of Makerere University, Kyambogo University, Gulu University, Busitema University and Mbarara University of Science and Technology. The program builds on earlier support aimed at strengthening and enhance the capacity of public universities in Uganda to generate knowledge and promote research uptake for national and regional development.

The current phase focuses on training a critical mass of independent thinking researchers based on basic, applied and multi-disciplinary research, covering natural sciences, social sciences and the humanities. Where previous support adopted the Sandwich mode of PhD training, this phase has targeted local training at Makerere University and the Partner Public Universities in multi-disciplinary teams, themes to fit within Mak's research agenda. For the year under review:

- The programs has so far recruited and awarded scholarships to 265 members of staff from five Partner Public Universities (Makerere, Busitema, Kyambogo, Gulu and Mbarara) at Postdoctoral scholarships (45), PhDs (118) and Master degree (85) out of the approved 337 research training scholarships and the remaining scholarships are yet to be filled soon.

  This year’s theme “Investing in Research and Innovating for Society” is in tune with our research agenda because we are convinced that the challenges to society today are increasingly becoming more complex in a world that is witnessing emerging and re-emerging health-related epidemics and pandemics, climate change, energy concerns, natural disasters, food insecurity, human rights abuses and conflict and insecurity among others. Local challenges require local responses. And for this, each country needs its own experts, its own problem formulations, and its own knowledge production – an intellectual autonomy.

  Prof Buyinza Mukadasi – Director DRGT at the Sida Collaborative Research Programme Annual Review Meeting Oct 2016

- The Ugandan public universities university have reviewed and developed academic curricula including the PhD in Mathematics, PhD in Information Sciences, MSc. Disaster and Risk Management;

- The beneficiaries have been trained in the areas of Research Financial Management and Result Based Management. The capacity to conduct out quality research greatly has been enhanced by regular training and availability of well-equipped cross cutting research laboratories and library resources.

- The support has also contributed to the establishment of centres of excellence in waste management in College of Agriculture, health systems research, and renewable energy research, among others.

- It has improved the staff research culture both in the basic and social sciences with increased publications. It has enabled many researchers to write grant winning proposals including; Makerere-Uganda Virus Research Institute won the DELTAS-Welcome Trust fund, 2016; Social Research Hub College of Health Sciences, 2016; World Bank Centre of Excellence in Nanotechnology 2016; World Bank Centre of Excellence in Agricultural Crop Improvement 2016.
Building on earlier phases, the Sida Programme has improved the library services. The library now provides up to date information, not only to Makerere University but also to the entire country including Internet services throughout the whole university. It has enabled the procurement of Modern equipment in GIS lab, Biomedical Lab, Agriculture and Medicine. As a result of the capacity developed, Makerere has become a regional centre in library and ICT resources and supports capacity building in these areas to other universities in the region including University of Juba in Southern Sudan.

Makerere Carnegie Next Generation of African Academics Project II (NGAA II) 2013 - 2016

Makerere University has been implementing Phase II of the Next generation of African Academics Programme (2013-2016) titled; ‘Enhancing research capacity and retention of the Next Generation of Academics at Makerere University’. The NGAA II grant supported Post-Doctoral research, PhD, travel grants and the revitalization of the Makerere University press. Under this programme, the following achievements were registered;

- The NGAA has contributed to the University vision and on-going processes to institutionalise a culture of research and foster a community of scholars by creating opportunities for grantees to publish, attend conferences and network. This has enabled them to become recognized within the institution and internationally. About 143 publications were produced by the different beneficiaries during and after the grant period. 60 academic staff have had the opportunity to present papers at international conferences, some papers arising from findings of their studies. This has provided opportunities for international collaborations and networks worldwide. Conferences have served as a platform to expose University staff to the international research environment and also show case research output by the University.

- It has helped to consolidate thinking on postdoc training and led to the development of a policy on postdoc research.
• The support has greatly contributed to the University’s human resources development. Staff have been trained at PhD, Masters and postdoctoral levels. This has elevated the calibre of academic staff and enhanced research capacity. A number of the beneficiaries have gradually progressed into higher teaching positions.

• It has supported the Interdisciplinary PhD Programme at Makerere Institute of Social Research (MISR). The Makerere Institute of Social Research launched its Interdisciplinary PhD in Social Studies in January, 2012. A total of twenty-seven (27) students have been supported in the Interdisciplinary PhD in social studies. Of these, five (5) students have earned an MPhil and have progressed to collect data, analyse and write their PhD theses in the next two years. Eight (8) of the students are in third year and should earn their MPhil in 2017. The other fourteen (14) students are currently in the second and third years of their studies.

• It has supported MISR to acquire 720 Library books to upgrade research infrastructure for graduate students under the MISR programme. In 2016, the institute launched an interdisciplinary journal entitled ‘The MISR Review’ and conducted individual academic writing clinics for PhD students.

The NORAD Supported Norwegian Programme for Capacity Building in Higher Education and Research for Development (NORHED) at Makerere University

The Government of the Royal Kingdom of Norway, through NORAD, moved into a new collaborative research program, Norwegian Programme for Capacity Building in Higher Education and Research for Development (NORHED). The goal of NORHED is to build higher education and research capacities in the Low and Middle Income Countries (LMICs), as a means to enhance sustainable conditions conducive to societal development and poverty reduction. NORHED is envisaged to be an important vehicle to further develop the excellent cooperation between Uganda and Norway on higher education and research”. The Programme that aims at increasing academic capacities in developing countries by creating a long term relationship between South-North was launched by NORAD in 2012.

The Programme is tailored along Institutional commitments and involvement with thematic and geographic focus areas geared towards post graduate programmes and joint research projects while utilizing the available research infrastructure and strengthening the research systems. Thematic areas include: Education and Training, Health, Natural Resources Management, Climate & Environment, Democratic & Economic governance, Humanities, Culture, Media and Communication as well as capacity development especially in South Sudan. As a collaborative programme, it links up institutions in a complete triangular form (i.e. South-North-South). Makerere University is involved in 13 out of the 46 NORAD funded NORHED projects. It takes lead in the implementation of nine (9) projects of the 13 projects guided by the signed Partnership Agreements with the nine 9 partner institutions from the South and six (6) institutions from the North. Besides these, Makerere University is a regional collaborating partner institution on four Projects led by Moi University, Sokoine University in Tanzania and University of Juba.
The NORAD Supported Norwegian Programme for Capacity Building in Higher Education and Research for Development (NORHED) at Makerere University. The Government of the Royal Kingdom of Norway, through NORAD, moved into a new collaborative research program, Norwegian Programme for Capacity Building in Higher Education and Research for Development (NORHED). The goal of NORHED is to build higher education and research capacities in the Low and Middle Income Countries (LMICs), as a means to enhance sustainable conditions conducive to societal development and poverty reduction. NORHED is envisaged to be an important vehicle to further develop the excellent cooperation between Uganda and Norway on higher education and research. The Programme that aims at increasing academic capacities in developing countries by creating a long term relationship between South-North was launched by NORAD in 2012. The Programme is tailored along Institutional commitments and involvement with thematic and geographic focus areas geared towards post graduate programmes and joint research projects while utilizing the available research infrastructure and strengthening the research systems. Thematic areas include: Education and Training, Health, Natural Resources Management, Climate & Environment, Democratic & Economic governance, Humanities, Culture, Media and Communication as well as capacity development especially in South Sudan. As a collaborative programme, it links up institutions in a complete triangular form (i.e. South-North-South). Makerere University is involved in 13 out of the 46 NORAD funded NORHED projects. It takes lead in the implementation of nine (9) projects of the 13 projects guided by the signed Partnership Agreements with the nine (9) partner institutions from the South and six (6) institutions from the North. Besides these, Makerere University is a regional collaborating partner institution on four Projects led by Moi University, Sokoine University in Tanzania and University of Juba.

Figure 3: Collaborating institutions under the NORHED Programme at Mak

KEY

- University of Bergen (UiB)
- University of Oslo (UoS)
- University of Agder (UiA)
- University of Life Sciences (NMBU)
- Telemark University College (TUC)
- Norwegian School of Veterinary Science (NVH)
- University of Juba (UoJ)
- University of Dar es salaam (UDSM)
- University of Zambia (UNZA)
- University of Nairobi (UoN)
- Addis Ababa University (AAU)
- University of Juba (UoJ)
- University of Dar es salaam (UDSM)
- University of Zambia (UNZA)
- University of Nairobi (UoN)
- Addis Ababa University (AAU)
- University of Bahr El-Ghazal (UBG)
The Programme now in its 4th year of implementation has enrolled 66 PhDs, 66 Masters and 8 Post doc fellows from the 9- south-to-south partner institutions.

3.4.1 Research Capacity Development at the College of Humanities and Social Sciences

The University is embracing role of humanities and arts in national development. As a result, the University has received great support towards through the following:

- **The Andrew W. Mellon Foundation grant USD4** million is a five-year grant to facilitate capacity building in the areas of PhD training, Masters fellowships and staff exchange and networking amongst Eastern, Western and Southern African Universities.

- **Gerda Henkel Foundation** grant worth 800,000 Euros towards training in any historical component. The support is three-year fulltime scholarship for 10 PhDs in Historical Humanities and Humanistic Social Sciences.

- The Japanese Government through their Ministry of Education has committed to support annual forums on African potentials in conflict resolution for the next four years on fulltime three-year scholarships for 10 PhDs in Historical Humanities and Humanistic Social Sciences, were so far two forums have been held first forum held in Kyoto, Japan and the second in Kampala.

- **The Erasmus Mundus** to support 2 PhDs and 2 MAs. The collaboration will see two faculty from Mak facilitated to spend a year at the University of Torino, Italy and in turn receive the expertise of two faculty from the University of Torino placed at the college during the same period.

- **Research Collaboration between the School of Women and Gender studies University of Oxford, Beijing Normal University and the National Law School India.** This is an international research project working to evaluate locally developed policies in three countries: Uganda, India and China on the theme “Does Shame Proofing anti-poverty Programmes improve their effectiveness? Theory of Change and impact policy evaluation in cross national settings”

- The Norwegian College of Dance renewed the MoU with CHUSS for another five years. The highlights include joint performances with the Department of Performing Arts and Film at Mak, sponsorship of two Masters Students undertake their studies at the University of Trondheim as well as support the fundraising drive for a 300-seater Amphi theatre for the department.

- A new training and skills development program through Partnerships for Africa’s Next Generation of Academics-Education (PANGeA) was launched. PANGeA-Ed is a network consisting of eight leading African universities focused on strengthening and advancing doctoral training and scholarship in the arts, humanities and social sciences on the continent. This is a five-year funded initiative by Robert Bosch and Gerda Henkel foundations that will offer 50 high quality short courses and workshops in research and skills development across the eight partner universities.
3.4.2 African Centres of Excellence

Makerere University is set to operationalize two (2) Centres of Excellence under Eastern and Southern Africa Higher Education Centers of Excellence Project (ACE II). The main objective of ACE II is to establish and strengthen specialization and collaboration among a network of higher education institutions designated as ACEs in the Eastern and Southern Africa region to deliver relevant and quality education and applied research to address key development challenges facing the region. Participating Governments include: Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe.

Uganda emerged with four centres, in Uganda Martyrs University Nkozi, Mbarara University of Science and Technology and two (2) from the Makerere University Colleges of Agricultural and Environmental Sciences focusing on the Establishment of an East African Centre for Crop Improvement and the College of Engineering Design Art and Technology Centre of Excellence on Materials, Product Development and Nano Technology (MAPRONANO).

![Image of African Centres of Excellence](image1)

**Prime Minister and the Vice Chancellor Mak after the opening ceremony**

The two Centres are led by Dr Richard Edema and Prof. Paul Gibson from CAES and Prof. John Baptist Kirabira and Dr Michael Lubwama from CEDAT respectively. The Performance based Centres will train up to 50 PhDs and 150 Masters Students in addition to infrastructure development and research projects.

This centre was launched in June 2016 by Hon Irene Muloni, Minister of Energy and Mineral Development. The Centre was initiated under a partnership between the College of Engineering Design Art and Technology, East African Community and the Austrian Development Agency, to host the first ever Centre of excellence for East African Centre for Renewable Energy and Energy Efficiency (EACREEE).
The Centre will be funded by the Austrian Development Agency through UNIDO. The centre is part of the Global Network of Regional Sustainable Energy Centres; that currently includes the EACREEE, the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) based in Cape Verde and the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) in Barbados, with the Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE) and the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE).

The EAC counties will also be expected to fund the Centre. The objective of the centre is to contribute towards increased access to modern, affordable and reliable energy services, energy security and mitigation of negative externalities of the energy system (e.g. local pollution and Green House Gas emissions) by creating an enabling environment for renewable energy and energy efficiency markets and investments. It is anticipated that the centre will have capacity to leave important footprints on technical, financial, institutional levels, and most importantly, on a human resource level, as well as reducing the political, regulatory, institutional, technical, and social barriers in the region for the achievement of access to energy for all.

The East African Oncology Centre of Excellence under the Uganda Cancer Institute was launched in April 2016. Within this framework, the department of pediatrics together with the Uganda Cancer Institute, Baylor-Uganda, and Baylor College of Medicine at Houston Texas, USA launched the First ever East African Hematology Oncology Fellowship with support from the African Development Bank to train super specialized pediatricians related health staff in pediatric hematology and oncology and four members of staff were awarded the fellowship scholarships for the two years.
The Infectious Disease Institute

IDI by the Numbers (June 2016)

**PCT**
- 7,840 active clients currently enrolled at the IDI Mulago clinic; 176 average daily client visits at the IDI Mulago clinic.
- 5,996 clients on first line antiretroviral therapy (ART) at the IDI Mulago clinic; 1,389 clients on second line (one of the largest second line single-centre cohorts in the region); and 176 clients on thirdline.
- 9 specialist clinics at IDI Mulago: Adolescent (327), Sexual Reproductive Health (148), Sfu Citizens (427), TB/HIV (51), Discordant Couples (573), Most At Risk Populations (216), Hepatitis B (313), Mental Health (100) and 2nd line and other regimens (1,565).

**Outreach**
- 81,973 clients on ART and 9,940 clients not on ART, plus 1,978,225 individuals counselled, tested for HIV (since 2007) in the IDI-supported outreach clinics in Kampala and in 7 districts in Western Uganda and in 8 districts in West Nile.
- 231,831 men circumcised since April 2011.
- 17,179 deliveries conducted in the Saving Mothers-Giving Life (SMGL) supported sites in year to June 2016.

**Training**
- 19,691 participants trained in the areas of HIV/AIDS, malaria, TB, systems strengthening, pharmacy, laboratory, research and especially dangerous pathogens since 2002.
- 11,844 queries answered through the free Advanced Treatment Information Centre (ATIC) since 2004.
- 80 districts across Uganda and 1 African country provided with technical assistance during the year.

**Research**
- 475 research articles published in peer-reviewed journals since 2001.
- 47 active research grants, including 13 clinical trials, 17 observational studies and 17 capacity building projects.

**Lab**
- 117,360 units tested at IDI core and central labs in year to June 2016.

**General**
- 902 full time staff employed as of June 2016
- 79 current grants managed by IDI in June 2016
- A$10.5m in the IDI annual budget 2015/16.
4 KNOWLEDGE TRANSFER AND PARTNERSHIPS

Knowledge Transfer Partners (KTP) as envisioned in the University Strategic plan aims at enriching the teaching, learning and research that deepens the University’s contribution to society. It has allowed the University to gain mileage and exposure into real life situations to enhance learning by staff and students. For 2016, the developments include interface with different districts to address health challenges, conferences, seminar series, community service and international partnerships.

4.1 Conferences and Seminar series

The following conferences and seminar series were held during the year under review:

- The 3rd economic, social and cultural rights conference was organised by the School of Law under the theme “Business and Human Rights in Uganda: Accountability Vs. Social Responsibility for corporate abuses”. The conference was attended by the Academia, Civil Society, students, and the general public.

- The 11th International Conference of the African Association of Remote Sensing of the Environment (AARSE2016) was held by CAES under the theme: Our Earth, Our Heritage: enhancing geospatial technologies for achieving sustainable development goals in Africa.” The issue discussed play a vital role in geospatial data and information in achieving the sustainable development goals.

Prime Minister and the Vice Chancellor Mak after the opening ceremony
The University Participated in the 24th National Agricultural Trade Fair and Show at the Source of the Nile, Jinja under the theme “Soil and Land use management for sustainable food security and wealth creation”. This is a national event where research institutions, companies and agribusiness firms showcase their latest innovations and technologies. Students from CAES showcased the innovations on Indigenous Microorganisms (IMO) and Earthworms as an alternative protein feed for poultry.

The 3rd FANRPAN’s Multi-Stakeholder Policy dialogue on Climate Smart Agriculture (CSA). The ideas generated are aimed at generating research-based evidence, and strengthen capacity of young professional on CSA and food security research; support advocacy campaigns for the development and implementation of responsive CSA policies and; supporting the uptake of CSA best practices.

The College of Veterinary Medicine, Animal Resources and Biosecurity held the 5th International Scientific Conference under the theme “Sparkling Innovations for Sustainable livelihoods and Health in Africa”. This was to empower the youth with innovative skills, sharing information, knowledge and experiences on improving the youth livelihood and health, disease control in humans and animals, research, human capital development, education, transformative capacity development and developing innovative minds.

In partnership with Uganda Veterinary Association, COVAB hosted the World Veterinary Day 2016 under the theme “Continuing education with a one health focus”. The day’s activities included vaccination of dogs for rabies in Kawempe, and an exhibition for showcasing veterinary and health pharmaceutical developments, agricultural products, business enterprises and research innovations.

The College of Computing and Information Sciences participated in the Automatic Weather Stations (AWS) design and prototyping as well as installing of the second-generation Automatic Weather Stations in South Sudan, Tanzania and Uganda under the Weather Information Management in East Africa (WIMEA) Project. The project is to advance all aspects of meteorology in the East African region - increasing the density of weather stations, training in the use of modelling for weather prediction and analysis, and to innovative ways of disseminating forecasts i.e. the migration of weather services from Analog to Digital!

The College of Engineering, Design Art and Technology held the CEDAT Annual Open Day and Conference under the theme “Symposium on Transformative Digital Technologies” to showcase the various activities. The symposium acted as a forum for the discussion on the technological breakthroughs to deliver future networks to turbocharge developing economies.

The College of Humanities and Social Sciences in collaboration with the University of Manchester held a symposium on the theme “Governing Development in Uganda: Does Uganda have the capacity and Commitment
to meet the SDGs” with a focus on Sustainable Development Goals. The College also held a Knowledge Exchange Forum (KEF) on issues of Policy, Communities and HIV/AIDS in Africa under their joint project titled: “Connecting Public Policy, Communities and HIV/AIDS in Africa” and were medical experts, policy makers discussed a number of issues surrounding the management of HIV/AIDS in Africa.

- In collaboration with Friedrich Ebert Stiftung CHUSS held the 4th seminar on Youth, Politics and Elections in Uganda, were a number of issues that impact on National development were discussed. The University paid tribute to Okot p’Bitek, by launching “Omulanga gwa Lawino” the Luganda translation of one of his famous books Song of Lawino. In addition, Prof. Dominic Dipio in collaboration with the Ma’di Cultural and Development Foundation (MACDEF) carried out research on the practice of rainmaking. Several myths surround the process of rainmaking and rain stopping in different communities in Uganda and Africa at large. Different people have claimed to have powers to make or stop rain but there are still a number of unanswered questions as to whether rainmaking is magic, witchcraft or rudimentary science waiting to be discovered.

4.2 Partnerships for Service Delivery: Linking the University to Community

The University has continued to build both local and international partnerships which cuts across teaching, research and knowledge transfer. Outstanding 2016 partnerships include, health and related activities in the local governments as well as legal representation for vulnerable communities. The medical camps organised by the College of Health Sciences do not only address health challenges in the communities but also expose staff and students to real life situations at the point of service delivery.

Katanga medical camp: As part of giving back to the community, a medical camp was held in Katanga Slum as a pre-JASH conference event. Approximately 302 patients were served; treated, received health education and health promotion or were referred.
Participating providers also introduced the concept and created awareness about the Sustainable Development Goals. **Surgical camp:** The Surgery department conducted a surgical camp in the greater Mubende region led by the Association of Surgeons of Uganda from 22\textsuperscript{nd} to 25\textsuperscript{th} August 2016. Faculty members and postgraduate students actively participated in offering surgical services in Mubende Regional Referral Hospital (RRH), Mityana Hospital, Kiganda HC IV and Ntwetwe HC IV. Over 300 operations were carried out and 1000 consultations were made.

In partnership with Stellenbosch University South Africa and Jomo Kenyatta University of Kenya, the University launched a **telematics receiving studio** to support Food Science and Human Nutrition training at the University. This initiative is with support from European Union (EU) –Edulink II project: **Partnerships to strengthen University Food and Nutrition Sciences training and Research in Eastern and Southern Africa (PASUFONS).**

Forest reformation and climate improvement were areas of focus, students from CoVAB and CAES participated in planting of trees to mark the World Record planting of 10,000 bamboo trees in 1 hour in Kayunga District. For the commemoration of the **World Earth Day 2016,** under the theme “**Trees for the Earth**” and trees were planted around the University by staff and students from the two colleges.

The School of Law successfully engaged the Supreme Court in an **amicus curiae** application, where staff from the School were admitted as friends of Court in the Presidential Petition. This was to provide expertise and civic obligations as legal academics for the benefit of the public. The School has continued to provide pro bono services in legal issues to the public so as to foster greater engagement of lawyers in public interest litigation and advocacy, carry out training and awareness sessions.

In 2016, four communities benefited i.e. Katanga, Kikubamutwe, Kivulu and Kikoni. In addition, the School has introduced Community Law Programme and Mobile Law Clinic (CLAPMOC) to promote the University’s commitment to promoting community outreach activities and to train students in a practical and hands-on manner. Two field offices in Nakivale and Kyangwali refugee settlements have been established. Kyangwali refugee settlement was gazetted as a magisterial area, a development that promises to bring legal services closer to the refugee population.

The University through the Guidance and Counselling Centre established partnerships with a number of organizations and universities (including Florida State University, Human Resources Association of Uganda, Association of University and College Counselling Centre Directors, IREX, DESIGN lab based in the USA, National Career Development Association (NCDA)). Through the partnerships a PhD student in career counselling trained 20 staff as Career Advisors. The staff also received scholarships from the American Group Psychotherapy Association (AGPA) and the Israel Anti-Drug Authority that enabled the staff to attend the American Group Psychotherapy conference and the substance abuse management training in Jerusalem Israel.

At the continental level, the Centre for Tobacco Control in Africa facilitated the enactment of a comprehensive tobacco control law in one of CTCA’s target countries, The Gambia. The National Assembly of The Gambia passed the tobacco Control law on December 20, 2016, and it was assented to by the President on December 30, 2016.
CTCA provided technical assistance to the government of the Gambia, right from the Bill enactment process. The Gambia joins Uganda as the second country to establish the Tobacco control law in Africa. CTCA was established in July 2011 by WHO, with funding from the Bill and Melinda Gates Foundation (BMGF) to provide technical and institutional support to governments in Africa in the areas of policy formulation, legislation and enforcement of tobacco control, as well as building and sustaining institutional capacity for tobacco control.

Africa Hub finally Launches Regional Training course in Health Systems Research. Africa Hub is a coalition of seven schools of public health in Eastern Africa looking to strengthen capacity for health systems research (HSR) in Africa. The training, it was envisaged, would build capacity for design and conduct health systems research, communicate evidence, analyse and apply health systems research evidence for better policy and decision making.

Symposium on the Future of African Higher Education Leadership and Management for Development

On 5th February 2016, the East African School for Higher Education Studies and Development hosted a Symposium on the ‘Future of African Higher Education Leadership and Management for Development’ at the Makerere University Main Hall. The Symposium was part of the activities of the Strengthening Institutional Capacity for Higher Education Leadership and Management in sub-Saharan Africa (LMUU II) project.

MPH Students Participation in Outbreak Investigation and Disease surveillance related activities

Eleven students participated in different disease outbreak investigations (and response) and surveillance systems evaluation and strengthening in different districts.
4.3 Internationalisation and MoU with national and international agencies

The University strategy articulated three cross cutting thematic areas of Gender, Quality Assurance and Internationalisation. While research stands out as a key component for Internationalisation, other areas including, curriculum, student enrolment and services, show case Makerere University in the regional and global space. Several agencies and Universities have expressed interest in partnership with Makerere University, through the Memoranda signed. The focus of these partnerships range from professional development, research, provision of specialized consultancy services as well as staff and student exchange.
The College of Health Sciences stands out as a key player in the internationalisation framework of Makerere University. For example, for the period under review, the College received 276 (Two hundred and seventy six) Students from 34 Universities across the world. These were students were from different specialties (medicine, Nursing, Physiotherapy and Biomedical engineering and Orthopaedics). 54% of these were from Universities with whom the college has established partnerships and the rest were free movers, University of Bergen sent the highest number of students and Faculty (N=52). The occasional students enhanced exchange of knowledge and skills, laid foundation for collaborative research and increased service to the community. Whereas most students were mainly from institutions from High Income countries like United States of America, Norway and Sweden, the college hosted students from Somalia and Southern Sudan in a bid to increase capacity of health professional in the region.

4.3.1 MoU signings with various Partners in 2016

For the period under review, the University through the various Colleges and Administrative Units continued to forge new professional service agreements, partnerships and collaborative teaching and research. For instance, the College of Health Sciences is developing collaboration with Witwatersrand University of Johannesburg (Wits) - School of Health Sciences. Upon their visit, a commitment was made to make it official by signing a Memorandum of Understanding which will open up new experiences for our students and staff in research, faculty exchange, sponsorships plus virtual learning opportunities.

Besides academic related MoUs, the University signed agreements with RENU for more cost-effective and affordable internet bandwidth given the growing need to utilise ICT; partnering with INASP for access to e-resources and with AYDU in implementation of Mak Policy on students with Disabilities.
## MoU with Various Partnerships

<table>
<thead>
<tr>
<th>PARTNERING INSTITUTIONS</th>
<th>DATE SIGNED</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mak-CAES (Uganda) and Justus Liebig University Giessen Germany</td>
<td>17-Dec-15</td>
<td>Cooperation agreement to promote international exchange and closer cooperation in research and teaching as well as the development of Joint Projects</td>
</tr>
<tr>
<td>Mak (School of Liberal and performing Arts) and Intern Aid Uganda Ltd</td>
<td>18-Dec-15</td>
<td>Makerere University wishes to engage in training programmes of displaced persons in performing arts as well as providing a context for research by and the training of students in the field</td>
</tr>
<tr>
<td>Mak-Uganda and Drugs for Neglected Diseases Initiative 1202 Geneva, Switzerland</td>
<td>8-Jan-16</td>
<td>Financial agreement in relation to research related to Leishmaniasis</td>
</tr>
<tr>
<td>Mak (School of Statistics and Planning)-Uganda and Ecole Nationale Superieure De Statistique ET D' Economie Appliquee (ENSEA) COTE D' IVOIRE</td>
<td>12-Jan-16</td>
<td>To find attached proposal letter between both parties</td>
</tr>
<tr>
<td>Mak-Uganda and University of Kentucky(United States of America)</td>
<td></td>
<td>Both parties pledge themselves to cooperate in a spirit of greater understanding to deepen friendly relationships and ties of mutual benefit</td>
</tr>
<tr>
<td>Mak-Uganda and University Court of the University of ST. Andrews (USTAN), Scotland and Kilimanjaro Clinical Research Institute(KCRI), Tanzania and Kenya Medical Research Institute(KEMRI),Kenya and National Institute for Medical Research-Mbeya Medical Research Centre(NIMR-MMRC),Tanzania and CPAR Uganda Ltd and East African Health Commission (EAHRC) of EAC</td>
<td>15-Jan-16</td>
<td>Specify with respect to the project the relationship among the parties, in particular concerning the work between the parties, the management of the project and the rights and obligations of the parties concerning inter alia liability, Access Rights and Dispute resolution</td>
</tr>
<tr>
<td>Mak-Uganda and British Geological Survey</td>
<td>25-Jan-16</td>
<td>Concerning a hidden crisis: unravelling current failures of future success in rural groundwater supply</td>
</tr>
<tr>
<td>Mak (School of Statistics and Planning)-Uganda and The Food and Agriculture Organisation (FAO) of the United Nations</td>
<td>29-Jan-16</td>
<td>Provision of the collection and management of data from administrative sources</td>
</tr>
<tr>
<td>Mak (College of Health Sciences) and The Ministry of Health and, Mulago National Referral Hospital (Uganda)</td>
<td>29-Jan-16</td>
<td>To provide a framework for collaboration between the two parties towards provision of quality health care services, training and research to improve the health of Ugandans and beyond</td>
</tr>
<tr>
<td>Mak (COBAMS), Uganda-and National Bureau of Statistics, Tanzania</td>
<td>18-Dec-15</td>
<td>Guiding the conducting of the pilot study on improving administrative data for the agricultural statistics. The ARDs was selected to be used in the pilot study. The activities were funded by the Global Office strategy to improve agricultural and rural statistics, hosted by FAO statistics division</td>
</tr>
<tr>
<td>Mak, Uganda and The Chonbuk National University S67 Baek-daero, Deokjn-gu,Jeollabuk-do, Republic of Korea</td>
<td>5-Feb-16</td>
<td>To develop the long-term activities where financially feasible and consistent with the policies of Mak and Chonbuk National University and all other governing legislation from the republic of South Korea</td>
</tr>
<tr>
<td>Mak, Uganda and The Flemish interuniversity Council(VLIR), Belgium and Ugent, Jimma University(JU) and Mountain of the moon University(MMU) and Arba Minch University(AMU)</td>
<td></td>
<td>Implementation of a project (NSS 2015-2016) in the framework of the institutional University cooperation (IUC).</td>
</tr>
<tr>
<td>NO.</td>
<td>PARTNERING INSTITUTIONS</td>
<td>DATE SIGNED</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>16</td>
<td>Mak, Uganda and Kyoto University, Yoshida-Honnachï, Sakyo-ku 606-8501 Japan</td>
<td>15-Dec-15</td>
</tr>
<tr>
<td>17</td>
<td>Mak, Uganda and Gwangju Institute of Science and Technology, Republic of Korea</td>
<td>30-May-16</td>
</tr>
<tr>
<td>18</td>
<td>Mak (College of Health Sciences), Uganda and The University of South Wales, Sydney, Australia and Brien Holden Vision Institute Foundation, Sydney, Australia</td>
<td>4-Aug-16</td>
</tr>
<tr>
<td>19</td>
<td>Mak, Uganda and Okayama University Japan</td>
<td>8-Nov-16</td>
</tr>
<tr>
<td>23</td>
<td>Mak, Uganda and International Institute of Tropical Agriculture Ibadan, Oyo State, Nigeria</td>
<td>19-Sep-16</td>
</tr>
<tr>
<td>27</td>
<td>Mak, College of Natural Sciences, Uganda and National Agricultural Research Organisation (NARO), Uganda and National Agricultural Research Laboratories (NARL), Kawanda Uganda</td>
<td>6-Sep-16</td>
</tr>
<tr>
<td>28</td>
<td>Mak CAES, Uganda and Moon Agriculture and Processing Co. Ltd (Map Co. Ltd), Uganda</td>
<td>12-Oct-16</td>
</tr>
<tr>
<td>29</td>
<td>Mak, Uganda and international Network for the availability of scientific Publications, INASP, Oxford, UK</td>
<td>12-Jun-16</td>
</tr>
<tr>
<td>31</td>
<td>Mak, Uganda (School of Medicine) and School of public health and Ludwig-Maximilian's (Germany), and Medical school, University of Freiburg (Germany) and University of Rwanda (Kigali-Rwanda) and Stellenbosch university (Cape town- south Africa) and Choronic Disease Initiative of Africa (Capetown- South Africa) and Addis Ababa (Ethiopia) and University of Malawi</td>
<td>6-Sep-16</td>
</tr>
<tr>
<td>33</td>
<td>Mak, Uganda and Action For Youth with Disabilities Uganda (AYDU)</td>
<td>5-Sep-16</td>
</tr>
<tr>
<td>34</td>
<td>Mak, Uganda and Mikelle University, Ethiopia</td>
<td>28-Sep-16</td>
</tr>
<tr>
<td>35</td>
<td>MakCONAS, Uganda and National Centre for Scientific Research(CNRS) under the French Law</td>
<td>24-Aug-16</td>
</tr>
<tr>
<td>36</td>
<td>Mak-Uganda and UNIS Software Systems Co. Ltd. Floor 3 TH-UNIS Building Tsinghua University, Beijing, 100084 China</td>
<td>21-Dec-16</td>
</tr>
</tbody>
</table>
Whereas the academic functions of teaching and learning, research & innovations, knowledge transfer partnerships define the core functions of the University, library services, human resource, physical infrastructure and ICT provide the support systems. The organisational structure however binds the two functions together to fit within a broader institutional framework. In 2016, there were marked improvement in support facilities especially in development of centralised lecture facilities under the AfDB-HEST program.
5.1 Organisation and Management

Mak was established by an act of Parliament and the strategy for organisation and management is anchored in the Universities and Other Tertiary Institutions Act 2001 (UOTIA). In 2016 a number of achievements were realised. The primary goal for organisation and Management under the University Strategic Plan is to ensure an efficient and effective organisational and management environment. The Plan envisaged that as a support function Organisation and Management will imply the harmonisation of governance structure and functions, institutional autonomy and running the University as an enterprise; as well as synchronizing plans /policies of government with those of Makerere University. The Governance docket which encompasses activities of University Council and Senate and the respective Committees. Key highlights for the year include:

**Installation of Chancellor- Professor Ezra Suruma:** Makerere University installed a new chancellor Professor Ezra Suruma who succeeded Professor Mondo Kagonyera after his eight-year term. Professor Suruma, a renowned scholar of economics and management was installed as the third non-Head of State Chancellor of Makerere University; before presiding over his inaugural graduation ceremony in January 2016.

![Chancellor Prof. Ezra Suruma](image)

Mak awarded an Honorary Doctorate of Laws (Honoris Causa) to H.E Recep Tayyip Erdoğan, the President of Turkey. The award was in recognition of his distinguished contribution to the development of nation states across the globe. President Recep Tayyip Erdoğan’s contributions include championing the wellbeing of more than three million migrants that have either found themselves into Turkey or have been returned to Turkey from many, especially European countries. H.E Erdoğan has also played a key role in countering violent extremism in the world. Government of Turkey donated ICT equipment worth over Uganda shillings 100 million to the Peace Centre through the Turkish Cooperation and Coordination Agency (TIKA).
Interface with the Members of Parliament

University Management interfaced with the Parliamentary Committee on Education and Sports. This provided an opportunity on the University Management to share information on the overall state of the University and challenges faced by the University.

5.1.1 The AfDB-HEST programme at Makerere University

The Government through the African Development Bank secured a loan of US$100m to improve science and technology in Higher Education Institutions (AfDB-HEST programme). Makerere University’s benefit is US$29.2m for infrastructure rehabilitation, refurbishment of laboratories, merit based scholarships at PhD, masters, undergraduate level and refresher courses for middle management staff. The University Strategic Plan highlights the need to have centralised teaching facilities as a mechanism for management of large student numbers. It was against this background that the central facilities were prioritised in the AfDB support.

The aim is that students and staff across the university will benefit from the central space. For the year under review the primary focus was the construction and rehabilitation of the Central Teaching Facilities. Other Central Facilities include concluded:

a) The Diagnostic Laboratory hosted by the College of Natural Sciences. It is our anticipation that all laboratory based units at the University will be accessing this facility which will have state of the art equipment.
b) The **Biotechnology Laboratory** based at the College of Agricultural and Environmental Sciences-CAES- Equipment worth USD 1m will be put in this facility

c) The **GIS Laboratory** based at the College of Engineering, Design, Art and Technology-CEDAT. Equipment is being procured to take the existing laboratory to a higher level. All Staff and Students in this field will have access to the facility

d) The **Computer Laboratory** based at the College of Computing and Information Sciences. 200 thin clients will be available for use by the student community

All Facilities designated as centralised will be available for access and utilisation by the staff and students in the respective disciplines. We thank the AfDB for taking us one step further in the implementation of the University Strategic Plan.

**Other areas of focus supported by the AfDB-HEST:**

1) **Specialised laboratory rehabilitations.** The renovation and refurbishment of existing Laboratories in the following colleges: **Physiology Lab** in the College of Health Sciences (CHS), Chemistry Laboratory based in the College of Natural Sciences-CoNAS, Science Labs in College of Education and External Studies (CEES), Materials and Hydraulics Lab in the College of Engineering, Design, Art and Technology-CEDAT

2) For **income generations and resource mobilisation**, the University is setting up an incubation centre targeting the Diary Value Chain at the Makerere University Agricultural Research Institute (MUARIK). Rehabilitation works for the centre are in final stages, and resources for operationalisation have been received.

3) **Scholarships**- academic staff at the doctoral level (10: 5F,5M), master students in their final year of study for research (12: 5F, 7M) and bright but needy undergraduate students (31: 8F,23M). Middle level management staff for short-term skills 33 staff in central Administrative Units have benefited from the Support.

4) The School of Open and Distance Learning is spearheading the **E-Learning activities**. A number of staff have been trained to develop e-content. A total of 40 business courses have been fully developed and they are online. The courses are ready and await to be launched to create awareness among the community.

5) Bridging the Gap between the University and the Private Sector - **Internships**: This component is coordinated by Uganda Manufacturers Association. This is aimed at providing students with soft skills that can enable them transition into the work environment. In the first cohort, a total of 292 students from the various colleges in Makerere University were sent to UMA for placement. Of these 164 (56 %) were placed in 83 companies and agencies in Uganda. Of this 31 were retained to be employed by the placement companies. A second cohort, a total of 480 were trained and forward to UMA for placement. Of these 195 (42%) have been placed as of September 2016. The students considered are final year students who have completed university education and await graduation.
6) **Gender, HIV AIDS & Special Needs:** AfDB realised this is one of the areas that it could provide support. A number of activities have been identified under this category. Gender issues to be implemented by Gender Mainstreaming Directorate, Special needs under Dean of Students, and HIV/Aids prevention under the University Health Services.

### 5.2 Human Resource

Mak values the contribution of its staff, and knows that only through them will its goals be achieved. Excellence in teaching, research and innovation requires great academics and professional staff. In 2016, the academic staff were 1,632 as compared to 1,651 in 2015 as shown in the table below.

**Table 7: Academic Staff by College and Rank 2016**

<table>
<thead>
<tr>
<th>College/ Rank</th>
<th>Prof</th>
<th>Assoc. Prof</th>
<th>Senior Lecturer</th>
<th>Lecturer</th>
<th>Assistant Lecturer</th>
<th>Teaching Assistant</th>
<th>Total</th>
<th>Part Time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAES</td>
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<td>25</td>
<td>39</td>
<td>50</td>
<td>43</td>
<td>0</td>
<td>180</td>
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<td>209</td>
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<td>CoBAMS</td>
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<td>9</td>
<td>8</td>
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<td>0</td>
<td>104</td>
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<tr>
<td>COCIS</td>
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<td>3</td>
<td>9</td>
<td>19</td>
<td>43</td>
<td>7</td>
<td>85</td>
<td>7</td>
<td>92</td>
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<td>6</td>
<td>16</td>
<td>34</td>
<td>46</td>
<td>0</td>
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<tr>
<td>CEDAT</td>
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<td>16</td>
<td>46</td>
<td>71</td>
<td>3</td>
<td>148</td>
<td>9</td>
<td>157</td>
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<td>54</td>
<td>5</td>
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<td>CHUSS</td>
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<td>87</td>
<td>6</td>
<td>264</td>
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<td>23</td>
<td>50</td>
<td>52</td>
<td>2</td>
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<td>COVAB</td>
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<td>6</td>
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<td>39</td>
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<td>2</td>
<td>5</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Jinja</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96</strong></td>
<td>149</td>
<td><strong>200</strong></td>
<td><strong>469</strong></td>
<td><strong>518</strong></td>
<td><strong>29</strong></td>
<td><strong>1461</strong></td>
<td><strong>171</strong></td>
<td><strong>1632</strong></td>
</tr>
</tbody>
</table>

**Source:** Directorate of Human Resources 2016

The Academic staff profile of the University has continued to improve as a result of promotions and recruitments. In 2016 the total number of professors is 96 as compared to 85 in 2015. Several staff have been appointed to higher academic ranks while others got awards and recognition at national and international levels as shown in table below.

**Table 8: Academic Staff Promotions in 2016**

<table>
<thead>
<tr>
<th>College/Rank</th>
<th>Professor</th>
<th>Associate Professor</th>
<th>Senior Lecturer</th>
<th>Lecturer</th>
<th>Assistant Lecturer</th>
<th>Total</th>
<th>F</th>
<th>M</th>
<th>F</th>
<th>M</th>
<th>F</th>
<th>M</th>
<th>F</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural &amp; Environmental Sciences</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Design Art &amp; Technology</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education &amp; External Studies</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computing &amp; Information Sciences</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>2</strong></td>
<td><strong>7</strong></td>
<td><strong>4</strong></td>
<td><strong>11</strong></td>
<td><strong>3</strong></td>
<td><strong>14</strong></td>
<td><strong>4</strong></td>
<td><strong>11</strong></td>
<td><strong>1</strong></td>
<td><strong>14</strong></td>
<td><strong>44</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>15</strong></td>
<td><strong>17</strong></td>
<td><strong>15</strong></td>
<td><strong>2</strong></td>
<td><strong>58</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Directorate of Human Resources 2016
The University with financial support from Sida/ Government of Sweden under the Directorate of Information Sciences procured and deployed the Electronic Document and Records Management System (EDRMS). For management of Human resources, DICTS piloted the (ERDMS) system at the central registry (Human Resource Directorate). The project digitized all active staff files and automated commonly used process flows such as leave requests and file tracking functionality for enhanced trace-ability. Implementation of the ERDMS system and its subsequent adoption and usage by the human resource directorate comes with several benefits to the university which include; saves time, improved storage of human resource files/records, easy tracing of files, saving on stationery.

5.3 Library services

Library services support teaching, learning, and research in Mak. The library resources set a premium on effective educational support to enhance the student experience and maximize learning success. The University adopted a cumulative improvement of the library resources. In 2016, there are currently 445,465 catalogue records; 11,167 journal holdings and 5,882 authority records accessible by users via MAKULA as compared to 280,984 (438,271 copies), 10,890 journal holdings and 4,332 authority records that were accessible by users via MAKULA by 2015. The number of students borrowing books using online circulation increased to 22,543 in 2016 from 6,122 in 2015; 42,551 titles were added to Makerere Institutional Repository (MakIR) in 2016 compared to 2,432 titles added to (MakIR) in 2015.

Table 9: Library Resources

<table>
<thead>
<tr>
<th>Category</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Catalogue Records - Titles</td>
<td>280,984</td>
<td>275,857</td>
</tr>
<tr>
<td>Journal Holdings</td>
<td>11,167</td>
<td>10,890</td>
</tr>
<tr>
<td>Mak Institutional Repository</td>
<td>42,551</td>
<td>2,432</td>
</tr>
<tr>
<td>Print Journal - Titles</td>
<td></td>
<td>45</td>
</tr>
<tr>
<td>Government Publications</td>
<td>273</td>
<td>193</td>
</tr>
<tr>
<td>Dissertation - Titles</td>
<td>1,198</td>
<td>193</td>
</tr>
<tr>
<td>Research Reports</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>E-books</td>
<td>1,308</td>
<td>1,308</td>
</tr>
<tr>
<td>Book Collection - Titles</td>
<td>1,603</td>
<td>1,130</td>
</tr>
<tr>
<td>Print Magazines</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>E-book Databases</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>E-journal Databases</td>
<td>59</td>
<td>40</td>
</tr>
<tr>
<td>Online Audio Lecture databases</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Music Files</td>
<td>1,300</td>
<td>1,300</td>
</tr>
<tr>
<td>Music Titles</td>
<td>155</td>
<td></td>
</tr>
<tr>
<td>Authority Records</td>
<td>5,882</td>
<td>4,332</td>
</tr>
<tr>
<td>Training of Students in Library usage</td>
<td>1,614</td>
<td>1,198</td>
</tr>
</tbody>
</table>
To strengthen its human resources capacity, 3 library staff were promoted to Librarian I, 11 Library staff attained CPD knowledge, RMS training and circulation and 2 staff members attained PhD.

**Figure 3: Library Trainings on E-resource Access and Use in 2016**

The Library outreach and publicity services conducted 10 sessions of Information Literacy trainings in 6 universities & other institutions (UPDF, NLU, UMI & NARO). Published two issues (4,000 copies) of the Health Information Digest and delivered 231 electronic documents (EDDS service) within and outside Makerere University with support from partner universities, and 50 Library resources were publicized within Makerere University through reference service.

### 5.4 ICT Support

The DICTS strategic Plan 2016-2012 was approved by University Council during the year under review. Through support mainly from the Sida project, implemented a number of ICT projects aimed at supporting the university’s core functions of research and learning. The implementation of these projects is expected to result into better use of ICTs within the Makerere educational and business environment. For the year under review, major projects were completed include the following:

- The deployment of the Wireless Hotspots project has increased and improved access to university and online based educational resources. This was enabled by the construction of a radio mast behind the University’s main library. Construction of the mast was successfully completed and wireless access points mounted to relay the wireless signal (Wi-Fi) to a wider area of the University and boost the GSM/mobile signal strength on campus.

- The improvement of wireless-access at student halls of residence. The wireless infrastructure at halls of residence was revamped with new wireless access points being placed at strategic locations for good coverage. This has complemented the wider wireless hotspots project above by increasing access to University and online educational resources to students at their halls of residence through the installation of wireless access points.
• DICTS procured and installed a total of 30 thin-clients computers and servers distributed among-students internet-kiosks, distributed to the following areas; Senate internet-kiosk -15, School of education-10 and College of Health Sciences -5. The internet Kiosks provide access to Makerere educational and online resources for students without personal computers or smart devices.

• The University-wide storage system at DICTS was upgraded to a better and more resilient high-performance Net-App storage system with storage capacity of 21 Terabytes. This upgrade resulted into better storage and management of University Data as well as improved mail quotas. In addition, the fire suppression system for DICTS server-room and data centre was upgraded to automatically extinguish fires in the server room.

• The Campus network backbone and network services (Network Optimization) were improved to better services. A new campus logical infrastructure has been implemented and elimination of unit bottlenecks in accessibility have been eliminated for better local and general experience. In addition, the Network Start-up Resource Centre at the University of Oregon (NSRC) through RENU donated a highperformance gateway router that has enabled the upgrading of the main network Gateway router for better network user experience and better services.

• DICTS coordinated the implementation of the government Computerized Educational Management and Accounting System (CEMAS). The e-campus management solution (CEMAS) will cover academic records (AR), financial records and Human resource records of the University and will integrate with other University information systems through the Integrated Management Information Systems (IMIS) framework. CEMAS is expected to improve the transparency and efficiency of business operations within the University. This will include among others online application and Smart-IDS enabled with RFID and NFC chips which respectively permit commercial payments through banks and verification of student records using smart card readers. The smart-ID will serve as a student-ID for the entire student life-cycle (admission to graduation) and thereafter cease to be a student-ID.

• DICTS developed the Mak-Pay system that automates the transfer of tuition payments from the bank to the University’s financial information system (FINIS). The system eliminates human intervention between the two portals (bank and FINIS). This has created transparency in the payment and management of student fees. The Mak-pay will be integrated with CEMAS the new government system when it is finally launched.

• DICTS further engaged Research and Educational Network Uganda (RENU) on the price of bandwidth. RENU is a National Research and Educational Network (NREN) which is a non-commercial driven network whose bandwidth prices drop as more research and educational institutions join the network. Bandwidth has been, and continues to be a limited resource at Makerere University. By the end of the year the bandwidth had increased to 900 Mbps from 340 Mbps using the same resources. Makerere being a research driven institution, the demand for bandwidth to access or disseminate information and collaborate with other research institutions is huge and
continues to grow as usage trends change towards real-time streaming applications which are highly bandwidth intensive. This initiative has seen a steady increase in bandwidth capacity and improved University web-ranking.

5.5 Physical Infrastructure

Physical infrastructure facilities are central to a conducive teaching, learning and research environment. The University strategy articulated the need to improve Mak’s physical environment to support her functions and services. One of the objectives of the University Strategic Plan under this thematic area is to increase lecture space by 20,000 M$^2$ by the end of 2018. Several milestones have been attained under this area for the period under review. For example lecture space is set to increase by 16,000 M$^2$ with the new centralised lecture facilities put up with support from the AfDB-HEST programme. The programme has also rehabilitated nine (9) specific and centralised laboratories in the various science based Colleges. Including: Physiology Lab in CHS; Chemistry and Diagnostic Laboratory Lab in CoNAS, Science Labs in CEES; Materials and Hydraulics & GIS Lab in CEDAT, Biotechnology Lab in CAES and Bio-security lab in CoVAB. The Dairy Value Chain at MUARIK was also rehabilitated. The rehabilitation included installation of the Milking parlour, Feed mill, Indoor feeding structure and the Calf barn. The Dairy Unit is now equipped to handle the whole value chain from harvesting, feeding animals, preparations for milk production, Milk itself, packaging products and marketing.

Completion of these civil works by Excel Company Limited are being supervised by Arch Designa and is expected to completed by June 2017.
Central Teaching Facility 2 above adjacent to CoRAMS and Central Teaching Facility 1 below, adjacent to the School of Social Sciences
The refurbishment of laboratories included the Physiology Lab in CHS; Chemistry and Diagnostic Laboratory Laboratories in CoNAS, Science Labs in CEES; Materials and Hydraulics & GIS Lab in CEDAT, Biotechnology Lab in CAES and Bio-security lab in CoVAB.
The Dairy Value Chain at MUARIK was also rehabilitated. The rehabilitation included installation of the Milking parlour, Feed mill, Indoor feeding structure and the Calf barn. The Dairy Unit is now equipped to handle the whole value chain from harvesting, feeding animals, preparations for milk production, Milk itself, packaging products and marketing.

Other facilities refurbished at MUARIK include Students’ Incubation centre, the Food Technology and Business Incubation Centre (FTBIC) Pilot processing plant and Mushroom production centre for mass production of mushrooms, multiplication and distribution of seedlings to farmers. The centre will also be a training facility for students and other stakeholders on different technologies on mushroom production. In addition, an Automated Weather Station was installed at MUARIK with support from Global Climate Change Alliance (GCCA) Uganda (GGCS) and SIDA funding to facilitate climate related research and agricultural training at the University farm. MUARIK also received a screen house that was donated by Balton Uganda; the facility is being used to demonstrate modern technology of growing tomatoes.

Other rehabilitation at the main and external Campuses included

- The Institute of Open, Distance and eLearning (formerly, Department of Open and Distance Learning) block and the ICT laboratory, was refurbished and equipped with over 100 computers and their accessories. The former AVU viewing Room, Control Room and Studio were revamped to host video conferencing facilities.
• The CEES Lira Centre was remodelled to house a modern computer laboratory, video conferencing facilities, resource centre, boardroom, lecture and offices for centre coordinator and ICT staff.

• The University officially opened the renovated students’ hostel at Nyabyeya Forestry College in Masindi district. The hostel facility was a donation by The Norwegian Government. In 2003 that was gutted by fire. The University took had to reconstruct the facility because of the need to provide accommodation for students on recess term and internship.

In terms of the general environment, the contract for the rehabilitation of University roads was signed with the KCCA. Works commenced in November 2016 under a Memorandum of Understanding between Makerere University and KCCA. Funding for the rehabilitation is compensation for the University land along Makerere Hill road that was to be affected by the road project.

5.6 Student Support

Academic institutions require a conducive environment to enhance efficient and effective teaching, learning and outreach functions. Provision of staff and student support services ensure a holistic development of the University community. The University strategy is geared towards an environment that strengthens students’ participation, increase student retention, and facilitate lifelong learning. Our aim is to holistically boost the academic and social development of staff and students. Key highlights for 2016 were

- The Freshers’ Orientation for the Academic Year 2016/17 in August, 2016 for both national and international students.

- The 13th Makerere University Environmental Health Students’ Association (MUEHSA) held an annual scientific conference under the theme “Intersectoral collaboration to enhance the role of Environmental Health towards achieving the Sustainable Development Goals.” The conference presented a clear overview and understanding of the importance of collaborative action across different fields to achieving Sustainable Development Goals, especially in health and stressing the role of environmental health.

The School of Law students under their umbrella organization Makerere Human Rights Association (MUHRA) participated in the 9th Inter University Human Rights competition and emerged the winner after nine years. The event was organized by Foundation for Human Rights Initiative (FHRI).
The Breast Cancer Awareness Run kick started the “MAK Breast Cancer Awareness Campaign” organized by Makerere University 82nd Guild Cabinet to disseminate information on breast cancer screening and treatment in several parts of Uganda. Over 400 Makerere University students assembled in the Freedom Square on Sunday 23rd October 2016 to participate in the Run and Chief Runner was Robert Kyagulanyi Ssentamu.

The Counselling and Guidance Centre continues to provide individual and group counselling to students and staff. Cases of gender based violence and sexual harassment have been on the increase. In the year under review 1013 clients were counselled compared to 823 served in 2015, 213 students attended group counselling sessions. The centre also provided counselling outreach activities to the different Colleges in the areas of stress management and other topics. The centre in partnerships with American Group Psychotherapy Association (AGPA) held two capacity building workshops for staff and NGOs across the country. The trainings were on essential principles in psychodynamic group psychotherapy and treatment of trauma and On the Front-lines of Trauma contemplative based trauma and resilience training. The University continues to enforce measures to improve on the welfare of students and staff through awareness campaigns, spearheaded by the Gender Mainstreaming Directorate and School of Women and Gender Studies.
ak’s financial resources are from three main sources, Government Subvention, Internally Generated Funds and Development Partner support.

### 6.1 Financial Performance – GoU Subvention & AIA

The budget performance based on the cash accounting adopted for the year under review is given in Table 8. Government subvention funding to the University has progressively improved over the past three financial years especially towards the enhanced salaries of staff both teaching and non-teaching. On the other hand, there continues to be a decline in the internally generated funds which attributed to the declining fee-paying students joining the University.

#### Table 10: Financial Performance

<table>
<thead>
<tr>
<th>PARTICULARS</th>
<th>2013/2014 UGX(m)</th>
<th>2014/2015 UGX(m)</th>
<th>2015/2016 UGX(m)</th>
<th>2013/2014 UGX(m)</th>
<th>2014/2015 UGX(m)</th>
<th>2015/2016 UGX(m)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants from foreign governments</td>
<td>7,176</td>
<td>10,984</td>
<td>12,099</td>
<td>8,654</td>
<td>10,984</td>
<td>6,454</td>
</tr>
<tr>
<td>Transfers received from the Treasury</td>
<td>81,477</td>
<td>86,420</td>
<td>115,056</td>
<td>81,505</td>
<td>89,180</td>
<td>115,056</td>
</tr>
<tr>
<td>Non-Tax Revenues</td>
<td>113,226</td>
<td>128,154</td>
<td>102,945</td>
<td>96,888</td>
<td>92,305</td>
<td>87,946</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>9,365</td>
<td>5,200</td>
<td>9,324</td>
<td>6,189</td>
<td>6,833</td>
<td>6,992</td>
</tr>
<tr>
<td><strong>Total operating revenue</strong></td>
<td>211,244</td>
<td>230,758</td>
<td>239,424</td>
<td>193,236</td>
<td>199,302</td>
<td>216,448</td>
</tr>
<tr>
<td><strong>Operating expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee costs</td>
<td>135,990</td>
<td>142,259</td>
<td>159,206</td>
<td>13,182</td>
<td>122,548</td>
<td>134,703</td>
</tr>
<tr>
<td>Goods and services consumed</td>
<td>34,239</td>
<td>34,609</td>
<td>26,136</td>
<td>28,513</td>
<td>25,313</td>
<td>26,208</td>
</tr>
<tr>
<td>Consumption of property, plant &amp; equipment</td>
<td>24,816</td>
<td>5,437</td>
<td>21,503</td>
<td>12,456</td>
<td>1,681</td>
<td>22,999</td>
</tr>
<tr>
<td>Transfers to other Organizations</td>
<td>1,633</td>
<td>1,626</td>
<td>1,636</td>
<td>1,636</td>
<td>1,626</td>
<td>2,177</td>
</tr>
<tr>
<td>Social benefits</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Other expenses</td>
<td>14,561</td>
<td>46,825</td>
<td>30,943</td>
<td>17,114</td>
<td>44,132</td>
<td>25,680</td>
</tr>
<tr>
<td><strong>Foreign exchange losses (gains)</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-54</td>
<td>3</td>
<td>-6</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>211,244</td>
<td>230,758</td>
<td>239,424</td>
<td>191,486</td>
<td>195,308</td>
<td>211,761</td>
</tr>
<tr>
<td><strong>Net surplus/ (deficit) after extraordinary items</strong></td>
<td>1,750</td>
<td>3,994</td>
<td>4,687</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.2 Makerere University Endowment Fund

The Makerere University Endowment Fund was instituted to diversify its resource base through mobilisation of funds from the University’s Alumni and key stakeholders. Therefore, the focus is to intensify efforts to raise funds from other sources including the alumni. The Makerere University Endowment Fund was instituted to diversify its resource base. The Endowment Fund Board of Trustees are running two parallel Funds. The Off-Shore Fund is managed by Crown Agents Investment Management Limited based in the United Kingdom and the Local Fund is managed by Gen Africa Limited. For the local Fund, the Custodian is Standard Chartered Bank.

For the year under review, the off-shore Fund had appreciated over 13% or an additional value of GBP134,000 as shown in tables 9.

Table 11: Performance of the Makerere University Endowment Fund (Offshore Investments)

<table>
<thead>
<tr>
<th>Fund as at 31 Mar 2017</th>
<th>Fund as at 31 Dec 2016</th>
<th>Fund as at 31 Mar 2016</th>
<th>Fund as at 31 Dec 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>%</td>
<td>£</td>
<td>%</td>
</tr>
<tr>
<td><strong>Cash</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash at call or deposit</td>
<td>77,672.86</td>
<td>6.39</td>
<td>141,717.25</td>
</tr>
<tr>
<td>FRN(Sov/Corporation)</td>
<td>130,080.85</td>
<td>13.41</td>
<td></td>
</tr>
<tr>
<td>Total Cash</td>
<td>77,672.86</td>
<td>6.39</td>
<td>141,717.25</td>
</tr>
<tr>
<td><strong>Bonds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Bonds</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Large Cap</strong></td>
<td>842,813.35</td>
<td>69.33</td>
<td>745,866.44</td>
</tr>
<tr>
<td>Medium cap</td>
<td>115,919.25</td>
<td>9.54</td>
<td>110,384.75</td>
</tr>
<tr>
<td>Small Cap</td>
<td>179,265.00</td>
<td>14.74</td>
<td>161,451.00</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Equities</td>
<td>1,137,997.60</td>
<td>93.61</td>
<td>1,017,702.19</td>
</tr>
<tr>
<td>Total</td>
<td>1,215,670.46</td>
<td>100.00</td>
<td>1,159,419.44</td>
</tr>
</tbody>
</table>

By close of the year, the local Fund had steadily grown by 4.24% as shown in table 10.

Table 12: Performance of the Makerere University Endowment Fund (Local Investments)

<table>
<thead>
<tr>
<th></th>
<th>Value as at 31 Mar 2017</th>
<th>Value as at 31 Dec 2016</th>
<th>Value as at 30 Sep 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Income Instruments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Deposits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Instruments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-Bills</td>
<td>90,112,940.00</td>
<td>49.77</td>
<td>86,660,719.00</td>
</tr>
<tr>
<td>Government Securities</td>
<td>90,568,801.00</td>
<td>50.02</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>180,681,741.00</td>
<td>99.79</td>
<td>86,660,719.00</td>
</tr>
<tr>
<td><strong>Cash and Demand Deposits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>381,431.00</td>
<td>0.21</td>
<td>28,757.00</td>
</tr>
<tr>
<td>Totals</td>
<td>381,431.00</td>
<td>0.21</td>
<td>28,757.00</td>
</tr>
<tr>
<td>Grand Total</td>
<td>181,063,172.00</td>
<td>100.00</td>
<td>86,689,476.00</td>
</tr>
</tbody>
</table>
Premier project

Students Centre, preliminary cost UGX 15bn to be confirmed by transaction advisor. Architecturals designed by CEDAT students with support from Uganda Architects Association.

During the Board’s initial resource mobilization efforts, *dfcu* was among the first points of contact and it pledged **UGX 100 M** towards the construction of the students’ centre. In July, 2016, *dfcu* honoured their pledge by paying the first quarter of **UGX 25 M**.

### 6.3 Makerere University Holdings Limited

The Makerere University Holdings Limited was instituted to diversify its resource base through short-term, medium term and long-term investments. Over the period under review, with guidance and oversight of the Board of Directors, MakHoldings Ltd. took over the running of Makerere University Guest House as a commercial business entity. The takeover over the one year period yielded a business turnaround leading to improved current asset position and quality and range of services offered. The primary focus of the Holding Company was to put in place operational structures for investment in real estate and other investments. The Transaction Advisor ENSafria Uganda retained to evaluate and develop information memoranda to attract investors identified five (5) projects of focus namely:

**Project 1:** Development of a Convention Centre and Associated Guest Accommodation

**Project 2:** Mixed Development- Kololo – Development of a Luxury Hotel, Commercial Centre & Upmarket Apartments

**Project 3:** Makindye – Development of a Luxury Hotel & Upmarket Apartments

**Project 4:** Development of additional Student Accommodation

**Project 5:** Development of a Student Centre

### 6.4 Grant Funding Solicitation

Besides this centrally coordinated initiative, encouraged are individual staff and college based grants/funding solicitation initiatives. Several of these initiatives span across different years and colleges. The College of Health Sciences stands out with respect to the grant solicitation. In the year 2016, the SPH made 87 grant applications and won 36 grants/consultancies in the areas of HIV/AIDs, health policy, disease prevention, nutrition, reproductive health, sanitation and health among other areas. These grant projects are funded by the European Union, USAID, UNICEF, WHO, Global Fund and the Bill and Melinda Gates Foundation and other donors. MakSPH has also developed and maintained partnerships with various Institutions including the Uganda Ministry of Health, PACE; Uganda, Johns Hopkins University, Nottingham Trent University and Georgetown University amongst others.
<table>
<thead>
<tr>
<th>College/Unit</th>
<th>No of Projects</th>
<th>Total Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Agricultural and Environmental Sciences</td>
<td>48</td>
<td>1,315,469</td>
<td>6%</td>
</tr>
<tr>
<td>College of Business and Management Sciences</td>
<td>8</td>
<td>639,994</td>
<td>3%</td>
</tr>
<tr>
<td>College of Computing &amp; Information Sciences</td>
<td>8</td>
<td>439,399</td>
<td>2%</td>
</tr>
<tr>
<td>College of Engineering Design Art &amp; Technology</td>
<td>9</td>
<td>572,216</td>
<td>3%</td>
</tr>
<tr>
<td>College of Health Sciences</td>
<td>63</td>
<td>8,285,899</td>
<td>36%</td>
</tr>
<tr>
<td>College of Humanities &amp; Natural Sciences</td>
<td>9</td>
<td>695,302</td>
<td>3%</td>
</tr>
<tr>
<td>College of Natural Sciences</td>
<td>15</td>
<td>647,703</td>
<td>3%</td>
</tr>
<tr>
<td>College of Veterinary, Animal Resources &amp; Biosecurity</td>
<td>14</td>
<td>763,242</td>
<td>3%</td>
</tr>
<tr>
<td>School of Law</td>
<td>3</td>
<td>409,712</td>
<td>2%</td>
</tr>
<tr>
<td>Directorate of Research &amp; Graduate Training</td>
<td>6</td>
<td>4,372,171</td>
<td>19%</td>
</tr>
<tr>
<td>Gender Mainstreaming Directorate (GMD)</td>
<td>1</td>
<td>368,101</td>
<td>2%</td>
</tr>
<tr>
<td>Planning and Development Department</td>
<td>3</td>
<td>4,372,056</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>187</strong></td>
<td><strong>22,881,264</strong></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4: Documented running projects in 2016 by units (Million US dollars)
7 PUBLICATIONS

7.1 College of Engineering Design Art and Technology


7.2 College of Education and External Studies


7.3 College of Agriculture and Environmental Sciences


3. Agaba, R; Tukamuhabwa, P; Rubaihayo; P Tumwegamire, S; Ssenyonjo, A; Mwanga, R.O.M; J, Ndirigwe and Wolfgang J. Grüneberg. (2016). Genetic Variability for Yield and Nutritional Quality in Yam Bean (Pachyrhizus sp.) HortScience. September 2016 vol. 51(9)1079-1086


35. Mukasa, C.; Tibazalika, A.; Mwangi, A.Y.; Banana, A.Y.; Bomuhangi, A.; Bushoborozi, J. (2016) Strengthening women’s tenure rights and participation in community forestry. CIFOR Infobrief no. 155 Published by Center for International Forestry Research (CIFOR), Bogor, Indonesia DOI:10.17528/cifor/006249


56. Tukamuhabwa, P. (2016). Feasibility study for implementation of the project entitled increased soybean production and productivity for sustaining markets. Rwanda Agriculture Board (RAB), Kigali-Rwanda


7.4 College of Humanities and Social Sciences


30. Turinawe Emmanueil B., “Those were taken away and given money”: Power and Reward expectations' influence in the selection of village health teams in rural Uganda. Rural and Remote Health.2016(2)16


7.5 College of Natural Sciences


36. Perpetua Ipulet (2016). Spawn Management (Booklet). Published by International Food Research Institute, UK.


7.6 College of Health Sciences


80. Eseza Kakudidi, Claude Kirimuhuza, Godwin Upoki Anywar, Esther Katura, Juliet Kiguli, Medicinal Plants used in the management of Non Communicable diseases in Uganda, in Ed. Medicinal Plants-Recent Advances in Research and Development, Book Chapter, Jan 2016, pp.397-418


91. Francis W Ojara, Kuteesa R Bisaso, Jackson Orem, Jackson K Mukonzo, Charles O Odongo, Muhammad Ntale, Fadhil Geriga and Paul Waako. Pharmacokinetics of Cyclophosphamide in Endemic Burkitt’s Lymphoma Pediatric Patients Attending Uganda Cancer Institute. Submitted to BMC-Pharmacology & Toxicology.


179. Marian Warsame,Margaret Gyapong,Betty Mpeka,Amabelia Rodrigues, Jan Singlovic, Abdel Babiker, Edison Mworozri, Irene Ageypong, Evelyn Ansa, Robert Azairwe, Sidu Biai, Fred Binika, Peter Folb,John Gyapong,Omari Kimbute,Zena Machinda,Andrew Kitua, Tom Lutalo, Melkzedik Majaha, Jao Mamadu, Zakayo Mrango,Max Petzold, Joseph Rujumba, Isabela Ribeiro and Melba Gomes; for the Study 18 Research Group Pre-referral Rectal Artesunate Treatment by Community-Based Treatment Providers in Ghana, Guinea-Bissau, Tanzania, and Uganda (Study 18): A Cluster-Randomized Trial. Clinical Infectious Diseases, 63(S5), (2016), S312-21


97.


247. Onegi Bernadina, Kakooko Adrian. Medicinal Plant Families of Uganda”, draft manuscript under editorial revision.


300. Tom Denis Ngabirano1, Joseph Sempa, Amy Bender, Charles Peter Osingada, Patrick Mburugu, Rose Nabirye Chalo, Amsale Cherie and Damalie Nakanjako (2016). Psychosocial Adaptation and ART Adherence of HIV-infected Adults at an Urban Ambulatory Clinic in Uganda. J Psychol Psychother 2016, 6:1 http://dx.doi.org/10.4172/2161-0487.1000236


