The Principal’s 10th Quarterly report highlights the major activities and achievements in the College of Agricultural and Environmental Sciences (CAES) between July-September 2016. The report focuses on the University’s core functions as outlined in the Makerere Strategic Plan including Teaching and learning, Research and Innovations, infrastructure development, Outreach and knowledge transfer to society.

The college successfully conducted the major academic activities including recess term and internship, examinations and admissions.

The report also brings you success stories including the improvement in the technology of recycling bio diesel from plastics and making bio fertilizers from agricultural wastes.

The college also commissioned a new students hostel with the capacity to accommodate 45 students at Nyabyeya Forest College. The collaborating field sites including Budongo Conservation Field station have expressed willingness to accord the university more land and facilities for students and staff accommodation.

We continue to strive to revive our research centres that is MUBFS and MUARIK. A number of projects and partnerships are ongoing at MUARIK including the new technology of all year screen tomato growing, a structure for mushroom production, and renovations of structures to set up the student’s incubation centre. We are also grateful of the ongoing renovations of the Dairy unit and the feed mill at MUARIK and laboratories on the main campus under the AfDB –HEST project.

Notable achievements were recorded in outreach and knowledge transfer partnerships. We participated in the 24th Source of the Nile and Trade Fair commonly referred to as the Jinja show. Our Climate Change Centre MUCCRI organized a public lecture as part of the celebration to the mark the EU celebrations Climate Change week. I thank the Coordinators for the job well done.

For the first time, a students’ association held a week’s long activities for academic and community benefits. Our Agribusiness students held an Agribusiness Week during which they cleaned Kampala markets of Nakasero, Wandegeya and Kelerwe. They also visited Namunkekereru Rural Industrial park in Kapeeka and finally held an exhibition. I applaud the association leadership and encourage the entire student leadership to embrace such activities that enhance learning and bond the relationship between the university and the surrounding community.
My sincere appreciation goes to University top management, government, donors, development partners, all members of staff, college leadership, students and parents for the trust and support towards these quarterly achievements.

PROF. BERNARD BASHAASHA

PRINCIPAL
Abbreviations

ACE   African Centre of Excellence
CAES  College of Agricultural and Environmental Sciences
DABE  Department of Agricultural and Bio systems engineering
DEM   Department of Environmental Management
EU    European Union
GGCS  Geography, Geo-informatics and Climatic Sciences
MAK   Makerere University
MUARIK Makerere University Research Institute Kabanyolo
SAS   School of Agricultural Sciences
SFEGS  School of Forestry, Environmental and Geographical Sciences
SFTNB  School of Food Technology, Nutrition and Bio engineering
USAID United States Agency for International Development
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>2</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>4</td>
</tr>
<tr>
<td><strong>1.0: TEACHING AND LEARNING</strong></td>
<td>7</td>
</tr>
<tr>
<td>1.1. Recess term and internship</td>
<td>7</td>
</tr>
<tr>
<td>1.2: Admission and Orientation of first years 2016/2017 Academic year</td>
<td>7</td>
</tr>
<tr>
<td>1.3: Semester II results</td>
<td>7</td>
</tr>
<tr>
<td>1.5: CAES Library enriched</td>
<td>7</td>
</tr>
<tr>
<td>1.5: Makerere and Cornell University (USA) to train &quot;Gender responsive researchers&quot; on Root, Tuber and Banana Breeding for Agricultural Transformation.</td>
<td>9</td>
</tr>
<tr>
<td>1.6: 214 Ugandan students flagged off to Israel for the AgroStudies International Internship</td>
<td>10</td>
</tr>
<tr>
<td>1.7: Mak to establish two Centers of Excellence: The project will fetch US $ 12 million funded by the International Development Association (IDA) of the World Bank Group.</td>
<td>11</td>
</tr>
<tr>
<td>1.8: MAK, GoU and China launch the 2016 Bilateral Training Course on Agricultural Cultivation Techniques for Rice and Millet for Uganda</td>
<td>12</td>
</tr>
<tr>
<td><strong>3.0 RESEARCH AND INNOVATIONS</strong></td>
<td>14</td>
</tr>
<tr>
<td>3.1: The technology of recycling diesel from plastics upgraded</td>
<td>14</td>
</tr>
<tr>
<td>3.2: Organic pesticide made from agricultural wastes</td>
<td>15</td>
</tr>
<tr>
<td>3.3: All year Screen Tomato production starts at MUARIK</td>
<td>15</td>
</tr>
<tr>
<td><strong>4.0: INFRASTRUCTURE DEVELOPMENT</strong></td>
<td>17</td>
</tr>
<tr>
<td>4.1: New students’ hostel commissioned at Nyabyeya Forest College</td>
<td>17</td>
</tr>
<tr>
<td>4.2: Facilities identified for renovation and rehabilitation under the Proposed Regional Centre of Excellence for Crop Improvement at Makerere University (MaRCCI)</td>
<td>18</td>
</tr>
<tr>
<td>4.3: Plan to set up the student incubation center</td>
<td>20</td>
</tr>
<tr>
<td>4.4: Mushroom production center set up at MUARIK</td>
<td>20</td>
</tr>
<tr>
<td>4.5: MAK - IOWA Service Learning Program is to establish an Agricultural Training Centre worth shs. 5bn.</td>
<td>20</td>
</tr>
<tr>
<td><strong>5.0: OUTREACH ACTIVITIES</strong></td>
<td>22</td>
</tr>
<tr>
<td>5.1: MAK - IOWA State University Service Learning program turns lives in Kamuli district</td>
<td>22</td>
</tr>
<tr>
<td>5.2: The EU climate diplomacy week public lecture held as part of the celebrations to mark EU Climate Diplomacy Week from 12th – 16th September, 2016</td>
<td>24</td>
</tr>
</tbody>
</table>
5.3: Agribusiness students hold the Annual Agribusiness Week: Clean Kampala markets, visit Namunkekeka Farm in Kapeka and hold an exhibition. ................................................................. 26

5.4: Participation at the 24th source of the Nile agricultural show and trade fair .................. 26

5.5: The 3rd FANRPAN’s Multi-Stakeholder Policy dialogue on Climate Smart Agriculture (CSA) held ........................................................................................................................................ 28

5.6: MPBSS students usher in guests at the meeting of Council of Ministers - AfricaRice....... 29
1.0: TEACHING AND LEARNING

1.1. Recess term and internship
The recess term activities were well conducted. Recess term activities commenced on 28th May, 2016. The activities were scheduled to end on 6th August 2016 but the last week was interrupted by the non-teaching staff strike that started on 1st August, 2016. Some students (especially environment) were not supervised due to lack of funds. In the School of Agricultural Sciences, students were supervised but there were concerns that lectures were paid half of their supervision funds.

1.2: Admission and Orientation of first years 2016/2017 Academic year
The fresher’s University wide orientation was held on 13-19th August 2016 at the University Freedom Square. This was followed by the college and school based orientation. The college wide orientation was held on 22nd August 2016 in the Biology Lab. This was followed by orientations at the school level. Signing for the provisional letters of admission is ongoing.

1.3: semester II results
The respective school academic boards sat and discussed semester II results and submitted them to the College Academic Board. Congratulatory, warning, stay put and discontinuation letters to students whose performance was either excellent or appalling were drafted.

The College Academic Board meeting was held on 6th September, 2016 to discuss and release semester II examination results. Students can access results through the website (intranet.mak.ac.ug)

Exams for Graduate Programs have been going on. The last exam was done on 16 July, 2016. Staff embarked on marking. Submission of marks is expected soon.

1.4: Students sensitized on the new fees policy
A team from the Bursar’s office visited the college on 23rd September, 2016 to sensitize students on the new fees policy. Makerere University in consultation with key stakeholders especially the students approved a new user-friendly fees policy which will make the experience of the University for the majority of students more fulfilling. The meeting was held at the biology lab and attended by GRC students’ representatives in the entire university across all the years.

1.5: CAES Library enriched
The CAES library strategic objective is to ensure optimal utilization of library resources. We have continued to process library materials and populated databases eg Card Master, AIM, MakIR, Virtua, MaKUD, etc. We have also populated library databases (Virtua) and a number of titles and copies of library information materials have been entered into Virtua.

A list of the databases through which staff and students can access literature is presented in the table below:
<table>
<thead>
<tr>
<th>No.</th>
<th>DATABASE</th>
<th>USERNAME</th>
<th>PASSWORD</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>AGORA (Access to Global Online</td>
<td>ag-uga002</td>
<td>contact the</td>
<td><a href="http://agoralogin.research4life.org/">http://agoralogin.research4life.org/</a></td>
</tr>
<tr>
<td></td>
<td>Research in Agriculture)</td>
<td></td>
<td>librarian</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>OARE (Online Access to Research</td>
<td>UGA503</td>
<td>contact the</td>
<td><a href="http://oarelogin.research4life.org/">http://oarelogin.research4life.org/</a></td>
</tr>
<tr>
<td></td>
<td>in the Environment)</td>
<td></td>
<td>librarian</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>HINARI</td>
<td>UGA003</td>
<td>contact the</td>
<td><a href="http://hinarilogin.research4life.org/">http://hinarilogin.research4life.org/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>librarian</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>ARDI (Access to Research in</td>
<td>Ardi-ug004</td>
<td>contact the</td>
<td><a href="http://www.wipo.int/ardi/en/">http://www.wipo.int/ardi/en/</a></td>
</tr>
<tr>
<td></td>
<td>Development and Innovation)</td>
<td></td>
<td>librarian</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>TEEAL (The Essential Electronic</td>
<td>No username required.</td>
<td>No password</td>
<td>teeal.mak.ac.ug</td>
</tr>
<tr>
<td></td>
<td>Agricultural Library</td>
<td></td>
<td>required.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>PROTAbase (Plant Resources Of</td>
<td>No username required.</td>
<td>No password</td>
<td><a href="http://www.prota.org">www.prota.org</a></td>
</tr>
<tr>
<td></td>
<td>Tropical Africa database)</td>
<td></td>
<td>required.</td>
<td>(This is a free source database accessed through the internet)</td>
</tr>
<tr>
<td>7.</td>
<td>AgriKnowledge</td>
<td>No username required.</td>
<td>No password</td>
<td><a href="http://www.agriknowledge.org">www.agriknowledge.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>required.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Makerere Institutional Repository</td>
<td></td>
<td></td>
<td>makir.mak.ac.ug</td>
</tr>
<tr>
<td>9.</td>
<td>OECD Online Library</td>
<td>makerere-user</td>
<td>makerere-user</td>
<td><a href="http://www.oecd-ilibrary.org">www.oecd-ilibrary.org</a></td>
</tr>
<tr>
<td>10.</td>
<td>Forestry compendium</td>
<td>No username required.</td>
<td>No password</td>
<td><a href="http://www.cabi.org/fc/">www.cabi.org/fc/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>required.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Crop Protection Compendium</td>
<td>No username required.</td>
<td>No password</td>
<td><a href="http://www.cABI.org/cpc/">http://www.cABI.org/cpc/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>required.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compendium</td>
<td></td>
<td>required.</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>CAB Abstracts</td>
<td>No username required.</td>
<td>No password</td>
<td><a href="https://www.cabdirect.org/">https://www.cabdirect.org/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>required.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others (On Maklib website)</td>
<td>-</td>
<td>-</td>
<td><a href="http://mulib.mak.ac.ug/">http://mulib.mak.ac.ug/</a></td>
</tr>
</tbody>
</table>
1.5: Makerere and Cornell University (USA) to train "Gender responsive researchers" on Root, Tuber and Banana Breeding for Agricultural Transformation.

The project is being led by Adjunct Professor, International Programs, College of Agriculture and Life Sciences Cornell University Hale Ann Tufan and Assoc. Prof. Margaret Makerere University, College of Agricultural and Environmental Sciences shown in the picture.

GREAT works to equitably extend the benefits of agricultural research to both women and men. The goal is for agricultural researchers working across sub-Saharan Africa to improve the livelihoods of smallholder farmers by considering gender and prioritizing gender equality goals in their work”. She said.

The training will improve the outcomes of agricultural research for smallholder women farmers, entrepreneurs and farmer organizations across SSA.

By 2020, GREAT expects to have trained eight cohorts with up to 10 research project teams each, or more than 200 researchers representing at least 30 national and international research institutions in SSA.

Subsequent trainings to create more inclusive and effective agricultural systems will be offered on the themes of grain and legume breeding; small ruminant breeding; dairy and legume value chains; nutrition and food systems; knowledge exchange (extension); and agricultural mechanization.

To help sustain the initiative, GREAT will create a Center of Excellence for gender responsive agricultural training at Makerere University. Over the life of the project, GREAT content will be
integrated into spin-off short courses and current agricultural degree programs at Makerere University.

1.6: 214 Ugandan students flagged off to Israel for the AgroStudies International Internship

Over 200 Ugandan students were on Monday 5th September, 2016 flagged off to Israel for the one year paid AgroStudies internship. The ceremony was presided over by the First Lady Mrs. Janet Museveni who is also the Minister of Education and Sports.

The function was held at the Makerere University Main Hall and also graced by the Israel Ambassador to East Africa, H.E Yahel Vilan, the Vice Chancellor Makerere University Prof. John Ddumba Ssentamu and the Deputy Vice Chancellor Finance and Administration Prof. Barnabas Nawangwe. Also present were the Friends of Israel, parents and AgroStudies Old boys and Girls from the previous cohorts.

The ceremony was moderated by Assoc. Prof. Denis Mpairwe, one of the initiators of the program and Head Department of Agricultural Production.

School of Agricultural Sciences, Makerere University.

Mrs. Janet Museveni presents a gift to the Israeli Ambassador H.E Yahel Vilan during the flag off ceremony

This was the fourth cohort of students Uganda was sending to Israel.

In 2013, Makerere University sent 31 students (majority from the College of Agricultural and Environmental Sciences and 2 from Busitema University) as the first cohort. Later in the year, Israel asked for more 10 students after being impressed by the exceptional performance of the Ugandan students totaling 41 students. All students in the 1st cohort were boys.

In 2014, 198 students were sent to Israel raising the number from 41 and the first largest increment in the history of AgroStudies. Of these, 10 were girls.

In 2015, a total of 220 students from different universities and agricultural institutions were admitted to the program. Of these 20 were girls. Two students dropped off on medical and religious grounds. The cohort graduated recently.
At the graduation, out of the 9 best students, 7 were from Uganda. 2 best students are remaining in Israel for another year. The best student of the year 2013 Mr. Hussein Asega who returned to Uganda to finish his course travelled back to Israel to enjoy his rewards.

The program attracts students from Africa, Asia and Latin America. The best students according to the Regional Coordinator are retained for some more time to manage AgroStudies farms. The AgroStudies opened farms where students can do experiments.

This year 2016, a total of 214 students were flagged off. Of these, 13 were girls.

1.7: Mak to establish two Centers of Excellence: The project will fetch US $ 12 million funded by the International Development Association (IDA) of the World Bank Group

Makerere University is to establish two centers of excellence (ACEs) under the ACE II World Bank Project. One centre will be in the College of Agricultural and Environmental Sciences (CAES) and the second at the College of Engineering, Design, Art and Technology (CEDAT).

These ACEs are (i) Makerere University (Centre of materials, product development and nanotechnology (MAPRANO) and (ii) Makerere University Regional Centre for Crop Improvement (MaRCCI).

The two projects are being spearheaded by Dr. Richard Edema as PI MaRCCI and Prof. John Baptist Kirabira (PI MAPRANO).

The total grant to Makerere University is US $ 12Million. Two other centers have been granted for Uganda; Mbarara University of Science and Technology - Pharm-Biotechnology and Traditional Medicine Centre and Uganda Martyrs University - African Center for Agro-Ecology and Livelihoods Systems.

The ACEs will be funded as a loan/credit to Government of the Republic of Uganda. The overall objective is to support the government to strengthen selected Institutions of Higher Education in Uganda to deliver quality postgraduate education and build collaborative research capacity in the regional priority areas. A regional facilitation unit has been set up at the Inter-University Council of East Africa (IUCEA) in Uganda for this purpose.

Expected outputs of the Makerere University Regional Center for Crop Improvement (MaRCCI) include:
- Approved USD 6 Million
Train about 70 graduate students in PhD (Plant Breeding and Biotechnology) and M.Sc. (Plant Breeding and Seed Systems).

- Revise & improve curriculum and delivery - elements of e-curriculum
- Develop short courses to serve industry
- Improve efficiency & management of ACE program (Administrative Assistance, Postdoctoral scientist attached to MaRCCI)
- Improve Infrastructure –students accommodation, office, classroom at Makerere
- University Agricultural Research Institute at Kabanyolo (MUARIK)
- Seek International accreditation
- Improve and support a Research program in breeding at MUARIK
- Improve capacity of teaching staff
- Serve as a catalyst for attracting other grant resources to Makerere University
- Develop linkage of Industry for output
- Strengthen collaboration in research and training with Regional as well as International partners. Namely:
  - Iowa State University (USA),
  - North Caroline State University (USA),
  - Regional University (Universities of Zambia and Juba);
  - Rwanda Agricultural Board (RAB),
  - National Agricultural Research Institute in DR-Congo (INERA).

- National Agricultural Research Organization in Uganda (Namulonge (NaCRRI)& Serere(NaSARRI))
- and The World Vegetable Center –Arusha Tanzania (AVRDC)
- NASECO (Uganda) and Seed Co Seed (Zimbabwe) companies

1.8: MAK , GoU and China launch the 2016 Bilateral Training Course on Agricultural Cultivation Techniques for Rice and Millet for Uganda

Makerere University researchers, district extension and agricultural officers from different districts of Uganda were equipped with the latest techniques of cultivation with regards to rice and millet. Most of the officials were from the rice and millet growing districts including Iganga, Butaleja, Oyam, Kotido, Bugiri, Jinja, Ngora, Kaberamaido, Pader, Palisa and Kamuli.

The training dubbed, “Overseas Training Course on Agricultural Cultivation Techniques for Uganda in 2016” was officially launched on 26th July, 2016 and ran for 30 days till 24th August 2016.

Participants pose for a group photo after the launch
at the Continuing Agricultural Education Centre (CAEC) at the Makerere Agricultural Research Institute Kabanyolo (MUARIK).

The training was conducted by the Chinese experts from the Shandon Foreign Trade Vocational College (SFTC) as part of the foreign aid-funded training of the bilateral cooperation between the Government of Uganda and the People’s Republic of China coordinated by the Ministry of Finance, Planning and Economic Development (MOFPED) and the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF).

The training was opened by the Counselor Chinese embassy to Uganda Mr. Ounyang Daoping and attended by the Makerere University’s Deputy Vice Chancellor (Finance and Administration) Prof. Barnabas Nawangwe. Also present were China’s Vice President SFTC Mr. Gao Cheng, the Director Agricultural Extension Service Madam Beatrice Byarugaba (MAAIF), The Commissioner Ministry of Finance Planning and Economic Development Mr. Robert Okudi and the Ag. Commissioner Agricultural Extension and Skills Management Mr. Yaka Zakayo among others.
3.0 RESEARCH AND INNOVATIONS

3.1: The technology of recycling diesel from plastics upgraded

In March 2016, the Department of Agricultural and Bio systems engineering in partnership with University of Kentucky USA came up with a new technology of converting plastics into bio-diesel.

Although the innovation was the first of its kind in the country, researchers in the two universities have been in the laboratory experimenting better means of processing the fuel.

The new process was demonstrated at the agricultural engineering workshop at the Makerere University Agricultural Research Institute Kabanyolo.

Makerere University Principal investigator Prof. Noble Banadda together with American counterparts improved the technology from a batch system to continuous loading and production of the bio-diesel.

The reactor loaded with plastics. This loading can be done contiously

The Makerere University team is made of Prof. Noble Banadda as the Principal Investigator (PI) and Co PIs namely Dr. Nicholas Kiggundu and Dr. Ahamada Zziwa. These are working with a team of 7 Masters Students. The partners from University of Kentucky USA are Assoc. Prof. Jeffrey Seay and a team of 5 Masters students.

A batch system means, you open the reactor, load the plastic, close, heat and convert. Every time you want to make a new process, you had to open and close, you lose a lot of time, it was tedious and sometimes frustrating. Heating is done at a temperature of between 400 – 420 Degrees celcius which means you have to wait for it to cool.

The advantage of the new process new process is that you can continuously load
the plastics and continuously produce the bio-diesel

3.2: Organic pesticide made from agricultural wastes

The Makerere University research team and that of University of Kentucky USA applying the organic pesticide to red ants in an anthill at Kabanyolo

Researchers from the Department of Agricultural and Bio systems engineering manufactured an organic pesticide from agricultural waste that can be easily used by farmers to control pests like the red ants which are common menace to Ugandan farmers.

The organic pesticide was tested and sprayed on various insects and red ants at the Makerere University Agricultural Research Institute Kabanyolo, where results were impressive on 27th July, 2016.

The project is a partnership between Makerere University’s Department of Agricultural Bio-systems engineering which falls under the College of Agricultural and Environmental Sciences and the University of Kentucky USA.

Makerere University team is made of Prof. Noble Banadda as the Principal Investigator (PI) and Co-PIs namely Dr. Nicholas Kiggundu and Dr. Ahamada Zziwa with a team of 7 Masters students. The partners from Kentucky University USA are Assoc. Prof. Jeffrey Seay and a team of 5 Masters students undertaking a course in chemical engineering.

The process known as Pyrolysis involves heating the bio-degradable wastes such as banana peels, maize stovers and saw dust (forestry waste products) in the absence of oxygen at a temperature of 300-500 degrees celcius to produce the main product which is vinegar - the organic pesticide.

The pesticide was made from eucalyptus saw dust. Has no human health and environmental effect. The research breakthrough presents business opportunities for organic farming and export.

3.3: All year Screen Tomato production starts at MUARIK

Balton Uganda Ltd provided a screen house worth shs. 5 million free of charge to MUARIK. The screen is being used to demonstrate the modern technology of
growing tomatoes and supply to the market. The company will support MUARIK in terms of capacity building for six (6) months until the staff is conversant with the technology.
4.0: INFRASTRUCTURE DEVELOPMENT

4.1: New students’ hostel commissioned at Nyabyeya Forest College

Makerere University officially opened the new students’ hostel at Nyabyeya Forest College in Masindi district. The hostel was commissioned by the Makerere University Deputy Vice Chancellor (Finance and Administration) represented by the Deputy Dean of Students Mr. Stephen Katega on 29th - 30th July, 2016.

The function was attended by the University Bursar Mr. Augustine Tamale, and the Director Works and Estates Department represented by Mr. Kawanyara Julius. Also present were CAES management and administrative staff.

The commissioning coincided with the recess term activities and provided an opportunity to the visiting team to tour the facilities at Nyabyeya Forest College and Budongo Conservation Field Station and appreciate the training needs for forestry so that management decisions especially concerning finances are taken from an informed position. It was also an opportunity for the CAES and university top management to interact
with forestry students and staff on recess term to share their experiences and clarify on issues that require attention to management.

Every year, students undertaking courses in forestry and related courses are dispatched to Nyabyeya Forest College and Budongo Conservation Field Station for field practical, recess term and internship. Makerere University does not own land at Nyabyeya Forest College but the two institutions have had long informal relationship in terms of training forest students.

In 2003, NORAD supported Makerere University and built a new students’ hostel that was completed in 2007 to provide accommodation for about 45 students on recess term and internship. Later, the building was gutted by fire but was not insured. NORAD conditioned Makerere University to reconstruct the building. The university took over the reconstruction under the supervision of the Estates and works department.

The team also visited the students site at Budongo Conservation field station. The field site Coordinator, Prof. Babweetera said that there is a structure that require repair which Makerere university can invest in to convert it to the Makerere staff house to accommodate lecturers during research and recess term activities.

The other facilities that require upgrading include the staff and student accommodation, kitchen, lecture space, dinning and students’ hall. The site has two blocks used as dormitories but due to the number of students, majority build tents in the compound. The big tree is used as a dining hall as well as a lecturer room. Other important things required are water storage facilities, electricity, toilets and bathrooms, truck for transportation of food, firewood and buses for field work.

4.2: Facilities identified for renovation and rehabilitation under the Proposed Regional Centre of Excellence for Crop Improvement at Makerere University (MaRCCI)

The World Bank approved the establishment of the Regional Centre of Excellence in Crop Improvement at Makerere University (MaRCCI). Specifically, MaRCCI will:

- Strengthen the training and research capacity in plant breeding and biotechnology within the region, and enhance regional and international collaboration.
- Improve the content and delivery of the curriculum, in order to provide a strong theoretical and scientific foundation with an applied focus on product delivery. The curriculum will serve
both the ESA private and public sectors

- Increase the capacity and sustainability of Makerere University’s regional program in plant breeding in order to bring expertise together in one place. This will transform the program into the premier post graduate training center of excellence for crop improvement in Africa.

- Train 30 new PhD level plant breeders from the ESA region. Some students will be selected for full funding, and others will enroll with part or all of their own funding.

Basic training and teaching infrastructure exist at the project location at the Makerere University’s Agricultural Research Institute Kabanyolo (MUARIK). However, these need to be expanded and/renovated to better support teaching excellence.

**Facilities identified for renovation and rehabilitation include:**

1. Creation of Seed quality/plant laboratory, students and visiting staff accommodation, screen houses, improvements and equipment at existing Molecular Biology & Microbial labs.

2. An enhanced Bioinformatics Training Facility will be added at the existing molecular biology laboratory in addition to general improvements to building.

3. With advice from consultants, other facilities related to seed handling and storage will be improved to contribute to the teaching and research programs. These include a greenhouse, seed store, molecular lab, and field equipment (e.g., irrigation systems).

4. To contribute to the distance learning component of course delivery, MaRCCI will develop video conferencing capabilities in consultation with Cornell University and others.

5. The expected increased number of students will require expanded accommodation and lecture space. There are about 6-8 old buildings whose structures appear sound but that would need to be overhauled including but not limited to power & plumbing installation, painting and other improvement as found appropriate.

6. Similarly, a small guesthouse that cater for visiting professors participating in the program will need to renovated to take care of about 4-5 visitors at any one time at the project campus.
4.3: Plan to set up the student incubation center
The School of Food Technology, Nutrition and Bio engineering in partnership with MUARIK is rehabilitating the former Goats House to become a production unit. The center at MUARIK will see students at MUARIK bring in their projects and students of SFTNB come in on the aspects of value addition.

In addition, The Dairy Value Chain Business Incubation Center under the African Development Bank will soon be hosted at MUARIK. Equipment will be installed in the Dairy Unit. These centers will be looking at the whole value chain from harvesting, feeding animals, preparations for milk production, Milk itself, packaging products and marketing.

MUARIK also has partnership with the Kabanyolo Co. Limited to run the business-related operations. Part of the broader plan is to have the Feed Mill produce feeds for animals into the incubation centre. The other plan is to open up 20 acres of land to produce pasture for feeding animals. Mashroom production will also have its incubation center. Reconstruction works has already started.

4.4: Mashroom production center set up at MUARIK
The Department of Agricultural production is setting up a Mashroom centre at the MURIK. This will be a one stop centre for massive production of mashrooms, multiplication and distribution of of seedlings for farmers. The center will also be a training facility for students and other stakeholders on different technologies on mashroom production. The project is being led by Dr. Kyeyune Gerald, an expert in mashroom production.

4.5: MAK - IOWA Service Learning Program is to establish an Agricultural Training Centre worth shs. 5bn

Makerere University (MAK) and IOWA State University (ISU) Service Learning program is set to establish a 5bn shillings Agricultural Training Centre in Kamuli district by the end of 2017. The major funders are individuals mainly old students (alumni) of IOWA State University USA.

MAK-IOWA state Service Learning students have been hosted in different rented sites in Kamuli districts for the past 10 years. Two accommodation sites
are in Kamuli town and several others rented near schools where activities are implemented.

The new facility will be a one stop centre for students and community projects. The Agricultural centre design includes students’ hostels, staff accommodation facilities, lecture theatres, dinning, kitchen and administrative offices among others.

Over 40 bidders have picked interest and already visited the site.

The program acquired 13.9 acres of land in Kamuli to set up an Agricultural Training centre of IOWA State University in Uganda.

The construction is likely to begin in September 2016 and would take one year. Architectural plans were already with Municipal Council and the Environmental Impact Assessment report is with NEMA.

The Service Learning program is a brain child of IOWA State University Centre for Sustainable Rural Livelihoods Uganda Program (CSRL) registered as an NGO. Currently the administrative offices are rented in Kamuli district.

The idea was conceived way back in 1960s by graduates of IOWA State University in America who thought of giving back to communities. A study was conducted and Kamuli district in Uganda was selected as a focal district to address the problem of hunger and poverty.

IOWA State University thought of university students as key players and worked with the then Makerere University Faculty of Agriculture and VEDCO as partners to develop the program. In 2004, Makerere University’s then Vice Chancellor, Prof. Livingstone Luboobi signed a Memorandum of Understanding to be part of the program. In 2005 several meetings were held and eventually in 2006 the first group of students were recruited in the program.
5.0: OUTREACH ACTIVITIES

5.1: MAK - IOWA State University Service learning program turns lives in Kamuli district

IOWA State University Centre for Sustainable Rural Livelihoods (CSRL) Uganda Program undertakes a number of programs in Kamuli District. The IOWA State University Faculty of Agriculture formed a centre in Kamuli that spearheads development work and activities. These include, the Livestock program, Service learning, Youth entrepreneurship, Health and Sanitation and Nutrition programs.

The livestock program handles three species of animals namely goats, poultry and pigs but the program has of recent seen farmers moving towards cattle rearing. The program works with farmers to put up a cost shared structure, provides feeds, trains farmers and gives piglets to farmers. In return, the farmer will give a piglet to another farmer after the pig delivering.

This approach has been modified. The program builds a structure for the farmer and provides the feeds, the farmer puts the piglets and operates as a business. This is to demonstrate that if the animals are well fed, they grow very fast and earn a farmer good returns. 10 people have been supported under this new arrangement. In addition sweet potato silage are also being promoted under the livestock program as alternative feed for animals.

In poultry, the program started with rearing of local and Kuroiler chicken but many farmers have gone commercial by rearing layers. A loan system has also been initiated to support farmers in poultry production. In loaning, the program gets materials like feeds, chicks and vaccinates them for the farmer. After laying eggs farmers are encouraged to sell the eggs collectively and use the income for restocking.

The goats were introduced to farmers by giving them male and female boar goats. The program has identified a community based breeding program in Hoima district and plans were underway to get elite Mubende breed for cross breeding. The main target group is the youth. The program message to the youth is that farming is a profitable and life employment. Other targeted groups are the mothers. The mothers are those once admitted in nutritional centers with malnourished children and need rehabilitation because of the deficiencies.

The Nutrition program looks at lactating children under 5 years and pregnant mothers. CSRL has 8 Nutrition Education Centers, the smallest having 45 members and the largest had100. The objective is to curb malnutrition. The program developed rations of a nutritive porridge containing soybean, silver fish, milk, sugar and amaranths given to lactating mothers up to nine months so that by the time they leave the centre they know. Mothers are trained about a balanced diet, at one setting, do family planning and immunization, health days inclusive of the communities. The
program collaborates with district health teams to provide skills and services.

The program also conducts training in livestock, animal and crop husbandry, entrepreneurship farming as a business and allow farmers to select enterprises of their choice.

Under this Nutrition program, Agronomy is compulsory. Mothers are given seeds to grow, retained at the centre until the harvest when they are discharged from the centre. Officers follow up and monitor. Farmers contribute the seeds to be given out to other farmers and for the porridge.

Some graduates are also doing crafts and the program finds the market to increase income. Livestock is emphasized for purposes of giving proteins while poultry is preferred because it is easier for households to provide a child with an egg. Farmers are mandated to give records of how many eggs were eaten.

The Youth entrepreneurship program works with Service learning in 5 schools where they grow a number of crops including the grain amaranths, soybean, bananas, sweat potatoes and fruit trees like guavas, papaya and oranges. Jack fruit was recently initiated. The objective is to enhance outdoor learning labs for schools. It was done in a way to fit in the school curricular when teaching science for example nursery beds and to sell seeds. In Social Studies, Agroforestry is promoted.

The school feeding program to supplement the school gardening program was initiated. Pupils and students grow crops and learn skills and also get food for lunch. One of the students did research and found out that one cup of nutritive porridge contained 50 calories an equivalent to a medium size apple in America. As a result the program developed a new ration of meal called Nyoyo where vegetables, maize, beans and some cooking oils are mixed. Some schools provide eggs. This raised the calories from 50 to 800 calories. Excess food from the school garden is sold to raise money to buy the missing food, pesticides and feeds.

Poultry units have been established in schools for self-sustenance. Irrigation systems, dormitories, kitchens, sanitation facilities, grain storage systems have been developed in schools. Among the benefiting school is Namasagali College school and several primary schools. The target in such a high school is to follow upon primary schools to establish whether the students are practicing what they were taught.

When students leave schools they form clubs. There are poultry clubs, apiary, piggery and crops clubs. A face book account has been opened to share information.

The Agronomy program focuses on pregnant mothers enrolled in Nutrition Educational Centers. The mothers are served with nutritive porridge composed of millet, maize, soybean, amaranths etc. To ensure sustainability mothers are only allowed to leave the centre after full recovery. They undergo agronomic trainings such as technologies to improve soil fertility and yields. The mothers are assessed based on yields they produce. They send yields to the Nutrition Education Centre, are assessed and
graduated. They are followed up to their homes to ensure they are food secure.

The Water and Sanitation program is integrated in all programs. The core part is to drill boreholes. So far 18 boreholes have been drilled in schools and communities. Grey water is also captured for livestock, brickmaking and occasionally for motorcycle washing. Cisterns are used for irrigation and special tanks installed in schools. Bee keeping for harvesting and utilization is also part of this program.

The Service Learning program has an outreach arm. For the past 10 years, students from Makerere University and IOWA state University USA have been deployed in Kamuli district to engage in development activities as they learn and serve communities.

To enroll in this program, Makerere University Program Coordinator puts up advertisement of seminars for students undertaking agricultural and related courses. This is followed by a call for applications, then interviews. The successful candidates are oriented to the program to enable them assess whether they can enroll into the program.

Applications are invited from students of Agriculture, Nutrition, Forestry. They should have a CGPA of not less than 3.6. The successful candidates are brought for orientation for 4 days to appreciate if they can enroll in the program. MAK and IOWA state program are synchronized for 10 weeks but the American students have 6 weeks for their internship so they leave after the general presentations to the university community and Makerere students continue for more 4 weeks.

The students are guided and supervised by Makerere University staff and the ISU Uganda program team.

5.2: The EU climate diplomacy week public lecture held as part of the celebrations to mark EU Climate Diplomacy Week from 12th – 16th September, 2016.

As part of the celebrations, the EU Delegation in Uganda and the Makerere University Centre for Climate Change (MUCCRI) in CAES led by Dr. Revocatus Twinomuhangi organized a public lecture/panel discussion on climate change with Makerere University students. The purpose was to raise climate change awareness among students.

The event was held on Friday 16th September, 2016 at Makerere University Main Building’s Senior Common Room from 11.00am to 1.00 pm. The Head of the EU Delegation in Uganda H.E Ambassador Kristian Schmidt and the FAO Country Representative Alhaji Momodou Jallow officiated at the function and gave key note addresses.
Prof. Edward Kirumira, Principal CHUSS represented Makerere University’s Vice Chancellor.

A panel discussion was held on four themes:
1. Climate Change policy and practice in Uganda
2. The role of education in addressing climate change
3. Climate change and the youth
4. Climate change and gender.

The Vice Chancellor thanked the EU delegation in Uganda for inviting MUCCRI and Makerere University to join in activities celebrating this important week.

The VC told participants that Makerere University was passionate about Climate Change and related research activities. Motivated by one of her core functions Research and Innovations, the VC said Makerere University was proud of her role in organizing and actively participating in events such as the; EA-Norway Climate Change Business Conference (November 2015), Economic Assessment of the Impacts of Climate Change in Uganda, National Outreach Event (November 2015), IPCC Fifth Assessment Report (IPCC AR5) Dissemination Workshop (August 2014) and so many others.

“This public lecture, therefore, is a welcome opportunity to expose our students to the latest information on key activities undertaken by the EU and FAO, as well as climate change projects in Uganda. I therefore urge our students to remain keen an attentive to the keynote addresses and subsequent discussions. Stay hungry for knowledge related to climate change for it remains a critical driver for our development as a nation and a global community”. The VC advised students that:

“After you have listened to all the presenters and discussants, I urge you to actively participate by asking questions. This public lecture presents you with the rare privilege of interacting with the Head of the EU Delegation and FAO Country representative at the same time, so make the most of it! “.
5.3: Agribusiness students hold the Annual Agribusiness Week: Clean Kampala markets, visit Namunkekerera Farm in Kapeka and hold an exhibition.

Makerere University Agribusiness Students Association (MUABSA) in collaboration with Africa Agribusiness Academy and FK Youth Mentoring Network organized an Agribusiness Week that took place on 12th-17th September, 2016.

The event was sponsored by CURAD, KCCA, Uganda Police, Africa Agribusiness Academy and the Youth Mentoring Network. Other sponsors were PIBID (Tooke), BIDCO (BUL) Namunkekerera Rural Industrial Centre (NRIC), Uganda National Farmers Federation, CAES, SAS and Makerere University and individual staff.

The week-long event was organized under the theme, “The impact of ICT gender, health, environment and finance in enhancing agribusiness value chain in Uganda”.

The objectives of the Agribusiness Week were to: 1) Share experiences and best practices on agribusiness services and identify new and innovative opportunities to improve agribusiness skills of people; 2) Provide an opportunity for stakeholders to exhibit their products so as to enhance their market and; 3) Encourage more networking and building strategic alliances in agribusiness.

The lined up events included cleaning of the Nakasero, Kalerwe and Wandegeya Markets, planting trees at MUARIK, presenting an agricultural book to MAAIF; holding an agribusiness exhibition and a study trip to Namunkekeera Rural Industrial Development Centre in Kapeeka.

5.4: Participation at the 24th source of the Nile agricultural show and trade fair
The Source of the Nile Agriculture Show and Trade Fair popularly known as the Jinja show is a national event during where research institutions, seed companies, agribusiness firms and other
businesses come together to showcase their latest innovations and technologies.

This year (2016) was the 24th Source of the Nile National Agricultural Show and Trade Fair which took place from 11th – 17th July 2015. The theme for this year’s exhibition was: “Soil and Land use management for sustainable food security and wealth creation”.

CAES is a permanent exhibitor at the show ground and has since last year expanded its land holding to cater for the Food Science Business Incubation Centre.

The event was coordinated by Dr. John James Okiror.

1. Food Science Business Incubation Centre – assorted foods and beverages
2. School of Food Technology, Nutrition and Bioengineering – blood pressure measurements, dieting advice and assorted farm and agro-processing machines
3. School of Forestry, Environment and Geographical Sciences – Shea butter products, soil amendments and tree seedlings
4. Makerere University Agricultural Research Institute – hay and silage making, IMO organic farming techniques, vermiculture and eco-toilets
5. Department of Agricultural Production – Unearthing the potential of earthworms as an alternative protein feed source for poultry farmers; Soya bean varieties, Animal Nutrition (milk boosters and calf accelerator feeds), Soil Science (soil profiles, structures, soil test kits and soya and bean Rhizobium inoculums) and Mushroom technology
6. Biotechnology and Tissue Culture Unit – sweet potato
vines, coffee seedlings and banana plantlets
7. Department of Extension and Innovation Studies – Uganda Micro Gardening Initiative
8. Department of Natural Resource Economics and Agribusiness – special project reports and theses
9. CURAD – assorted coffee products (wines, spirits and beverage)
10. Fountain Publishers (marketed the agriculture textbooks on our premises)

5.5: The 3rd FANRPAN’s Multi-Stakeholder Policy dialogue on Climate Smart Agriculture (CSA) held

The Food, Agriculture, Natural Resources Policy Advocacy Network (FANRPAN) on 21st July 2016 held the 3rd Multi-stakeholder Policy dialogue on Climate Smart Agriculture (CSA). The dialogue was held at the conference Hall, School of Food Technology, Nutrition and Bio-engineering, Makerere University.

The Multi-Stakeholder dialogue was organized by FANRPAN’s Uganda Node Coordinator Prof. Archileo Kaaya and officially opened by the Ag. Principal, Makerere University College of Agricultural & Environmental Sciences (CAES), Assoc. Prof. Gorettie Nabanoga.

The function was attended by FANRPAN representative, Mr. Njongenhle Nyoni, Mr. Stephen Muwaye from the Climate Change Department in the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Climate Change Expert Dr. Patrick Byakagaba among others.

FANRPAN CSA program seek to Generate CSA research-based evidence and address knowledge gaps; Strengthen CSA institutional capacity and support capacity building 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 program titled, “Strengthening Policy Advocacy and Research Capacity for Enhanced Food Security in East and Southern Africa (SPARC)”, is funded by African Capacity Building Foundation. The project started in December 2012 and will be ending in December 2017.

In 2014, The CSA Policy studies were conducted in 16 countries including Botswana, Democratic Republic of the Congo, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.
The objectives of the policy studies are to: Conduct comprehensive reviews of the existing CSA policy context in each study country; Analyze gaps in the existing policy frameworks; Identify relevant policy recommendations; Develop and share policy recommendations (briefs) at national and regional levels.

In 2015, a validation workshop involving a number of stakeholders validated the COP study findings. This year (2016) the plan was to look into the 2014 validation and recommendations to come up with the development strategies to fill the gaps.

It is within this background that about 70 delegates with a strong national influence in food, agriculture and natural resource including senior officials of national governments, donor organizations, farmers’ organizations, agri-business, development partner agencies and media converged at Makerere University to share perspectives and experiences on CSA in Uganda.

5.6: MPBSS students usher in guests at the meeting of Council of Ministers - AfricaRice

Eight students from Makerere University’s regional program of Master of Science in Plant Breeding and Seed Systems (MPBSS) had the opportunity to participate as Ushers at the AfricaRice high level delegation meeting held at Speke Resort Munyonyo Kampala, Uganda.

The 30th Ordinary Session of the AfricaRice Council of Ministers was held from 22nd-23rd August 2016, under the chairmanship of Hon. Vincent Bamulangaki Ssempijja, Minister of Agriculture, Animal Industry and Fisheries of the Republic of Uganda.

The meeting attracted Council of Ministers and respective country Director Generals (DGRs) and non-member countries like Ethiopia, Tanzania and Kenya. This was aimed at recognizing the strategic importance of rice for Africa, the effective geographic expansion of the centre and election of a new chairman.

Makerere University’s regional Coordinator, Master of Science in Plant Breeding and Seed Systems Dr. Richard
Edema said the guests had an impressive event in Uganda. He disclosed that eight Masters Students had the opportunity to participate as Ushers.

“These students were at the core of the conference preparation helping the organizing committee to organize conference materials, guide the honorable guests. This provided a great opportunity for the students to interact with the ministers and DRGs.” Dr. Edema stated.

Dr. Edema described the Africa Rice Center (AfricaRice) as a leading pan-African rice research organization committed to improving livelihoods in Africa through strong science and effective partnerships. He commended the students for the pre-event preparations, offering the highest level of customer service and maintaining a professional, neat and well-groomed appearance.

“AfricaRice is a CGIAR Research Center – part of a global research partnership for a food-secure future. It is also an intergovernmental association of African member countries. Today its membership comprises 26 countries covering Western, Central, Eastern and Northern Africa regions”, Dr. Edema explained.

As ushers, students’ responsibilities included; politely directing and escorting guests to their seats; providing guests with programs and other relevant materials; being aware of and enforcing appropriate house rules and; demonstrating an in-depth knowledge of all points within the venue.

5.7: Upcoming CBA 11 International Conference

The Ministry of Water and Environment (MWE) in partnership with the International Institute for Environment and Development (IIED) and Makerere University (MAK) will host the eleventh CBA international Conference. The tentative date has been fixed on 22nd - 29th June 2016.

The CBA11 conference will be held under the theme, “Ecosystem Based Adaptation (EBA)”. The IIED will manage the conference in collaboration with the Makerere University Centre for Climate Change Research and Innovations (MUCCRI), based in the College of Agricultural and Environmental Sciences (CAES).

The decision was reached during a meeting with representatives from IIDE, Makerere University and the Ministry officials chaired by the Permanent Secretary (PS) Mr. David O. Obong on 30th August, 2016 at the Ministry
headquarters in Luzira a Kampala Surburb.

A team from IIDE was led by the Director International Centre for Climate Change and Development (ICCCAD) at the Independent University of Bangladesh (IUB) Dr. Saleemul Huq. Makerere University team was led by the Principal, College of Agricultural and Environmental Sciences (CAES) Prof. Bernard Bashaasha.

The meeting with Ministry officials followed a letter that was submitted by the Makerere University Vice Chancellor in January 2016 seeking permission from the Ministry on behalf of Government of Uganda to host the conference and to kick start discussions and preparatory activities.

It is a requirement that the Government of Uganda hosts the CBAll Conference. As the Ministry responsible for Climate Change in Uganda, the Ministry of Water and Environment Management would thus host the Conference. The Ministry would, among others, set-up a committee to provide oversight and guidance to the Conference. This is what was done in the past CBA Conferences in Kenya, Nepal, Tanzania and Bangladesh.

“Makerere University is part of Government but it is not government. That is why the Vice Chancellor wrote to you to give permission to host the conference and initiate the discussions”, Prof. Bashaasha submitted.

With the Ministry approval, Makerere University would start local planning for the Conference with support from IIED. Both institutions will work closely with the Ministry of Water and Environment to construct an appropriate Conference programme and identify participants. Makerere University has delegated Dr. Revocatus Twinomuhangi as Coordinator.

The Permanent Secretary welcomed the proposed conference as important in addressing climate change issues affecting the population. The PS described hosting of the conference as an honor and an opportunity to market Uganda because the country has come a long way on issues of climate change.

“We have Climate Change integrated in the National Development Plan. We have the climate Change policy taking into account issues of adaptation and mitigation. As part of mitigation we intend to change the policy in local languages. Parliament and the speaker are well involved and we have held several meetings asking to table the PARIS Agreement. We have a baseline intervention of the World Bank ADP Forum, REDD+ and others focusing on climate change”, Mr. Obong stated.

Mr. Obong, provisionally, accepted to host the conference on grounds that Uganda stands to benefit pledging to brief the political leadership. By the time of the meeting, the Minister for Water and Environment was reportedly out of the station on other state duties.

“In principle, we agree that the Ministry will host the conference in partnership with IIDE and Makerere University. We will brief the political leaders when they come back and
tentatively agree on the date to allow ministry take care of her team”, The PS indicated.

Based on subsequent meetings, IIDE and Makerere University and representatives of the Ministry will draft a conference budget and a Memorandum of Understanding to be send to the Solicitor General and other cabinet committees for approval.

The Assistant Commissioner Sector Capacity Development Mr. Joseph Epitu and the Under Secretary Mr. Esimu Okuraja are the link persons in the Ministry.

Makerere University’s Prof. Bernard Bashaasha thanked the Permanent Secretary for the blessings, enthusiasm and insights and assured the Ministry officials of the University’s commitment and readiness to cooperate with other stakeholders to successfully host the conference.

The Director International Centre for Climate Change and Development (ICCCAD) at the Independent University of Bangladesh (IUB) Dr. Saleemul Huq also thanked the PS for welcoming the team and agreeing to host the conference.

According to Dr. Saleemul, the conference will take 7 days. He explained that the first three days will be dedicated to field visits by the international participants who will visit the Ugandan local communities to assess their vulnerability.

The other days and sessions were scheduled for plenary and parallel sessions, inaugural session for VIPs and the concluding session for high level delegates.

The University has also been requested to organize a Parallel Youth event for two days whose representatives will be invited to present at the concluding session.

Each participant is expected to pay 500 pounds. A provision for people who cannot afford fees to physically attend the conference has been planned via the social media platform. This category of participants is termed as Virtual Internet Participants (VIP). A team of ICT experts will facilitate this process of interaction.

About the CBA
The International Institute for Environment and Development (IIED) and partners created the International Community Based Adaptation (CBA) conferences to highlight that effective adaptation to climate change takes place at community level. A bottom-up approach to adaptation enables local knowledge and practices to be shared among communities, academics and project managers so that those most exposed to the impacts of climate change are better able to adapt.

Since 2005, nine (9) International CBA conferences have been held in different countries including Bangladesh, Kenya, Nepal, Tanzania and Vietnam. Past CBA conferences have focused on scaling up best practice, ensuring a scientific basis to action, communicating and mainstreaming CBA, and ensuring
adaptation funding reaches community level. The ninth and most recent conference was held in Nairobi, Kenya, 24-30 April 2015, in partnership with the African Centre for Technology Studies (ACTS) and was hosted by the Government of Kenya.

The CBA10 conference was held in Dhaka, Bangladesh from 22-28 April 2016 with the theme 'Enhancing Urban Community Resilience'.

Having participated in the ninth International CBA Conference (CBA9) in Nairobi Kenya in April 2015, Makerere University and other Government of Uganda delegates became interested in hosting the eleventh CBA Conference (CBA11) in Uganda. Makerere University has now offered a proposal to host CBA11 in Kampala – Uganda in June 2017.

Regarding Financing, IIED in partnership with Makerere University will fundraise and manage funding and logistics. Makerere University will start local planning for the Conference with support from IIED. Both institutions will work closely with the Ministry of Water and Environment to construct an appropriate Conference programme and identify participants.

Please find these and more by visiting our website on www.caes.mak.ac.ug