

Center Title and Acronym: Centre of Excellence in Sustainable Agriculture and Agribusiness Management (CESAAM)

Host University and Country: Egerton University

Center Website Address: www.cesaam.egerton.ac.ke

Center Director and email address: Prof George Owuor, PhD, Email: g.owuor@egerton.ac.ke/
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Primary Thematic Discipline of Center:

To contribute to sustainable agricultural and agribusiness management through capacity development, research and technology transfer for enhanced food security

Brief Description of Center:

Food insecurity and poverty remain the major challenges to Africa's development, affecting about 33% of its population. One key approach in addressing Africa's food insecurity is to build capacity along the agricultural value chains. The Centre of Excellence in Sustainable Agriculture and Agribusiness Management (CESAAM) at Egerton University (Kenya), funded by World Bank is modelled to address the above issues. The broad objective of CESAAM is **to contribute to sustainable agricultural and agribusiness management through capacity development, research and technology transfer for enhanced food security**. Among other factors identified as causes of food insecurity include frequent droughts, youth unemployment, rampant diseases (crop and livestock), poor plant and animal genotypes, inadequate technical capacity and limited innovations, poor infrastructure, inadequate market access, high input costs, poor policies among other factors. To address these challenges, CESAAM's key focus areas include: Agricultural Economics and Agribusiness Management, Animal Sciences, Crop and Soil Sciences, Dairy and Food Sciences among other related fields to sustainable agriculture. Further to that, CESAAM also has focus on gender and fragile and post conflict countries such as South Sudan, Burundi and Rwanda. Uganda (through Gulu University) is also a key partner in this project. In the recent past, the centre has been involved in a number of activities; mostly for laying foundation and structures for its operations that have since kicked off.

Key Objectives and Expected Outcomes:

1. Capacity development along the agricultural value chain in Eastern and Southern Africa region, especially for the fragile and post conflict states
2. To undertake innovative research, including use of biotechnology and climate smart agriculture, for increased crop and livestock productivity
3. To enhance capacity of University's Agro-Science Park to assist partner universities establish a similar model for incubation of technological innovations.
4. To develop evidence-based agricultural policy briefs and disseminate best practices through Agricultural Knowledge Centres at Egerton (CESAAM) and partner universities.

Expected Outcomes

- I. Train 30 PhD and 60 MSc of which at least 40% will be female.
- II. Develop and launch at least 8 short courses relevant to the needs of the country and the region.
- III. University teaching and administrative staff capacity enhanced through retooling workshops.
- IV. Exchange fellowships of 34 staff and PhD students awarded.
- V. Collaborative research projects (12) for staff supported.
- VI. Four (4) international conferences held.
- VII. Intern fellowships (about 50) awarded to CESAAM students.
- VIII. Five (5) summer schools held for graduate students (2 involving partners).
- IX. Teaching and research facilities modernized.

- X. One (1) Agricultural Knowledge Center established in Egerton University and ICT infrastructure at Egerton University enhanced.
- XI. At least fifty (70) publications published in peer-reviewed Journals by the end of the project period.
- XII. At least five (5) incubation of innovations supported

Major Accomplishments to Date:

1. 70 post-graduate fellowships have been awarded: - 26% are from fragile and post-conflict countries that CESAAM aims at leveraging. A total of 39% are PhD fellowships while 61% being MSc. Given its further focus on gender, CESAAM has enrolled a total of 43% female representation of its fellowships. A total of 923 applications were received out of which 70 were picked out of this competitive process.
2. The centre has updated its website (<http://www.cesaamegerton.org/students/>) to create profiles for all CESAAM-Sponsored Students on its website where partners can visit to see progress of the students, their bios and other activities each students engages in.
3. Four MoU's signed with partners. The institutions with which CESAAM has signed Memoranda of Understanding include Virginia Tech Agricultural College (USA), Nanjing Agricultural University (China), Louisiana State University (USA) and Michigan State University (MSU)
Plans are underway to sign MoU's with its regional partner universities such as University of Juba (South Sudan), University of Rwanda, University of Burundi, Sokoine University (Tanzania) and Gulu University (Uganda). The Inception Workshop and launch of CESAAM took place on 20th July, 2017 at Masada Hotel in Naivasha Kenya.
4. A new program - MSc Agri-enterprise Development has since been approved by the Commission for University Education, Kenya.

Primary Regional and Global Partners:

Academic Partners

Virginia Tech College of Agriculture and Life Sciences – USA, Michigan State University (MSU) – USA, Nanjing Agricultural University - China, Louisiana State University – USA, Gulu University - Uganda, University of Rwanda, University of Burundi, Sokoine University (Tanzania)

Private/public Sector Partners

KALRO, BeCa/ILRI, KEPHIS, ICRISAT, Kenya Seed, Green Forest Foods, CARD

Senior Faculty

Senior Faculty	Email Address	Research Area
Prof George Owuor	g.owuor@egerton.ac.ke	Agribusiness specialist, with emphasis on impact assessment and microfinance
Prof Samuel Mwonga	smwonga@egerton.ac.ke	Soil fertility management
Prof Josephine Ouma	jouma@egerton.ac.ke	Major: Agronomy/ Minor: Genetics
Dr. Mary Omwamba	momwamba@egerton.ac.ke	Food chemistry, Food Analysis, Product Development, Food Processing, Functional foods in promoting human health.
Dr. Anthony King'ori	akingori@egerton.ac.ke	Animal Nutrition, Livestock Management and Production