



Transformation of higher education through internal engagement and external partnership



University Background

The University of Eldoret (UoE) was established upon the award of Charter by the President on 11th February, 2013, as the Chepkoilel University College. The institution was founded in 1946 by the white settlers initially as a Large Scale Farmers Training Centre. In 1984, it was converted to a Science Teachers' Training College at Diploma level. It was later converted into a university campus - Chepkoilel University Campus of Moi University offering basic and natural science degree programs. In 2010 the Campus was upgraded to Chepkoilel University College, a Constituent College of Moi University. The University is Science, Environment/Natural Resource, Agriculture and Technology based institution and has grown steadily from the initial Schools of Agriculture, Natural Resources and Science to the current eight (8) schools with 34 academic departments and a student population of above 14,000; and teaching and non-teaching staff number of over 1,300. The total University acreage is 1,054, part of which is set aside for agricultural production.



Prof. Teresa A.O. Akenga
Vice Chancellor, University of
Eldoret, Kenya

Tertiary education in Kenya has expanded exponentially in the last two decades; every sub-county has at least a TVET institution and it is planned that every county should host at least one public university. The number of public universities and university colleges has increased to 34 and there are about 70 universities including private ones. Recently the Government has called on the rationalization of university programs and their numbers due to the huge financial burden they exert on the former. The Government has established Universities Development Fund and instituted Differentiated Unit Cost as ways of financing the universities and at the same time urging the universities to look for alternative sources of financing their programs, establish income generating ventures, Public private partnerships and international partnerships. In view of all these emerging issues, there have been repeated calls to universities to rethink their



strategies and embrace transformative agenda. Currently the University of Eldoret has embarked on transformative agenda anchored upon:

1. Transforming Academic programs

In an effort to make the academic programs more competitive and relevant to the ever changing labour market the university reviews its programs every 4 years and continues to develop new ones. Recently the university embarked on harmonization of its academic programs with the view to rationalize these against the number of faculty and their relevance. However, at the same time the school of Agriculture and Biotechnology developed two trans-disciplinary programs in MSc. in Gender and Agriculture and MSc. in Food Security.

In order to improve on the employability of our graduates we have revised our curriculum to have the students perform the Practicum on the farmers' fields. We have placed student attachments to the end of Fourth year and this has increased the possibility of these students being retained at these firms.

For the last 4 years the Department of Soil Science has been running an International Field Course that has included students from programs outside Agriculture and outside Kenya. This program is for a duration of two weeks – one week in the farmer's field in a selected area and the second week, there are group and plenary discussions followed by a Project Report. This year the course will be conducted twice: already one set was conducted from 7th to 21st May, where about 40 students participated – 20 from Belgium and 21 from UoE and funded by VLIR; the other set will be held in July and will involve another 40 students – 20 from Switzerland and the others from Kenya and this will be sponsored by Biovision and Cerad. Lately, the focus of the course has been on Agro-ecology issues.

2. Internationalization of programs

The University has strived to internationalize its programs and services through the following channels:

- a) **Collaborative training in fisheries and aquaculture in East, Central and Southern Africa (COTRA)** - The EU under its Intra-Africa Academic Mobility Scheme, has provided funding to support training of graduate students in African universities. In this mobility programme five African partner institutions and one EU Technical partner collaborate in the training of professionals to achieve sustainable fisheries management and aquaculture resources that shall lead to increased fish production and enhanced food and nutritional security, and hence, improved livelihood and household revenue. A total of 24 Masters (6 credit seeking, 18 degree-seeking) and 12 Doctorates (4 credit seeking, 8 degree-seeking)]





will be trained in the thematic areas of Fisheries Management, Aquaculture, Fisheries and Aquatic Sciences, Ichthyology, Zoology and Biology:- Hydrobiology. In addition, 10 administrative staff will participate in a capacity building program mainly in areas of financial and international student management among others.

- b) **Scientists in Crop Improvement for Food Security in Africa (SCIFSA)** - This is a capacity building project to train graduates through the Intra-African Academic Mobility scheme, an AU-EU arrangement. This project is led by Makerere University and funded to the tune of Euros 1.39 million; UoE is one of the collaborating universities. We have admitted 2 PhD and 3 MSc students from other African countries - Uganda, Senegal, Ghana and Botswana and will train them in Seed Science and technology. There is also staff and student exchange for short periods of 12 months - the staff who is doing his PhD at Nelson Mandela University in Arusha, is finalizing research work at Makerere, through the exchange program; an administrator has been included in the non-academic staff exchange, and will be visiting Cairo University in June.

The project has graduated one MSc. student who did thesis research in Bambaranuts seed systems in Uganda; one PhD student has completed his studies on the Physiological seed quality aspects in African eggplant and one MSc. student has also completed studies on seed quality of Mucuna beans; these two are awaiting graduation. The other PhD is finalizing field research work in Uganda on Bambara nuts seed science.

- c) **RUFORUM Graduate Training Assistantship (GTA) scheme** - It is all about staff exchange for agricultural training at master and doctoral levels (priority being doctoral training focusing not only on the RUFORUM regional post-graduate training programs but other university programs as well). The GTA Mechanism will support capacity building in key identified gap areas of the participating member universities. RUFORUM universities will send staff for training to other RUFORUM universities and also receive staff to be trained on behalf of the sending university. The University of Eldoret is participating in this program and already has 13 students from 6 African countries.

3. Established of the Outreach center

The Outreach Center was borne out of the need to have a unit that encompasses all the extension and outreach activities in the university. Establishment of this center was further reinforced by incessant complaint by farmers we worked with that they are tired of collaborating with Universities and Research organizations on the basis of research projects. **They wished to have continuous relationship with the University.** Through the RUFORUM CARP and the NICHE-NUFFIC project on capacity building the establishment of the center was realized. The UoE-OC mission can be elaborated in relation to its core functions of outreach, business incubation, training, community service and teaching as follows:





- a) Community-Engaged for Research and Scholarship: To strengthen linkages for research that engages communities in knowledge-building partnerships for economic development through running profitable agribusinesses. These collaborations will result in advancing new technologies and products, marketing strategies and knowledge co-creation. The industry and farms may support students in any of the activities through scholarships in a well-structured **Internship program**.
- b) Community-Engaged business incubation: To develop ideas and incubate the ideas into businesses to start agribusinesses that generates wealth and transform local agricultural activities. The pilot phase has been completed and is being integrated into University academic programmes.
- c) Community-Engaged Learning and Teaching: To enable students obtain hands on experience, industries and farms becomes labs for research, training and practice in attachments and internships. This is also an opportunity for co-learning by farmers and industry in the form of **hands-on practical training**. Communities and industry high appreciate this programme
- d) Community-Engaged Outreach: To **transfer technologies and information** that produce tangible benefits. A helpdesk is being established to receive, answer or refer farmers in an effort to solve their problems

The center has already connected the university with the communities around and trained many farmer groups in various agricultural value chains from Dairy, horticulture, vegetables, cereals, fruits and mushroom production. The center has been chosen as one of the eight centers participating in the ENABLE Youth Kenya project funded by the AfDB and implemented by the Ministry of Agriculture, Livestock and Fisheries. This project hopes to incubate 2,000 Agribusinesses by youth in Kenya, of whom 300 will be incubated at UoE.

4. University – Industry Linkages

To enhance our linkages with key industrial players, the University has managed to achieve these through the following ways:

- a) The UoE-EABL Barley crop improvement program is a collaborative research project between University of Eldoret and East Africa Malting limited (EAML), a subsidiary of East African Breweries (EABL), which is part of Diageo International. EAML is in charge of Agriculture department, which carries out barley research (through University of Eldoret) and malt barley production. The barley crop research was bid for and won by UoE School of Agriculture and Biotechnology when EABL was shedding off non-core business in 2010. This initiative aims at improving barley crop production through





development of varieties and improved crop husbandry through the training of students and applied research. The program has so far trained 12 postgraduates, released 7 new barley lines (varieties) – Fanaka, Quench, Grace, Aliciana, Cerise, Shuffle and Tipple; trained many barley farmers on Good Agricultural Practices (GAP) and successfully carried out efficacy trials on several pest/disease chemical products.

- b) The University holds annually Agribusiness Trade Fair which brings together a wide range of stakeholders in the agricultural sector and service providers. The goal of the trade fair is to furnish UoE, farmers, service providers and industry suppliers with an opportunity to exhibit their products for bench-marking and trade, familiarize agricultural sector stakeholders with new technological innovations and ideas for better efficiencies, improved quality, and demonstrations to small scale and large scale players. The annual event attracts thousands of local farmers, students, visitors and participants within the East African Community i.e. Uganda, Tanzania, Rwanda, DRC and South Sudan and provides a great opportunity to interact with experts, learn about emerging technologies and innovations that would make their operations more profitable. The trade fair incorporates major players along the value chain, namely suppliers, processors, traders, researchers, ICT, among others. There are plenty of materials for take away, including some do-it-yourself (DIY) brochures. The event provides a chance to see, test and negotiate for farm and other agro-industry services and products. The presence of banks provides opportunities for negotiating for loans to facilitate farmers to drive home new tractors or herds of high class livestock. The University in partnership with leading agricultural companies uses Agribusiness Trade Fair to mobilize agricultural innovation, provide a platform for short seminars, train on farming techniques and empower local farmers; and hence enhancing food security, support Kenya Big 4 agenda, Sustainable Development Goals and Kenya Vision 2030. The Outreach center plays a pivotal role in this event.

5. Development and implementation of policies to better govern university

Several policies have been developed and implemented to make university activities responsive to the community, stakeholders and the environment. These include Research and innovations Policy, Intellectual Property Rights Policy, Consultancies Policy, University Governance and Management, among others. The University has also initiated a programme to strengthen staff and students leadership skills.

6. Stable financial management





When Chepkoilel University College attained University status through the granting of the charter in 2013 it was operating on a deficit but since then prudent financial management system was established. The ERP system was acquired and implemented, thus computerizing most of the management activities including financial activities like budgeting, requisitions, purchases and accounting and salaries; and academic and student issues. The online tracking system stopped the inherent habit of delays in imprest acquisition and surrender and even improved on timely purchases.

The financial system embraced stressed that we operate within the budget and implement the budget accordingly. Expenditures out of the budget and budget lines were punished through surcharges. The bills were paid as and when they are due and controls were put in place to stem off wastage.

7. Opportunities encountered in Transforming and Developing HEIs

As an organization, we encounter promising and abysmal moments which are cornerstone towards our establishment. Notable opportunities which we have grasped as an organization include:

- a) During the pandemic period, most of our operations stagnated due to the closure of the University. However, with the need to meet our core mandate, we looked beyond the horizon and we established the Open, Distance and E-Learning (ODEL) Program which leveraged on technology which ensured that teaching and learning continued in a more flexible and effective manner.
- b) With increased cutting edge competition both from public and private institution, it is clear that we have to be above the rest with our infrastructure and technical capacities. Due to this, irrespective of the fixed government support, the university has enhanced capital development in all of its operations to meet the needs and aspirations of our students. Nonetheless, we have afforded capacity building and training for our staff and above all encouraged them to join various organizational bodies for networking and exchange of ideas.
- c) To enhance Pan-Africanism, the University through our partnership with RUFORUM, we have embraced the Graduate Teaching Assistantship (GTA) programme aimed at enhancing the level of quality education in HEIs across Africa.
- d) Last but not least, to meet the needs and aspirations of a dynamic and growing institution when it comes to income generation, the University amidst the dwindling government allocations, the university established the Income Generating Directorate (IGU) and the Endowment Fund Trust (EFT) aimed at supplementing the University in sourcing for additional resources.



8. Challenges encountered in Transforming and developing HEIs

Notable challenges that we face as a HEIs emanates from the following factors;

- a) Resource mobilization is getting tougher by the day, especially in the face of COVID 19 pandemic because all counties became more nationalistic, thinking of their people and institutions first
- b) In Africa and specifically in Kenya, there is very little university-industry linkages and where there are, these are still very weak
- c) The mantra that universities churn out graduates unfit for the labour market, especially in Agriculture, is a systems problem that need to be sorted right from primary through to secondary school levels. Proper and appropriate systems need to be adopted and this will shape the perceptions of the youths.

About the Author

Prof. Teresa Akenga is a chemist by training with vast experience in training, mentorship, leadership, and management having worked in various academic and administrative roles in East Africa. She is the founding Vice-Chancellor of the University of Eldoret. She is a member of various Professional bodies and association among them being the Royal Society of Chemistry (MRSC) based in the United Kingdom, the Kenya Institute of Management (KIM) based in Kenya, the International Interdisciplinary Consortium (ICC)-a consortium of Universities from Kenya, Uganda and Nigeria, the Forum for Women Vice-Chancellors in Africa (FAWoVC) where she is the Vice-Chairperson, a member of the Organization for Women in Science for the Developing World (OSWD), a member of the Executive Committee of the Inter-Universities Council of East Africa (IUCEA) and a Human Resource Committee Member of the Implementation Committee of the Inter-Public Universities Councils Consultative Forum (IPUCCF) She is also a member of the RUFORUM Board Executive Committee. For her contribution to training, research and curricula development, she was awarded the Moran of the Burning Spear by H.E President Uhuru Kenyatta in 2013. In November 2020, she was honored by the Asian Confederation of Businesses in conjunction with the World Education Congress as the Best Woman in Education Leadership in East Africa for her distinguish role in enhancing the levels of higher education in the region and beyond. She holds a PhD in Organic Chemistry: Synthesis from the University of New South Wales, Australia, Masters of Business Administration (Corporate Governance) from KCA University, Nairobi – Kenya, Masters Qualifying from University of New South Wales, Australia, Masters of Science (Chemistry) from Kenyatta University and Bachelors of Education (Sc., Chemistry major), (1st Class Hons.) from Kenyatta University in Kenya.





This is our twenty-seventh issue in a series of articles we are releasing as part of the RUFORUM Seventh Africa Higher Education Week and RUFORUM Triennial Conference Digests. More information about the conference is available at <https://www.ruforum.org/Triennial2021/>. Join the Conversation on Social Media using our Official hashtag **#AfricaHEWeek2021**.

