

Inclusive and Transformative Education; where Rubber Meets the Road: Experiences from Egerton University



Prof Nancy W. Mungai

Position: Director, Research and Extension
Institution: Egerton University

Introduction

In today's complex world, the pursuit of education transcends the mere acquisition of knowledge as witnessed in transformation in education to reshape learning and teaching in preparing the future generations (Srivastava 2023). Higher education institutions hold a critical responsibility in ensuring that education is inclusive and transformative for personal and societal growth. This is because universities serve as hubs for intellectual growth, personal transformation, and as active participants in the communities they inhabit. Universities have their unique models that help them achieve tangible reality of the journey towards inclusive and transformative education.

Transformative Education is described as an element of quality education and a crucial enabler for sustainable development. Learners are empowered with the knowledge, skills, values and attitudes to address the interconnected global challenges including climate change, environmental degradation, loss of biodiversity, poverty and inequality (UNESCO, 2023). Transformative education allows learners to become more responsible and active global citizens in building an inclusive, peaceful and sustainable society. This indicates that institutions of higher learning have a big role to play in ensuring curriculum and framework of operation aligns to transformative education needs for meaningful contribution in sustainable development.

Egerton University is the oldest institution of higher learning in Kenya and envisions a world-class university for advancement of humanity. The university mission is to generate knowledge and offer exemplary education and training to society for national and global development. Egerton university education model is cognitive of universities as centers of learning and innovation with potential to inspire, empower, and uplift individuals, while also acting as integral part of the community it serves. Through embracing diversity, making learning accessible, engaging with communities, nurturing critical thinking, enhancing entrepreneurship, experiential learning and fostering a passionate faculty, Egerton University is paving the way for personal growth, social progress, and the development of a generation prepared to tackle the challenges of the ever-changing world.

In line with its mission, Egerton University has established a series of local and international partnerships and linkages in research, teaching, and industry. These collaborations have played a key role in enhancing access to higher education, conducting research, which contribute to sustainable development goals of ending poverty, hunger, enhancing good health and wellbeing, quality education,

gender equality, clean water and sanitation, and climate action among others. There are many projects implemented at Egerton University that contribute to inclusive and transformative education some of which are highlighted below.

The 'Transforming African Agricultural Universities to meaningfully contribute to Africa's growth and Development' (TAGDev) Programme, is an 8 years (2016-2024) programme implemented at Egerton University, Kenya and Gulu University in Uganda. It is supported by Mastercard Foundation through the Regional Universities forum for capacity building in Agriculture (RUFORUM). Inception of TAGDev programme was designed to offer an innovative education model of experiential learning, community engagement and entrepreneurship to bring transformation at individual, institutional and community levels. Egerton University hosts Centers of Excellence that are playing key role in agriculture and agribusiness. The Center of Excellence in Sustainable Agriculture and Agribusiness Management (CESAAM), which is funded by the World Bank, is modeled to address Africa's food insecurity through capacity building and innovative research along agricultural value chains. The Center of Excellence in Livestock, Innovations and Business (CoELIB) at Egerton University conducts research in livestock and also provide an innovation hub for young entrepreneurs. The hub provides modern facilities necessary for business incubation. The Limnology and Wetlands Management Programme (LWM) is part of the Education and Research Hub for the Sustainable Management of Aquatic Ecosystems in East Africa (AQUAHUB) project. The main objective of the project is to enhance the facilities and capacity at Egerton University and other African partner institutions (Addis Ababa University and Bahir Dar University, both in Ethiopia) through training.

This thought piece explores the multifaceted ways in which Egerton University enhances inclusive and transformative education to produce change agents in the society.

The Role of Faculty and Administration

In shaping the educational experience, a committed, diverse, and empathetic faculty, supported by forward-thinking administration, plays a pivotal role. HEIs should place a strong emphasis on faculty development and support to have a teaching staff that is not just knowledgeable but deeply passionate about fostering inclusive and transformative education. Egerton University administration is keen on supporting local, regional and international initiatives in its focus on transformative education and sustainable development.

The faculty is responsible for reviewing and developing curriculum that enhances production of graduates with requisite skills and competences for meaningful contribution towards addressing the pressing needs of the industry and society at large. Egerton University recognizes the importance of conducting tracer studies to track changes emanating from its education model. Some of the tracer studies conducted include graduates' tracer studies, Influence of entrepreneurship education on Egerton university's graduates' intention to start a business, farmers' perception regarding Egerton University community engagement, farmer-preferred learning methods and utilised teaching approaches, efficacy of agriculture teaching practice projects in secondary schools for Egerton University Agricultural Education and Extension programme among others. These tracer studies have helped to identify gaps in teaching, learning, research, linkages thus informing decision for curriculum review, staff capacity building, delivery of teaching and students engagement among others in line with enhancing inclusive and transformative education.

Staff capacity building activities have been focusing on enhancing service delivery, promoting students-centered learning, enhancing students experiential learning, problem-based learning, leadership and governance, entrepreneurship, supervision of graduate studies, competence-based curriculum among others. When staff are trained, they are able to learn new ideas while strengthening existing skills and knowledge for better service delivery.

Embracing Diversity and inclusivity

The World Bank describes inclusivity as creating systemic change for overcoming barriers to quality educational access, participation, learning progress and outcomes for all learners. Universities bring together individuals from all walks of life manifested through intersecting expressions of gender, class, ethnicity, race, nationality, religious beliefs, and dis/abilities (Ahmed, 2012). However, the ability to accommodate students' differences and leverage their unique talents and merits defines institutional strengths in embracing diversity and inclusion. Thus, institutions should ensure establishment of firm foundation for inclusive education by creating environments where diverse backgrounds, perspectives, abilities and experiences are not just tolerated but valued.

Egerton University has embraced diversity and inclusion in a number of ways. The university has ensured internationalization and has an established Directorate of International Linkages and Partnerships that takes care of the wellbeing of international students and staff, including support for special accommodation, processing of students and work passes, notarization of academic certificates among other needs. International students have their associations where they are able to exercise leadership and have a common platform where their voices can be heard. In the bid to support women in education, Egerton University has an Institute of Women, Gender and Development Studies, which was established in 1991 as the Centre for Women Studies and Gender Analysis to address the issues that interfered with the pursuit of academic excellence among female students in campus. The mission is to eradicate all obstacles to women's access to education, training, learning and employment opportunities through researching and acknowledging the needs of both women and men in order to achieve substantive gender equality.

Egerton University offers a wide range of academic programmes that provides students with opportunity to pursue their desired courses in line with their career goals. In the 2023/2024 academic year, Egerton University welcomed 20 female students from across East Africa to its master's programmes under the ACEII programme; The Center of Excellence in Sustainable Agriculture and Agribusiness Management (CESAAM). Egerton University emerged as the top choice among 14 Centers of Excellence spanning 9 ACE II countries in various universities which include: SACIDS in Tanzania, TACE in Malawi, AQUAFISH in Malawi, ACALISE in Uganda, CLIMATE SABC in Ethiopia, NSEFOODS in Kenya, ACEWM in Ethiopia, CoE_FAPP in Mozambique, IRPM & BTM in Tanzania, and CREATES in Tanzania. The selection reflects applicants' high preference expression for academic programmes at Egerton University in agriculture and agribusiness that address issues of food insecurity and poverty hindering Africa's development.

Expanding access to higher education

In modern education, inclusivity goes beyond mere physical access and is accommodative of diverse learning styles, needs and abilities. Technology advances has given rise to online platforms, virtual classrooms, digital resources thus promising greater education accessibility and flexibility. Universities need to ensure equitable access and effective utilization of these technologies. Equipping educators with skills and strategies required to harness the technology's potential is necessary to ensure technology serve as an enabler rather than a barrier. Capacity building the educators to equip them with necessary skills in understanding diverse learning needs, creating inclusive classroom environments, and utilizing assistive technology to cater for the needs of all students is important. The focus lies in enhancing innovative pedagogies that encourage active students' engagement, critical thinking and deeper understanding of the subject matter regardless of the mode of delivery.

In an effort to expand access to Higher Education, Egerton University is gradually adopting a dual mode in teaching/learning through the School of Open and Distance Learning. This is largely in response to the growing number of Kenyans seeking access to higher education, but who may not afford face-to-face instruction. The university has been offering Military Science degree programme and Bachelor of Education programme through distance learning module. Further, the university has embraced e-

learning in line with Egerton University 2023-2026 Strategic Plan (under review) which isolated e-learning as one of the strategies for improving access to University Education and Training. The E-learning programmes offered through the E-Campus were launched in 2015 with 5 pilot phase degree programmes. Since then, five (5) undergraduate and six (6) postgraduate degree programmes have been developed and uploaded on the E-Learning platform. Further, the university has also adopted blended learning for most of the academic programmes to enhance learning. Faculty members are facilitated for trainings to equip them with skills necessary in development of e-modules for course units they teach, how to upload them on e-platform and how to effectively teach and interact with learners. Learners are also oriented on how to navigate through the e-learning platform.

The university host The Essential Electronic Agricultural Library (TEEAL) library that allows for electronic access of research materials for researchers and students. In terms of accommodation, the university welfare reserve accommodation facilities for people with disabilities and has a well-established Disability mainstreaming office and resource centre where support devices and services are provided to those who need them. A counselling department under Dean of Students office provides psychosocial support and mentorship to students and staff to safeguard their social wellbeing for academic and social excellence. Each faculty has been allocated professional counsellors to take care of students' social issues in the bid to safeguard mental health.

Apart from the system wise way of enhancing the access to education, Egerton University through collaborations with partners has enhanced access to education through scholarships to academically bright but economically disadvantaged students. For instance, through the TAGDev Programme, 188 students (50% of which are female) have been supported. These students are from 14 African countries namely Kenya, Uganda, Malawi, Rwanda, Lesotho, Ghana, Nigeria, Cameroon, Liberia, Ethiopia, Somalia, Benin, Tanzania and Zimbabwe. These initiatives have enriched the academic discourse and prepared students for a more globally interconnected world. Students are taken through a series of skills enhancement programmes in the course of their study to ensure they are equipped with requisite skills that match societal needs. Further, through CESAAM Project, which is funded by the World Bank, 265 masters and PhD students from across 12 countries in Africa have been supported for their studies at Egerton University.

Enhancing experiential learning

Effective transformative education should lead learners to become change makers in their spheres of interaction. Experiential learning, or learning by doing, is a key element in making learners become aware of situations and their complexities, as well as the needs for change. Through experiential learning, learners are able to develop soft skills for meaningful engagement, such as working in teams, critical thinking, communicating effectively among others. All these skills help them become active and be better suited to live and work in complex societies and environments.

Egerton University in its education model adopted a practical oriented approach in providing quality education. The focus is to produce graduates who are competent for effective transition into the job market and impacting the communities they interact with. As such, the academic programmes offered at the university are competitive and aligned to the market needs. For instance, agricultural programmes such as agronomy and horticulture, the university has adopted field experience projects where students are allocated plots of land to manage from first year to the fourth year of study. Students learn by doing all the aspects of crop production, management, harvesting, postharvest handling and storage. This exposure enhances students' skills and critical thinking in matters regarding crop production and management important in impactful contribution in the society.

Another way in which experiential learning is enhanced is through field attachment (FA) which is a key component of undergraduate studies at Egerton University. Currently, more than 70 different academic programmes across all faculties have FA component, mostly as a core unit. The coordination of field

attachment is done through the Board of Undergraduate Studies that facilitates the posting and assessment of students in all academic programmes that have FA. During field attachment, the students are expected to engage with the industry for a minimum of 8 weeks to gain work place experience and training that meets the changing trend in the labour market. The TAGDev programme has enhanced this model by offering additional field attachment support to 50 undergraduates after completing their second year of study to enhance their experiential learning. Through the Board of Undergraduate Studies, Egerton University implements Farm Attachment Programme where students are attached to farms for a minimum of 8 weeks. Over 1,000 students have benefitted from FAP where they work with the farmers, gaining hands-on skills and implementing relevant projects and activities on the farm. Students who successfully complete the FAP compete for internship opportunities in Israel, German and Denmark.

Egerton University upholds internships as an enabler in linkages for job opportunities and work environment experience. The University partnered with Arava International Agricultural Training Centre (AICAT) in Israel that provide hands-on skills and technology transfer to students undertaking agricultural related programmes. This 11-months attachment programme provides selected students with an opportunity to be attached to various farms and farmer organizations in the Arava region of Israel. The students work for five days a week in the farms and one day a week in class at AICAT. Alumni of the AICAT programme have been instrumental in creating interest by young university graduates in agricultural enterprises in the country with quite a number successfully establishing their own farming enterprises. Implementation of TAGDev programme has resulted in support for 130 students for internship in local and international organizations to enhance their transition. Through the extensive networking opportunity created by the programme and its partners, students are able to acquire internship places that provide them with greater connection with professionals, mentors, and peers who can offer guidance, support, and potential job referrals.

Beyond the Classroom: Community Engagement and Social Responsibility

Institutions of higher learning (HEIs) are embedded within communities and should embrace community engagement and social responsibility as integral aspects of their education models. HEIs have a wide pool of resources that can benefit communities for social, economic and national development. Communities on the other hand, have a wide range of needs for which HEIs should be in the forefront in addressing and providing correct, relevant, and up-to-date agricultural extension services to the communities they serve.

Egerton University having been founded as a farm school has a long history of engagement with community. The university has well established structures on community engagement as stipulated in its Community Engagement Strategy. It has a Directorate of Research and Extension that coordinates all research and extension services. The community engagement strategy and the extension and outreach policy exist which guide on how services are offered. Extension and outreach activities are carried out with full involvement of communities in a consultative manner through partnerships based on their problems, needs and priorities as well as national policies and priorities. Major approaches adopted by the university in enhancing inclusive and transformative education in line with community engagement include the outreach programme, community action research in various agricultural value chains, extension services through media among others.

The Community Outreach Programme at Egerton University has made significant strides in addressing local issues. Through partnerships with community organizations, students and faculty actively contribute to solving real-world problems, instilling a sense of civic duty and social consciousness. Outreach programmes are conducted majorly in the Faculty of Education and community Studies, Faculty of Agriculture, Faculty of Veterinary Medicine and Surgery, Faculty of Law. The students engaged in the outreach programmes are equipped with requisite soft skills in executing a community outreach and education session, important skills in professional growth and transition. They participate in a

community needs assessment, prioritize the needs, and thereafter plan and execute community outreach activities.

Other ways in which the university engages with the community is through the community action research where farmers and stakeholders in agricultural value chains are engaged in implementation of agricultural value chain projects. CARP projects ensure training of students jointly with industry for rural community transformation and appreciation of entrepreneurship. Some of the key outcomes of Egerton's work with stakeholders include Baraka Agricultural College increased its acreage of seed potato production through collaboration with the Seed Potato Value Chain CARP+ project; clean seed potatoes have been availed to farmers from Egerton University and Baraka Agricultural College, Egerton university participated in drafting the National Potato Strategy and potato regulations launched in 2019, six case studies have been published in collaboration with stakeholders in the potato value chain, over 5,000 farmers have been reached directly and another 3,000 indirectly, and students have been hosted for attachment at partner institutions among other outcomes. Egerton University has great potential as a centre of excellence in agriculture to influence national development.

The Radio is considered as one of the oldest and popular information technologies in the rural areas of developing countries such as Kenya due to its accessibility and affordability. Egerton university has a Radio (101.7 FM) launched in June 2012 as a training radio for students taking Communication and Media studies at the University. Apart from being a branding tool for the University, the radio was inspired by the desire to sensitize locals on cohesion and harmonious living following the post-election violence period of 2007/08 that also largely affected the University (a number of staff were displaced and the University also acted as a refuge centre for some communities during the period). Egerton Radio has a potential to reach over 10,000 farmers in Nakuru County. The TAGDev programme utilized this opportunity by commissioning a 'Kilimo Bora' Radio show Programme that seeks to enhance the capacity of Egerton university students in agriculture related fields to deal with rural communities' agricultural challenges. "Kilimo Bora" a Swahili word translated to 'Good Agriculture' is an agricultural show hosted at Egerton Radio 101.7FM or online streaming at <https://www.egerton.ac.ke/radio> and aired on weekly basis. The show provides a platform for enhancing students' ability to engage with the community in addressing real life problems. A total of 30 talented, self-driven, and academically excellent undergraduate and post-graduate students from the faculties of Agriculture, Education & Community Studies, Veterinary medicine, and Environment have participated in the radio show programme in the last one year and are mentored by a PhD student. These students are assigned specific agricultural-related topics to prepare and present as guest experts during the shows. Follow up farm visits are done for beneficiary farmers to help address issues of concern at farm level for enhanced agricultural productivity. Therefore, apart from enhancing students experiential learning, the radio programme provides a platform for engaging with farming community in university's effort towards sustainable development agenda.

As an agricultural institution, the university is keen on research that contribute to food security and improvement of livelihoods of farming community. Through the AgroScience Park (AgroPark) which is under the Directorate of Research and Extension, technology is moved out of the laboratory into the market place. The Park's overall mandate is promotion of innovations, products and services to be commercialized and linking university with industry for uptake of this products. It brings together academia, farmers, graduate students, business, agro-processors and manufacturers in one stop-shop for sharing information and innovative ideas, commercialization and wealth creation. Key achievements include: Release and commercialization of high yielding crop varieties for farmers in low and medium altitudes in Kenya and include beans (Chelalang, Tasha and Ciankui), groundnuts (Nyota and Mwangaza), Sorghum (EUS1), finger millets (Snapping green), chickpeas (Saina ka1) and pigeon peas (Egerton Mbazi M1, Mbaazi M4 and Mbaazi M3); Commercialization of Egerton University Organic Honey and Yoghurt with Kenya Industrial Property Institute (KIPI), and KEBS Standardization Mark of Quality Certificate for Egerton University – HONEY through Agro-Food Industry and Nutritional Products

Centre (AFINPC) from Dairy plant of Dairy and Food Science Department; Establishment of Fingerlings production Unit for the supply of fingerlings to farmers thus enhancing Fish Farming in Kenya; Enhancing mechanization by fabrication of shellers and motorized small machines. The national and Nakuru County government have proposed to upgrade the park into an agro-city to double it up as a special economic zone.

Nurturing Critical Thinkers

The essence of transformative education lies in equipping students with critical thinking skills and a passion for lifelong learning. It is the desire of any institution of higher learning to nurture inquisitive and innovative minds. The start point is the incorporation of interdisciplinary learning into curriculum. This encourages students to explore various fields, foster curiosity, promote research and nurture lifelong learners who drive the societal change.

The innovative model of experiential learning, community engagement and entrepreneurship implemented at Egerton University has played significant role in bridging gap in the curriculum and exposing students to opportunities that enhances critical thinking in addressing the needs of the community. Students have been able to initiate projects for which they work with the communities in improving agricultural productivity and environmental conservation to improve livelihoods of farming communities amidst the effects of climate change.

The 4-pillar give back project, initiated by four masters' students supported by TAGDev programme at Egerton University from three countries (Kenya, Rwanda and Uganda), is an initiative tailored towards improving the state of agripreneurship among farming community around Egerton University environs through incorporating community engagements and promoting social responsibility in the vegetable value chain. The Project started with problem identification involving community mobilization to further understand the community's problems. They came up with interventions to help boost vegetable farming for food and nutritional security and improvement of livelihoods. The 4-pillar Give Back Project started with 6 farmers but have increased the reach to 75 farmers. On the other hand, **Rosaline farm venture** is a model farm established by another master's student in Mwigito Village bordering Egerton University to the North. The student is working with 15 farmer groups (>500 farmers) in Njoro sub-county training them on herbs, spices and vegetable production. The farm has also supported 12 interns to enhance their experiential learning. The student is also active in training farmers on other agricultural aspects to contribute to improved agricultural productivity among farmers.

Further, Gordon Agricultural Organisation (GAO)-UG Limited is a company founded by an undergraduate student back in his home country, Uganda. The company was started in 2020 and fully registered in Uganda and provides small-scale farmers with agricultural inputs, farm tools, and capacity knowledge to enhance food production and earnings, reduce food insecurity and poverty. The company uses community model approach through which farmers are offered with trainings, agricultural inputs, farm tools, extension services and access to finance. GAO-UG Limited has implemented several agricultural activities in Alebtong District, Northern Uganda and so far, reached 458 farmers in total. In addition, one hundred and forty-seven (147) farmers (65 males and 82 females) in Aloi town council in different villages were trained on different agronomic practices to improve their knowledge and skills, as well as to learn from the farmers. The company sold farm tools and inputs to at least 301 smallholder farmers in Alebtong District, Northern Uganda.

The Youths for Green Action Kenya (YGAK), NGO, is a wholly youth-led organization seeking to position the youths at the center of environmental action. One of the TAGDev supported students is a board member and has recruited several other Egerton University students as volunteers in the organisation. The organization believes that the youths have the capacity to drive change with regards to climate action agenda. The organization ensures collaborative engagement with other organizations, institutions of higher learning, corporate organizations and individuals towards promoting

environmental conservation. The organisation successfully planted over 200,000 tree seedlings in the Counties of Narok, Nakuru, Mombasa, Kakamega and Kisumu within three years of partnership, and collected over 10 tons of wastes in different clean-up activities.

The CandyCream and **Comrades Dairy** processing companies are founded by TAGDev supported master's and an undergraduate student, respectively. Candycream Dairies is located in Pakawa, Pipeline, Nakuru town and has been in operation since 2022 while Comrades Dairy is located in Ngondu Njoro sub-county and has been in operation since 2018. The students embarked on milk value chain to address challenges in marketing of milk and farmers access to extension services. The two companies have provided job opportunities to 13 people contributing to the global agenda of creating jobs for youths.

Greenriro Investment is climate action for carbon finance in agroforestry, forestry and other land use projects among local land owners and farmers in Bomet County, Kenya initiate by a TAGDev programme supported student to improve on livelihood and resilience. It is a youth-led afforestation and land management business model that is community driven for climate action and carbon investment. The project is monumental in nature restoration initiatives with over 50 decentralized nurseries – production capacity of over 30,000 seedlings per year of different tree species that fosters afforestation, agroforestry, soil conservation and carbon literacy programmes. Over the course of 3 years, the project target to help communities to integrate agroforestry, afforestation and effective land use for maximum profit on their using tree species that encompasses high carbon sequencer species of indigenous exotics and fruit varieties contributing to biodiversity preservation as well. This is the first collective and concrete pathway placing the communities at the heart of addressing the climate crisis through positive change that can be seen and tasted for years.

A PhD Food Science student has made a significant contribution to enhancing food safety through development of test kit for detecting antibiotic residues in raw milk. The research was supported by the Center of Excellence in Sustainable Agriculture and Agribusiness project at Egerton University. The test kit is rapid and simple to use. Efforts are underway to make the test kit available to dairy farmers' cooperatives and other handlers in the milk value chain.

Entrepreneurship for Job Creation

Embracing entrepreneurship within higher education institutions represents a cultural shift. It encourages students and faculty to think beyond traditional academic boundaries and explore the practical applications of knowledge. Entrepreneurship instills a sense of empowerment and self-reliance that can last a lifetime. Higher education institutions play an important role in supporting research and development initiatives, encouraging cross-disciplinary collaborations, and providing resources like incubators to foster innovations. Incubators and accelerators are key in supporting and nurturing student start-ups to drive economic development. Entrepreneurs are provided with access to mentorship, funding, and networking opportunities crucial in enhancing students' ability to turn their ideas into reality. When faculty and students work on real-world projects, solving industry-specific problems and gaining practical experience, there is a clear indication of education relevance and responsiveness to the demands of the job market. Further, graduates who have entrepreneurial skills are job creators rather than job seekers thus expanding the range of career opportunities and reducing youth's unemployment, which is estimated at 13.3% in Africa (GETH, 2022).

Egerton University, like most higher education institutions, has introduced entrepreneurship courses as a way of enhancing graduates' self-employment through business creation. In a tracer study conducted by Mshenga et al., (2020) to assess the impact of entrepreneurship course unit on the entrepreneurial intentions of Egerton's agricultural science graduates, it was reported that taking the course unit greatly increases chances for Egerton University graduates to start businesses and be financially independent. The Department of Agricultural economics also introduced a Masters course in Agrienterprise Development aimed at training entrepreneurs in the agricultural sector. The academic programme is

designed in a manner that the students are required to start and run a business successfully as part of the course work. This is aimed at equipping them with the necessary skills to succeed in the business world by enhancing critical thinking to turn challenges in agriculture into business opportunities.

Entrepreneurship activities at Egerton University are conducted through the 'Empowering Kenyan Youth through Agrienterprise Incubation for Improved Livelihoods and Economic Development' (AGLEAD) project currently under TAGDev. The focus is to stimulate the establishment and growth of enterprises by university students, to improve their entrepreneurship skills and to enhance collaboration between the university and the private sector. Students receive business incubation support and mentorship from ideation to actualization of their innovative business ideas. Once students develop innovative business ideas, they are facilitated with start-up loans to allow them to implement their business ideas. The young entrepreneurs are able to repay their start up loans by the time they are graduating hence ensuring a revolving fund to support more entrepreneurs. Key achievements of business incubation hub at Egerton University include: the incubation of 24 student businesses sponsoring 60 students; the creation of 150 job opportunities; six trainings on incubation and entrepreneurship benefitting 256 students have been provided; 168 farmers have been trained on agribusiness management and agripreneurship; and 2 agribusiness clinics have been conducted in Nakuru County focusing on educating poultry farmers on different agricultural aspects with an aim of addressing challenges facing them. Four (4) business start-ups have been supported for acceleration and are making significant contribution in addressing challenges faced by farming community in dairy value chain, food industry, animal nutrition and poultry value chain.

Conclusion

Inclusive and transformative education is not an ordinary model, but a practical endeavor undertaken by institutions of higher learning around the world. Through embracing diversity, making learning accessible, engaging with communities, nurturing critical thinking, and fostering a passionate faculty, Egerton University is contributing to personal growth, social progress, and the development of a generation prepared to tackle the challenges of the ever-changing world. The university has also recognized entrepreneurship as a game-changer, offering students the chance to explore their full potential, innovate, and create a brighter future. Fostering entrepreneurial mindsets and nurturing start-ups reposition universities not just in educating the leaders of tomorrow but also actively contributing to economic growth and societal development. Egerton University experiences show that the journey towards inclusive and transformative education is where the rubber meets the road, driving real change in the lives of students and the community it serves. This is a clear picture that in a rapidly changing world, institutions of higher learning must continue to evolve, adapt, and strengthen their commitment in shaping minds and the future of our society.

References

- Ahmed, S. (2012) Being Included. Racism and Diversity in Institutional Life; Duke University Press: Durham, NC, USA, 2012
- Global Employment Trends for Youth (GETH) (2022) in Africa
- Mshenga, PM, Ayuya, OI, Okello, DO, Mwangi, D, Ouma D, Jabu J and Mungai, NW (2020). Influence of entrepreneurship education on Egerton University's graduates' intention to start a business. African Crop Science Journal Vol 28: 273-288
- The World Bank Inclusive education public report
<https://thedocs.worldbank.org/en/doc/04c9f9c7fea704c013ab4f350cb756620200022022/related/WB-InclusiveEducation-10-14-22-RGB-e-version.pdf>
- UNESCO (2023) Transformative Education
<https://www.unesco.org/en/fieldoffice/beirut/transformative-education>

ABOUT THE AUTHOR

Prof. Nancy W. Mungai is the Director of Research and Extension and a Professor of Soil Fertility and Microbiology at Egerton University in Kenya. Previously, she served as the Director of undergraduate studies and field attachment programmes, and was an International Agricultural Ambassador at Walt Disney World in Florida, United States. Her research areas of expertise include biological nitrogen fixation in grain legumes, biological agricultural inputs, and relevance of soil-based approaches for adaptation and mitigation to climate change. She has coordinated eleven research projects and several student internship programmes. She holds a PhD in Soil Science from University of Missouri in the United States. She is part of the team leading Institutional transformation at Egerton University and coordinates the University-Community engagement and link to policy and industry.

This is our sixth issue in a series of articles we are releasing as part of the RUFORUM 2023 Annual General Meeting Digests. More information about the meeting is available at <https://www.ruforum.org/AGM2023/>. Join the Conversation on Social Media using our Official hashtag **#RUFORUMAGM2023**