3rd Forum of the Alliance of Entrepreneurial Universities in Africa

On

Forging Reliable, Sustainable and Long-Term Partnerships

"Towards one million start-ups and $100 billion in revenues"

Dates: 18-24 October 2024

Venue: Dedan Kimathi University of Science and Technology, Nyeri, Kenya

1. Background

The concept of "entrepreneurial university" has been around for about 4 decades (Etzkowitz, 1983)[1]. It has quickly inspired the work on government-academia-private sector relations and interactions[2] as key engines for industrial and sustainable development. The desire to enhance the direct contributions of universities to development has a long history; discussions on the role of universities in the United Kingdom to teach "classics, mathematics, and pure science;…useful subjects like mechanical and electrical engineering, medicine.."[3] and so forth in order to empower their students with skills needed by industry and society at large were already taking place in the 19th Century.

In the United States, land-grant universities were established to focus on the teaching of practical agriculture, science, military science, and engineering with support mechanisms to disseminate the results to users interested in innovating.[4] Some researchers have argued that land-grant universities helped the United States surpass the United Kingdom as the economic powerhouse[5].

Since then, the role of universities such as Massachusetts Institute of Technology (MIT – itself a Land grant University) and Stanford University in driving technological development in their regions have attracted interest of policy makers and researchers alike. It is estimated that a total of "18,000 firms created by alumni [Stanford University] were headquartered in California, generating annual worldwide sales of $1.27 trillion and employing more than 3 million people" (Eesley and Miller, 2018)[6].

Can African universities match the performance of their well-funded, networked and staffed research-intensive universities elsewhere? There are several cases that suggest African universities can serve as drivers of economic and social progress. First, African universities are already key partners of agricultural and veterinary research institutes, and they have contributed to the development of innovative products (e.g. improved planting materials), healthcare providers (e.g. university teaching hospitals) and numerous other undertakings of economic and social value in areas such as energy, water, security, public services.

Second, various universities in Africa have founded and run their own firms independently or in partnership with others. For instance, University of Zambia founded ZAMNET Communications

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[1] Etzkowitz, H. (1983) Entrepreneurial scientists and entrepreneurial universities in American academic science, *Minerva, Vol – 21 1573-1871* https://doi.org/10.1007/BF01097964

[2] Triple Helix of university-industry-government ad their various mutations

[3] W. E. Ayrton (1892) The Function of a University, NO. II67, VOL. 45, Nature, Nature Publishing Group https://www.nature.com/articles/045439b0.pdf

[4] Eldon L. Johnson (1985) Some Development Lessons from the Early Land-Grant Colleges, The Journal of Developing Areas, Vol. 19, No. 2 pp. 139-148

5 Ehrlich, Isaac; Cook, Adam; Yin, Yong (2018). "What Accounts for the US Ascendancy to Economic Superpower by the Early Twentieth Century? The Morrill Act–Human Capital Hypothesis". *Journal of Human Capital*. 12 (2): 233–281. doi:10.1086/697512

[6] Eesley, C. E. and Miller, W. F. (2018) Impact: Stanford University's Economic Impact via Innovation and Entrepreneurship. *Foundations and Trends in Entrepreneurship, 14(2)*, 130–278.

Systems Limited[7], York Farms (export to Germany, the United Kingdom, New Zealand, and South Africa)[8], UNZA Press, in addition to the Technology Development and Advisory Unit[9], Veterinary Clinics, consultancy units and real estate, among others. Similarly, University of Nairobi Enterprises and Services (UNES) runs a Dental Plaza, University Bookstore, UoN Eye Centre, Chiromo Funeral Parlour and Arziki Restaurants[10]. Being enterprising is an important step in helping a university to become entrepreneurial.

Third, some universities have already set the goal to become entrepreneurial and institutionalize the entrepreneurial mission. For instance, Ashesi University in Ghana sets it mission as "Educating Ethical, Entrepreneurial Leaders with the Compassion and Courage to Transform Africa"[11]. Ashesi boasts a student-led honour code, multidisciplinary academic programs, integration of community service, internships, and real-world projects and a diverse community of students (26% of its students come from 34 countries) as well as numerous public and private partners. For a university that became fully chartered in 2018, its accomplishments are an inspiration to both new and old universities on the continent that they can become entrepreneurial.

Dedan Kimathi University of Technology in Kenya provides a different model of an entrepreneurial university. The university boasts a student population that is fully exposed to entrepreneurship; numerous financially independent centres that undertake research as a service, commercialize products; host private firms on campus; collaborates with private and public entities (e.g. Semiconductor Technologies Limited, Siemens, Kenya Film Commission, Asytec Ltd, UN Economic Commission for Africa etc); and has built its own science and technology park.

The few examples above suggest that African universities can put in place support systems to encourage all their students and staff to promote entrepreneurship, become entrepreneurial, capitalize and commercialize their knowledge outputs.

The government has a role to play as well. In Morocco, the government passed Law 01-00 in 2000 which allowed universities to provide services for a fee, create incubators for innovative companies, exploit patents and licenses, and market the products of their activities. In addition, the Moroccan Incubation and Spin-off Network (RMIE) was created by an interministerial committee of the Ministry of Higher Education, Scientific Research and Executive Training (MESRSFC) and the Ministry of Industry, Trade and New Technologies (MICNT) in collaboration with the National Center for Scientific and Technical Research (CNRST). These arrangements led to a rapid rise in

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[7] http://www.zamnet.zm/

[8] https://trade4devnews.enhancedif.org/en/node/6954?fbclid=IwZXh0bgNhZW0CMTAAAR1AkyAxoOLRQth2R QIzogsie6Nd9xIrGGPQThSOq-CRPI7Z_KHMDCuRWHw_aem_rSgyXTYxcR2TomlIV0ZLcw

[9] https://www.unza.zm/units/tdau

[10] https://unes.co.ke/

[11] https://www.ashesi.edu.gh/about.html

establishment of incubators, technology transfer offices and innovation hubs in universities, and streamlined the operations of incubators across the country[12].

Similarly, South Africa enacted the Intellectual Property Rights from Publicly Financed Research and Development Act of 2008[13] which led to the establishment of the National Intellectual Property Management Office (NIPMO) and the Intellectual Property Fund which supports the technology transfer offices at public institutions. Further, Zimbabwe adopted Education 5.0 with a focus on 1) teaching, 2) research, 3) community service, 4) innovation and 5) industrialization. All public universities in Zimbabwe are encouraged and supported to become producers of goods and services[14]. In all these cases, government played a key role in ensuring universities become entrepreneurial in nature.

The business sector is a key partner of most entrepreneurial universities. While governments can pass laws and regulations to encourage university-industry linkages, cultivating good relationships seems important. Small and medium-sized businesses are more likely to partner with universities that can provide talent and innovative solutions to challenges these firms face at a relatively lower cost. Joint industry-government funded research contracts and centres at universities can help build strong bonds between industry and universities. Former students and staff in industry are more likely to partner with their former universities in both formal and informal ways thus serving as a source of information on new and emerging developments. Large donors that contribute huge sums of money are preferred but are rare. In other words, there are many ways a university can build strong relationships with industry.

It is equally important to build good and strong relationship with the community. Working closely with development partners, foundations, not-for-profit organizations and representatives of farmers, processors, miners, civic leaders, businesses etc can help a university contribute directly to development of their own communities. Some simple steps may include attachments and internships with entities in the area; encouraging students, researchers and their partners to undertake projects that address local needs; and supporting each school to have at least one outreach staff member that spend a fix proportion of their working time with civic, community and business entities (e.g. councils, associations, advisory committees).

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[12] For details, see the draft report on Advancing Technology Transfer in Africa: Case of Morocco at https://www.uneca.org/eca-events/sites/default/files/resources/documents/TCND/ARFSD2024/STI/case_studies/morocco_tt_report_august.pdf.

[13] https://www.dst.gov.za/images/pdfs/IPR%20Act%20of%202008.pdf

[14] https://muast.ac.zw/wp-content/uploads/2020/10/higher-edu-plan.pdf

2. About the Alliance

The Alliance of Entrepreneurial Universities in Africa was launched in 2022 at the Africa Regional Science, Technology and Innovation Forum in Africa in Kigali, Rwanda. The main goal of the Alliance is to encourage and stimulate universities' positioning to promote, nurture and drive entrepreneurship and business development within the institution, in the region and beyond. Specifically, the objectives of the Alliance are:

➢ Advancing university initiatives that promote innovation and entrepreneurship, including curriculum updates that lead to the desired outcomes;
➢ Aiding national and regional efforts to strengthen institutional arrangements that drive technological and non-technological innovations and entrepreneurship for job and wealth creation, and competitiveness in trade and in attracting investments;
➢ Creating a conducive environment for universities to adapt strategically and embark on initiatives whereby income could be generated through innovative businesses;
➢ Creating entrepreneurial ecosystems within and around universities that integrate teaching and learning, research, academic staff and students;
➢ Sharing relevant knowledge, resources, experience and good practice;
➢ Showcasing relevant activities, outputs, outcomes and impacts
➢ Identifying potential areas for research and development with potential for commercialization;
➢ Supporting each other to co-learn and co-innovate in terms of innovation and entrepreneurship;
➢ Launching initiatives and activities aimed at encouraging excellence and competition in specific aspects relevant to entrepreneurship; and
➢ Forming strategic partnerships within the local and international research communities on Research, Development and Innovation (RDI) collaborations and entrepreneurship, with the aim of producing solution oriented scientific research findings.

Currently, there are about **41 formal members** drawn from Kenya (11) and South Africa (9), Ethiopia (4), Ghana (3) and one each from Botswana, Burundi, Cameroon, Egypt, Eswatini, Lesotho, Libya, Malawi, Senegal, Tanzania, Uganda and Zimbabwe. There are also over 40 informal members from a host of countries such as Congo, Mauritius, Nigeria, Senegal, Sierra Leone, and Zambia) in addition to the countries where the Alliance has formal members. Collectively, there are at least 1.5 million students and about 45,000 lectures in the Alliance.

3. Overview of the Forum

The first Forum of the Alliance of Entrepreneurial Universities in Africa was held in November 2022 with a focus sharing of experiences and lessons in building a broad-based entrepreneurial culture that cuts across disciplines and sectors. To meet this objective, the Forum made three calls: a) Excellence in entrepreneurship culture; b) Excellence in go-to-market entrepreneurship support and; c) Excellence in student unipreneurs.

The Second Forum (10-11 October 2023)[15] focussed on advancing the institutionalization of entrepreneurship in internal processes of the universities to ensure it is widely diffused into the university community and set the target of creating at least ***"one million startups and $100 billion in revenues in a decade"***. It also addressed in detail the institutional arrangements of the Alliance such as its terms of reference, sustainability, and role of different stakeholders, among others.

The second Forum of the Alliance of Entrepreneurial Universities in Africa focussed on how African universities can inspire their communities of researchers, students, staff and partners to create business opportunities, social enterprises and innovations that can directly generate one million startups and $100 billion in revenues. This is important to accelerate Africa's development prospect in meeting the targets that it has set in Agenda 2063.

The Third Forum of the Alliance builds on the experience of the first two Forums held in 2022 and 2023. It will focus on ***"Forging Reliable, Sustainable and Long-Term Partnerships"*** to achieve the ambitious goals of creating one million startups and $100 billion in revenues. The Forum will look at ways of encouraging both internal and external partnerships. Research suggests that many entrepreneurial universities could have reaped more from their investments if entrepreneurship was not limited to favoured teams or schools with successful serial entrepreneurial staff. Internal mechanisms to encourage partnerships could help bridge entrepreneurship knowledge, talent, networks and other resources already available in or to the university.

External public and private partnerships are crucial to the entrepreneurial mission of the university. Several successful entrepreneurial universities benefited and continue to benefit from public and private partner contracts, donations, collaborations and other support services. External engagements with private and public partners helps diversify funding sources, bringing in entrepreneurial talent, access new and emerging knowledge, and get embedded fully in society. Partnerships between and among universities and their communities of researchers and students may be equally important in fortifying and sharing of talent, infrastructure, and financial resources as well as in facilitating mobility and collaboration for greater impact.

4. Objectives of the Forum

The overall objective of the Forum is to **encourage universities to cultivate, build, and promote** reliable, sustainable and long-term partnerships in order to **nurture and drive entrepreneurship and business development in teaching, research, and outreach**. Specifically, the Forum will seek to:

a) Identify the secrets behind successful and long-term partnerships
b) Reveal the strategic policy, regulatory and administrative arrangements for partnership governance
c) Highlight and diffuse different arrangements for seeding, nurturing and sustaining broad-based partnerships.
d) Interrogate and advance measures for boosting internal partnerships among and between the various communities of university, and for leveraging existing partners across schools

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[15] https://www.uneca.org/eca-events/second-forum-alliance-entrepreneurial-universities-africa-and-workshop-sti4sdgs-roadmaps-and

e) Seek ways in which government can encourage academia-industry-community collaborations and partners in areas of common interest.

f) Find ways of expanding external engagements and linkages that are sustainable, reliable and long-term.

5. Structure of the Forum

The Forum will be composed of calls for innovators and solvers that may spend time to find solutions to challenges that communities and entities would like to solve now. These may include sponsored challenge calls and community development challenges. The challenges to be solved will be defined by challenge owners, with the support of Origin Research and Innovation Hub. For examples of innovation challenges, see the Origin Research and Innovation Hub website (https://originlabsafrica.org/). This may take 2-5 days depending on the challenges and the teams working on the solutions.

The Forum itself is expected to be composed of keynote addresses by senior government officials, business leaders and managers of universities and public research institutions. The keynote addresses are intended to set the tone and provoke discussions. These will be followed by high-level panels of senior university, industry, community and government leaders. High Leve Panels are intended to enable the sharing of national and institutional experiences that offer unique or different perspectives to facilitate learning.

In addition, the Forum will also feature high-level policy dialogues and discussions that will deal with a given issue and generate some form of consensus, way forward and information that may inform members, the Alliance and their partners. The Forum will also offer a platform for showcasing inventions, innovations, startups and businesses, as well as ecosystem builders and supporters – accelerators, tech hubs, mentoring platforms and venture capital funders etc.

Networking sessions will take place each evening and during lunch breaks. Teams interested in organizing and managing networking session around a specific topic are invited to express their interest in writing to the organizers. These could include sponsored networking sessions on areas such as innovation and entrepreneurship funding, intellectual property management, growing your market among others.

6. Contacts:
For operational and organizational arrangement, kindly contact
- Asfaw Yitna at yitna@un.org