



Regional Office
for Eastern Africa



Republic of Djibouti

Ministry of Higher Education & Research

Conference on Higher Education¹ and Research: Quality and Future Challenges for Eastern Africa²

Venue: Djibouti Palace Kempinski, Djibouti

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Concept Note

¹ Higher education is part of UNESCO's Priority Africa programme.

² UNESCO/Countries of Eastern Africa region consist of: Comoros, Djibouti, Ethiopia, Eritrea, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, Tanzania, Uganda

I- Background

For the last three decades Africa, and more particularly sub-Saharan Africa, has been responding to the continuous call from stakeholders to improve both the internal and external efficiencies of its higher education systems for quality assurance. African universities face a myriad of challenges in the management of higher education systems which are systemic and qualitative in nature in addition to the shortage in the number of institutions required to serve Africa's youth bulge. Internal efficiencies and qualitative change need to respond to returns on investments in this sub-sector, to contribute more effectively to the economic environment for societal well-being, and peace and security for sustainable growth and development. Consequently, the number of African universities has increased significantly. In a report published in 2010, the World Bank indicated that the number of tertiary students in Sub-Saharan Africa tripled between 1991 and 2006, increasing from 2.7 million to 9.3 million³. This trend will continue due to Africa's increasing youth demographics and the corollary high social demand for higher education.

However, the call for the improvement of quality and relevance is yet to experience a similar surge. On the contrary, there are increasing concerns that the quantitative drive is being achieved at the expense of quality and relevance, with higher education still not responding adequately to the transformation required for the quantum leap out of poverty and current challenges facing the region. The current model of higher education in Africa is criticized for the lack of relevance and quality of the programmes being offered which have marginal effects on the socioeconomic and environmental challenges the continent faces. At a Continental Summit organized by Trust Africa in March 2014, in Dakar, Senegal, the former President of the African Union Commission, Dr Nkosazana Dlamini-Zuma, lamented that "*we produce too few PhDs, medical doctors, engineers, scientists, project managers, and mathematicians,*" and "*our youthful population is confronted with an ageing academic and research community which limits opportunities for innovation and expansion.*"⁴

In the Sciences, Africa's contribution to scientific knowledge production is still negligible compared to the rest of the world estimated at just 1.1% of the world total. Africa only produces 79 scientists per one million people, whereas countries such as Brazil and the USA produce 656 and 4.500 respectively. As a consequence, Africa does not benefit from the tremendous financial windfall that can accrue to countries where scientists produce more patents which in turn can be used by industry to manufacture new goods such as medicine and machines that are needed for human consumption and productivity.

In an article entitled *Higher Education in Africa: our continent needs science, not aid*, Kelly Chibale, founder of Africa's first drug discovery and development centre explains why scientific research is key to unlocking the continent's potential. Professor Chibale refers to crippling disease,

³ World Bank (2010). Financing Higher Education in Africa Report.

⁴ <https://www.worldbank.org/en/news/feature/2015/03/12/setting-goals-to-revitalize-africas-higher-education-systems>

high morbidity and mortality rates as the prime factor for what is choking economic growth on the continent and the need for committed investments in research and development through Africa led international public-private partnerships.⁵ Chibale also explains how the lack of “meaningful investment in research infrastructure by most African governments” inadvertently perpetuates the brain drain phenomenon because the status quo in development makes it difficult for scientists to practice their art at home.

Just prior to the launch of the Sustainable Development Goals (SDGs), a list of sustainable solutions was proposed by a panel of experts on the complex challenge of higher education in Africa, which include and emphasize an integrated approach to academia through concerted collaboration between the social and natural sciences, developing the Information and Communication Technologies (ICT) sector to take advantage of Massive Online Open Courses (MOOCs), linking studies to the world of work, and increasing collaboration between academia and the private sector with an emphasis on ‘high quality STEM curricula’ (Science, Technology, Engineering, Mathematics).⁶

Highlighting the need for scientific research includes similar development in the sector for human and social sciences aptly captured in the *World Social Science Report*,⁷ which focused on the theme “knowledge divides,” jointly published by UNESCO and the International Social Science Council (ISSC). One contributor observed that “the precarious state of many of the Social and Human Sciences research centres (in Sub-Saharan Africa) is indicative of a more general trend in research and scholarship in many African countries – the de-institutionalization of research in Africa”⁸, with another noting that “few, if any, articles [in highly ranked journals] are published by academics from Sub-Saharan African universities...even when the topic directly relates to Sub-Saharan Africa”⁹ says Maureen Mweru to University World News. To overcome these challenges, the report provides a number of recommendations, including among others, the need for sustained attention to three levels of capacity building, namely: individual, organizational and systemic, as well as support for regional social science research networks, including diasporic ones, to promote the circulation of ideas, and more importantly link those ideas to the development of policies that address social problems.

ICTs play a pivotal role in widening access to higher education and enhancing the quality of delivery for both on-campus and on-line programmes and governments need to work with the private sector to reduce the cost of access to higher education through digital solutions. Universities are destined to play a fundamental role in knowledge societies, based on radical changes in the traditional patterns of knowledge production, diffusion and application.

⁵ <https://www.theguardian.com/global-development-professionals-network/2015/jul/02/higher-education-in-africa-science-not-aid>

⁶ <https://www.theguardian.com/global-development-professionals-network/2015/aug/10/15-steps-closer-to-quality-higher-education-in-africa>

⁷ *World Social Science Report: Knowledge Divides*, UNESCO and ISSC, Paris, 2010. Full report can be found on <http://www.worldsocialscience.org>; <http://www.unesco.org/new/en/social-and-human-sciences/resources/reports/world-social-science-report>

⁸ Mouton, J. (2011). *The State of Doctoral Training in Sub-Saharan Africa: Statistics, Analysis and Challenges*. AAU Conference of Rectors, Vice-Chancellors & Presidents (COREVIP). Stellenbosch, 30 May-3 June 2011.

⁹ <http://www.universityworldnews.com/article.php?story=20100828051049446>

Whereas access to higher education in Africa improved considerably at the turn of the century, very few institutions developed a strategy in response to issues highlighted by the Millennium Development Goals (MDGs, 2000-15), while conclusions from the Decade of Education for Sustainable Development (DESD, 2005-14) identified numerous challenges within higher education, which include:

- Lack of a coordinated institutional approach to deal with the challenges of sustainable development;
- Staff not having been trained to transform curricula and pedagogy towards a sustainable development perspective; and
- Difficulty in removing academic disciplinary boundaries, which prevent complex sustainable development issues being addressed.

The SDGs cover to a large extent issues already identified by the DESD, and all of them require a comprehensive strategy, if higher education institutions are to make a substantive contribution to Agenda 2030, be it through teaching, research, community engagement, or advisory services. For the institutions already contributing to the SDGs in diverse areas, the challenge is to develop a strategy whereby contributions are more target oriented, effective and meaningful through an integrated approach that addresses the challenge of sustainability in their respective countries and at the global level for peace and sustainable development.

II- Relevance and justification of the Conference

This Conference is timely, as the Eastern Africa Region, along with the entire continent, have elaborated ambitious reform agendas to address old and new developmental challenges that rely heavily on the capacity of higher education, to lead the intellectual and technological processes. In most of the Eastern Africa countries, there are now new visions with specific goals and deadlines to propel nations into becoming middle-income countries by putting in place capacities to use scientific knowledge and technologies to transform their economies into knowledge-based ones.

The Eastern Africa countries have also put in place reform agendas for improving the quality and relevance of their higher education systems for national development, and regional integration. With regard to the latter, the countries of the East African Community (EAC), namely, Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda have established a regional mechanism called the Inter-University Council for East Africa (IUCEA) as a strategic institution mandated to play a significant role in the strategic development of higher education and research.

The IUCEA coordinates its 88 universities, both public and private, with the view of promoting harmonization of quality of higher education in the region through the development of quality assurance frameworks, facilitation of mobility of students, faculty and researchers.

The IUCEA has established The East African Qualifications Framework for Higher Education (EAQFHE) and the East African Higher Education Quality Assurance Network. These tools significantly support the implementation of the UNESCO Convention on *the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States* (known as the Addis Convention). This convention replaces and builds on the 1981 Arusha Convention with the overall aim of strengthening and promoting inter-regional and international co-operation in the field of recognition of qualifications and mobility of students,

teaching staff and researchers in Africa, as well as establishing mechanisms for enhancing the quality of higher education institutions and systems.

The watershed commitment by the African Union is enshrined in the 50th Anniversary Solemn Declaration¹⁰ which serves as a blueprint for capacity building in all sectors, further reinforced by the AU's Continental Education Strategy for Africa (CESA 2016-2025), which is a comprehensive approach based on the framework of the African Union 2063 Agenda, the Common African Position (CAP)¹¹, and the Post-2015 Development Agenda, and takes into account lessons from previous continental plans and strategies with respect to the place of the AUC (AU). The CESA outlines seven pillars for action: 1. Strong political will to reform and boost the education and training sector. 2. Peaceful and secure environment. 3. Gender equity, equality and sensitivity throughout the education and training systems. 4. Resource mobilization with emphasis on domestic resources. 5. Strengthen institutional capacity building through: i. Good governance, transparency and accountability; ii. A coalition of actors to enable a credible participatory and solid partnership between government, civil society and the private sector. 6. Orientation and support at different levels and types of training. 7. The creation and continuous development of a conducive learning environment.

All of the above pillars stem from the desire to set up a “qualitative system of education and training to provide the African continent with efficient human resources adapted to African core values and therefore capable of achieving the vision and ambitions of the African Union.” In order for the above to occur, CESA advises to “reorient Africa’s education and training systems to meet the knowledge, competencies, skills, innovation and creativity required to nurture African core values and promote sustainable development at the national, sub-regional and continental levels”.¹² Higher education systems are thus challenged to re-articulate the core commitments of their respective mandates by linking research to developmental needs in key priority areas. This entails enhancing action-research and cross collaboration across academic networks.

UNESCO’s Priority Africa programme¹³ outlines six flagship areas for action (2014-2021) which are inter-related and designed to address four overall challenges in Africa, namely: demographic growth, social transformation, democratic governance, sustainable development and economic growth. The main actions prescribed within the six flagship areas cover a vast area of academic interventions including support for:

- the quality and relevance of education;
- the need to strengthen African higher education and research institutions, and research development and innovation capacity;
- promote the twinning of institutions and exchanges of Science, Technology, Innovation (STI) through North-South, South-South and South-North cooperation;

¹⁰ https://www.google.com/webhp?hl=en&hl=en&q=50th+anniversary+solemn+declaration&*&spf=381

¹¹ i. Structural economic transformation and inclusive growth; ii. Science, technology and innovation; iii. People-oriented development; iv. Environmental sustainability; v. Natural resource, risk and disaster management; vi. Peace and security vii. Funding and partnerships.

¹² http://www.adeanet.org/en/system/files/resources/cesa_16-25_english_v9.pdf

¹³ <http://unesdoc.unesco.org/images/0022/002244/224489e.pdf>

- upgrade scientific institutions, in the fields of the environmental, earth, ocean and climate system sciences, through strengthening universities and research centres and mobilizing international science cooperation;
- train a critical mass of natural resources and disaster risk managers (young skilled people and resourceful scientists and engineers) with the perspective of employability.

In spite of the paucity of the infrastructure, many Eastern Africa countries have developed and are implementing ICT integration policies. They also benefitted from the support provided by regional bodies such as the African Virtual University (AVU) that are promoting the use of Open and Distance eLearning (ODEL) by creating fully equipped centers and providing training to faculty and students in integrating dual-mode teaching and learning to enhance access and quality. The advent of Massive Open and Online Courses (MOOCs) and Open Educational Resources (OERs) is opening the way to more affordable access to quality learning materials, thereby reducing the high cost of higher education in Africa. AVU and other continental institutions such as the African Association of Universities (AAU) have also spearheaded the use of ICTs in governance and management of higher education institutions. However, the challenges of the infrastructure and the cost of the bandwidth could stifle the growth required in this domain.

The challenges of building peace and maintaining security in Eastern Africa is similar to those faced in other sub-regions of the continent. The context of the region is however rather more complex than others, with a myriad of actors, interests and issues, converging to produce challenges and threats to peace and security. Some of these are of specific national character, but with significant implications for regional security, integration, and ultimately, transformation of the lives of the millions of people who populate these spaces. The conflicts and competition for resources have been exacerbated by dramatic population increase, as well as by climate change, with increasing frequency of droughts, cyclones, storm surges and other climate related hazards leading for instance to displacement of populations.

This combination of social and natural factors produces forced migrations across the region, which in turn reinforce exclusion, as opposed to promoting inclusion. These, and many other related issues, must be addressed from a multi-disciplinary and multi-sectoral perspective, as we frame the debate on the role of higher education in responding to these fundamental challenges of our time.

The conference will address the themes of *science, technology, policy and science research, climate change, peace and security and information and communication technologies (ICTs)*. It will also tackle the following key cross-cutting issues: financing, gender equity, renewal of ageing faculty, and brain drain/brain regain (contribution of the African diaspora).

Key questions to be addressed by the Conference

1. How can universities combine natural sciences, and social and human science research to tackle the Sustainable Development Goal challenges of human security, peace and climate change in partnership with scientific networks within the region involved in cutting-edge research?
2. How can universities produce highly qualified specialists and contribute to knowledge production and environment conducive for employment and entrepreneurship of university graduates and young people in general, so they, in turn, can find jobs and income?
3. How can universities in the region work to collaboratively respond to emerging challenges linked to inclusive sustainable growth and development?
4. How can the region work together to pool its intellectual and financial resources through the creation of a sub-regional mechanism on climate change?
5. How can ICTs serve as a vector for quality assurance and implementation of measures to strengthen greater collaboration in research and scientific knowledge production in universities within the region?

Objectives of the Conference

- a. Strengthen existing reform agendas to promote science research at national and regional levels for socio-economic and environmental development.
- b. Promote resilience strategies vis-à-vis climate change by pooling intellectual and financial resources.
- c. Promote peace and security by enhancing research and programme development on conflict resolution in universities and other think-tanks.
- d. Accelerate ICT integration in higher education to enhance access, quality and relevance as well as innovation capacities.
- e. Promote Regional Integration through sub-regional and regional harmonization and Quality Assurance frameworks, such as the East African Qualifications Framework for Higher Education (EAQFHE) and the Addis Ababa Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States.

Recommendations and expected outcomes

The Conference is expected to adopt a Resolution among participating countries so that reforms in several areas are accelerated by all concerned in the areas recommended below:

- a. Higher education reforms at the regional level for the revitalization of science research in Eastern Africa and an agreement for the establishment of a UNITWIN Network of institutions on science research.
- b. A mechanism for joint collaboration led by universities to address emerging issues, including climate change, and peace and security in the region.
- c. A collaborative effort to mobilize universities, including UNESCO Chairs and Centers for empowerment of young people, to link learning with the job market through partnerships with the private sector, research and development, eco-tourism and creative industries for income generation.
- d. Higher education as a priority for ICT policies and masterplans.
- e. Collaborative strategy by all participating countries for ratification and implementation of the *Addis Convention*.

Format: Plenary and Parallel Sessions

- a. **Plenary sessions:** they will feature prominent academics, policy makers (Ministers), opinion leaders (private sector & civil society), students and representatives of development organizations known for their expertise in the themes of the Conference.
- b. **Parallel Sessions based on the three sub-themes:** renowned scholars and development practitioners from the Eastern Africa region and from other African and world regions will present papers for discussion based on their areas of expertise in the three sub-themes of the Conference.