

14th General Conference
and
Golden Jubilee Celebration
of
The Association of African Universities—AAU@50

*Achievements, Challenges and Prospects for
Sustainable Development in Africa*

— Concept Note —



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Introduction

The Association of African Universities will be marking its Golden Jubilee Celebration in 2017 at its 14th General Conference under a theme “AAU@50: Achievements, Challenges and Prospects for Sustainable Development in Africa” at the Association’s new premises in Accra, Ghana. The Conference will extensively deliberate around the following five key higher education sub-themes:

- I. Promoting **science, technology and innovation** through higher education
- II. Curriculum reform as key to **graduate employability and entrepreneurship**
- III. The role of higher education in managing the **environment**
- IV. Higher education as a tool for promoting democratic **governance**
- V. Mobilizing **resources** for higher education in Africa.

Background

A plethora of development players, policy makers, and relevant organisations—from the African Development Bank (AfDB) to the African Union (AU), from the World Bank to the Organisation for Economic Cooperation and Development (OECD), and from the Association of African Universities (AAU) to the Association for the Development of Education in Africa (ADEA)—all concur that higher education must be centrally placed in the strategic development plan of African nations for a meaningful and sustainable economic development to take effect (Teferra, 2014). Higher education is now undisputedly established as “core” (AU, 2006), “critical” (OECD, 2010), “central” (AfDB, 2008), “key” (European Commission, 2014), and “unambiguous” (World Bank, 2008) to national development and global competitiveness thereby massively catapulting its role.

With the world increasingly moving toward a knowledge economy, higher education helps economies keep up and catch up with more technologically advanced societies. Higher education enables graduates to effectively use new technologies—and develop new tools and skills as well as promote job creation and entrepreneurship. By producing well-trained teachers, it can enhance the quality of primary and secondary education systems; by training physicians and other health workers, it can improve a society’s health thereby, raising productivity at work; by nurturing governance and leadership skills, it can provide countries with the talented individuals needed to establish a policy environment favourable to socio-economic growth. Setting up robust and fair legal and political institutions, making

them part of a country's fabric, and developing a culture that encourages the creation of new businesses and jobs, for example, call for advanced knowledge and decision-making skills. Addressing environmental problems and improving security against internal and external threats also place a premium on the skills that advanced education is best positioned to deliver (Bloom, Canning, Chan, & Luca, 2013).

African higher education has recorded unparalleled expansion in the last decade with enormous implications for the sector in particular and social and economic development of the region as a whole. This unprecedented development, needless to say, carries a solid promise in situating Africa as a significant, even critical player, in the global knowledge society if expansion is concurrently augmented with quality. In *Accelerating Catch-Up: Tertiary Education for Growth in Sub-Saharan Africa*, the World Bank (2008) posits that human capital gains from tertiary education can increase allocative and technical efficiency, spur innovation, and improve export competitiveness. It however notes that it is insufficient merely to increase the number of graduates but stresses a corresponding improvement in quality.

Although gross tertiary enrollment ratio (GTER) for Sub-Saharan Africa is the world's lowest and does not appear to have significantly increased recently in comparison to growth in other world regions, paradoxically actual numerical tertiary enrolment has dramatically increased over the past few decades. In 1970, tertiary enrolment in the region was less than 0.2 million and this figure increased to over 4.5 million in 2008 (UNESCO Institute for Statistics, 2010). In Nigeria alone, which has the largest tertiary education system in Sub-Saharan Africa, tertiary enrolment doubled from about 0.7 million in 2000 to 1.4 million in 2005; now it is estimated to be close to 2 million. The annual increase in GTER for Sub-Saharan Africa was 8.6% between 1970 and 2008, compared to 4.6% globally (Mohamedbhai, 2013). According to a recent study, Africa now boasts 20 million students in its higher education system studying in around 2,000 institutions (Teferra, 2015).

I—Promoting Science, Technology, and Innovation Through Higher Education

In the 21st century of the knowledge economy and information era, advancing science, technology and innovation (STI) has become an undisputed imperative to promote social and economic development as well as catching up with more technologically advanced societies. Accordingly, countries after countries are now formulating policies, devising strategies and design implementation plans to promote national capacity in STI.

The role of STI has been explicitly recognized as a vital driver of sustainability which depends on the capacity of states to put science at the heart of

their national strategies for development thereby strengthening their capacities and investment to tackle challenges (UNESCO, 2011).

STI have played a critical role in the accomplishments made in Africa so far and it is expected to continue playing the same critical role now and in future challenges. The critical role of science, technology and innovation in each of the 15 Millennium Development Goals (MDGs) include, among others, fostering access to knowledge; increasing productivity, industrialization, economic growth and the creation of decent jobs; promoting health and access to essential drugs; achieving food security through sustainable, equitable agricultural systems and by raising production and incomes, especially of smallholder farms; and promoting renewable energy technologies in order to respond to the dual challenge of reducing poverty while mitigating climate change. Yet, the investment in STI in Africa remains rather woefully low. In most African countries, the budgetary allocations to STI range between 0.20% and 0.48% and in 2012, only three African countries – Malawi, Uganda and South Africa – had fulfilled the 1% GDP allocation stipulation (African Academy of Sciences, n.d.).

The African Union Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024) places STI at the epicentre of Africa's socio-economic development and growth and is designed to meet the knowledge, technology and innovation demands in various African Union economic and social sectors' development frameworks. This is because harnessing Africa's massive natural resources lies in actively and aggressively deploying the power of science and technology. This power predominantly resides in African higher education institutions, which are the central location of STI and research, but still remains to be effectively tapped. African Union's Agenda 2063, also emphasizes that Africa's continuous growth, competitiveness and economic transformation requires sustained investment in new technologies and continuous innovation in areas such as agriculture, clean energy, education and health.

In a number of countries, such as Botswana, Ethiopia and Namibia, entirely new universities have been commissioned and built. Even more so, new programmes and departments have also been established. In some countries, the uptake of students has also been reversed in favor of science and technology. Several years ago, Ethiopia for instance shifted its student intake to 70 percent in science, technology and engineering. It is also worth noting the regional and continental initiatives such as the African Centers of Excellence (ACE) and the Partnership for Skills in Applied Science, Engineering, and Technology (PASET), both World Bank steered; Center of Excellence initiative, pursued by the African Union Commission; and Nnamdi Azikiwe Mobility Scheme, in accord with the CESA 2016-25.

The creation and transfer of scientific knowledge are critical to building and sustaining socio-economic welfare and integration in the global economy. In the long

run, no region or nation can remain a simple “user” of new knowledge but must also become a “creator” of new knowledge. Closing the innovation gap is a necessary role of universities; innovation and technology transfer must become as important missions as teaching and research (UNESCO, 2010).

II—Curriculum Reform as Key to Graduate Employability and Entrepreneurship

Graduate unemployment has become one of the main challenges facing nations across the continent, with higher education sector taking much of the criticism for not preparing competent and capable graduates for the world of work. The establishment of the Association of Unemployed Graduates in Ghana and the Arab Spring allegedly triggered by an unemployed Tunisian graduate may strikingly illustrate the gravity of the problem. It may be important to state that the challenge of graduate unemployment is a global phenomenon. For instance, more than 50 percent of Portuguese unemployed university graduates were out of work for more than six months (Organization for Economic Cooperation and Development 2009), against the OECD average of 42 percent (de Oliveira and Guimarães 2010). According to the World Bank (2014) as many as 11 million young people in Sub-Saharan Africa will be joining the job market every year for the next decade, and the risks associated with growing numbers of urban youth without meaningful occupation are high.

In the same vein, African higher education witnessed “massive” growth in the last decade which generated quite a large number of graduates who generally expect employment at the end of their studies. However, gainful employability has been for a number of reasons elusive, with major impending consequences to nations and governments.

Despite its remarkable growth, the African economy is not yet robust to absorb the surging numbers though ironically quite a large number of vacancies remain unfilled. This phenomenon has been largely described as an indication of, among others, lack of coherence between needs and graduate attributes as well as curricula and the world of work and the economy at large.

Whereas the fast changing global economic regimes render developing “dynamic” curricula a difficult one, efforts have been well underway to produce responsive curricula with anticipation of promoting graduate employability and enhancing the spirit and practice of entrepreneurship. The Tuning and Harmonization endeavor spearheaded by the African Union Commission and supported by the Association of African Universities, among others, intends to enhance harmonization of African curricula—in the process enhancing quality and advancing graduate employability.

To be sure, there has been considerable criticism and outright indictment of higher education institutions for the outdated and marginally relevant curricula—allegedly contributing to lack of employability. This as it may, curriculum review and development processes are not simply matters of academic exercise but a complex affair that involves considerable financial and logistical commitment—which pushes the boundaries of roles and responsibilities beyond the confines of higher education institutions.

It is in recognition of the significance of this issue that the Association of African Universities in 2013 organized its 13th General Conference in Libreville, Gabon under the theme “Transforming African Higher Education for Graduate Employability and Socio-Economic Development”. The sub-themes included: the Connection between Higher Education and Productive Sector; Employability of Graduates; The Role of Organized Private Sector; Socio-Political Environment and Employability. As the issue of graduate employment is growing in significance, the upcoming General Conference will also deliberate on it at length.

III—The Role of Higher Education in Managing the Environment

A number of global development challenges, including the environment, have been widely acknowledged and efforts are underway to address them. Serious air and water pollution, vast deforestation, reckless natural resource extraction and chemical and waste disposal, massive erosion, hazardous emissions, mismanagement of wildlife, among others, have become serious developmental challenges specially to the so called developing world and typically Africa. It is in recognition of these systemic and imminent threats to the world at large that the Sustainable Development Goals (SDGs) noted the urgent need to address them (UN, 2015).

As the African population is growing fast the pressure on the environment is mounting not only through the acts of the inhabitants but also those externally sanctioned multinational corporations and government actors. In the era of powerful multinational corporations that own, operate, and manage African resources at a time when population growth is spiking in the continent, the need for more strategic and systematic approaches to managing the environment has not been more imperative.

African higher education could play multiple roles in advancing the preservation, management and improvement of the continent’s environment against the multiple attacks from different fronts. These include training a conscious cadre of graduates, producing responsive curricula, developing appropriate policies, engage in vocal advocacy, and undertaking training programmes.

IV—Higher Education as a Tool for Promoting Democratic Governance

The former U.N. Secretary-General, Kofi Annan, upon receiving an honorary degree from the University of Ghana in 2000, stated that the university must become a primary tool for Africa's development in the new century. This is because universities can help develop African expertise; enhance the analysis of African problems; strengthen domestic institutions; serve as model environments for the practice of good governance, conflict resolution and respect for human rights; and enable African academics to play an active part in the global community of scholars (United Nations Information Service, 2000). Lopez (2015), the Under Secretary-General of the United Nations Economic Commission for Africa (UNECA), while recognizing the importance of governance, accountability and transparency, he posits that such conversation need to take place from an African perspective.

In the last decade, Africa has seen a surge in political pluralism, democratic governance, successful elections, and the decline in civil war. This is indeed a far cry from the days when *The Economist* (2000), the influential global magazine, famously described Africa as a “Hopeless Continent” which the same bulletin dubbed it as “The Hopeful Continent—Africa Rising” (*The Economist*, 2011) some five years back. It was observed that “Over the past decade six of the world's ten fastest-growing countries were African. In eight of the past ten years, Africa has grown faster than East Asia, including Japan.”

It is in recognition of the peace dividend that the Continental Education Strategy for Africa (CESA) 2016-25 (African Union, 2016), the spinoff of Agenda 2063, stipulates the promotion of peace, education and conflict prevention and resolution at all levels of education and for all age groups. It posits among other things: the formulation of national policies for peace education involving relevant ministries as well as representatives of civil societies and groups grounded in African values and mechanisms of conflict prevention and resolution; the development and dissemination of teaching and learning materials on peace education and organizing periodic training sessions at schools, training institutions, universities and adult learning centers.

The role of higher education in a nation's social, economic, political, educational and cultural life is well established. Higher education institutions attract, shape, and generate social critics, economic doyens, political elites and cultural leaders. In the increasingly democratic Africa this has become a growing reality where in a number of countries the legislatures are being enriched by academics. In some countries, acquiring an undergraduate degree has become mandatory as eligibility criteria to ensure a seat in parliaments.

Higher education institutions are known as hotbeds of social, political and economic movements. They are an entry point for many to active political life where they learn and exercise the virtues of democratic values, governance, political,

religious and cultural capital. Concurrently, this same space is a bastion of radical views, factional attacks, and vicious and intolerant partisanship which are a threat to democratic principles, governance regimes and freedom of speech. In the current information era, where exposure to all forms of views, perspectives, and discourses that span from the sublime to the ridiculous are readily and instantaneously accessible, advancing “preferred” values has become increasingly tricky.

V—Mobilizing Resources for Higher Education in Africa

Higher education is a heavy enterprise of human, financial, logistical, and technical resources. Thus financing higher education is an expensive endeavour simply because knowledge creation, knowledge dissemination and innovation do not come cheap. The high-end expertise, the expensive equipment and instruments, the extensive infrastructure such as laboratories, libraries and dormitories, and the accompanying requisite logistics such as ICTs, and complex academic culture entails that the sector, unlike its younger sister subsectors, such as primary and secondary education, makes it costly without comparison (Teferra, 2013).

Problems surrounding financing of higher education institutions are worldwide. However, nowhere in the world is higher education finance more problematic than in sub-Saharan Africa. According to Johnstone (2004), the reasons stem from two nearly universal forces. The first of these is the high and increasing unit, or per-student, cost of higher education. This problem can be attributed to a historically entrenched, tertiary education production function that is both capital and labor intensive and that has proven throughout the world to be especially resistant to labor-saving technology. The second force greatly exacerbating the financial problems of tertiary educational institutions and ministries in many countries is the pressure for increasing enrollments, particularly where high birth rates are coupled with rapidly increasing proportions of youth finishing secondary school with legitimate aspirations for some tertiary education.

While African governments in post-independence years provided a significant portion of the budget for higher education, the structural adjustment programmes of the 1980s, the economic crisis of the mid-1990s, and the more recent international debt crises have contributed to the degenerating financing condition in which higher education in Africa finds itself (Wilson-Strydom and Fongwa, 2012).

According to the World Bank (2010), the investment required over the 2006 to 2015 period – to increase the capacity of current institutions (classrooms, libraries, laboratories, workshops and lecture halls), establish new institutions for better distribution across the region and improve administrative and teaching materials – is estimated at approximately US\$45 billion (value in 2006) for public higher education as a whole, of which US\$20 billion is for low-income countries.

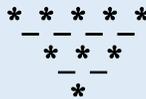
However, very few countries in Africa have the wherewithal to considerably increase the public financing of higher education.

It is true that countries are committing considerable resources to higher education, especially since the sector has been, as noted above, declared “key”, “critical”, “central” to advance socio-economic development and enhance global competitiveness. Despite such commitments, the sub-sectors continue to suffer from shortages of resources for effective dissemination and generation of knowledge. In most countries, the buildings and facilities are in disrepair; the laboratories and workshops are under-equipped; and the academia and the staff are poorly remunerated.

African higher education faces considerable—and complex challenges—because it is endeavoring to expand access while it is concurrently struggling to maintain quality—both matters of considerable financial and logistical significance. Improving academic quality and expanding access do not lie on the same, if not necessarily opposite, trajectories, owing largely due to the dynamics of resources.

This imminent development thus entails that resources need to be provided in sufficient amounts on a regular and predictable manner, if institutions are to operate at an acceptable level of academic competence fitting the competitive global knowledge economy. Government resources need to be complemented by businesses, development partners, parents and students and augmented by effective resource mobilization and utilization of institutions. It is imperative that the resource base of higher education institutions is both expanded and consolidated. (Teferra, 2013).

It is against this backdrop that the AAU organized an international Conference on “New Model for Innovative Funding of Higher Education in Africa” in 2014 in Lome, Togo. This provided an opportunity to share and disseminate success stories from selected case studies in Africa and other continents.



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