Over the past several months, there have been numerous conferences on the state of higher education in Africa and around the world, some of which I’ve participated in and even given keynote addresses. From these conferences, and the increasingly frantic higher education media, it is clear that the spectre of financial instability and unsustainability haunts many universities in the developed and developing countries alike, from the United States to Kenya. The challenges are, of course, mediated by local contexts embedded in levels of development and socio-economic inequalities, prevailing political cultures and ideologies, institutional histories and capacities, and a confluence of other forces.

In the United States, the outlook for universities has largely been negative over the last decade. According to Moody’s, in its 2019 higher education outlook, “Increasing expenses outpace constrained revenue for most universities and colleges...owing to constrained tuition revenue growth, the main revenue stream for most universities and colleges...Colleges and universities will look to further control costs, which will lead to longer-term challenges related to programmatic and capital investment. For most colleges, rising labor costs, which are roughly 65%-75% of expenses, will remain the largest hurdle.”

Moody’s forecast for 2020: “The outlook for the US higher education sector has been changed to
stable from negative,” underpinned by “revenue growth in the 3%-4% range over the next year or so, driven mainly by larger, comprehensive universities.” It continues: “Over the longer term, social risks will continue to transform the US higher education sector, with demographic changes presenting both challenges and opportunities...Governance will remain a key differentiator among higher education institutions...Those that are able to identify their strengths and weaknesses and take appropriate action where necessary will fare better than those that remain reactive.”

In 2016, a report by Ernest & Young found that 800 institutions (largely concentrated among small universities and colleges excessively dependent on tuition) were facing the most serious risks. Some experts predict up to a quarter of American colleges will become extinct within a decade. Whether such predictions come to pass or not, the rate of closures has accelerated. Equally troubling is the staggering growth in student loan debt. In 2018, it reached $1.5 trillion, encompassing 44.2 million borrowers. This was higher than credit card debt. In fact, student debt is the second biggest source of household debt after mortgages in the United States.

The growth in student debt reflected changes in the financing model of American higher education, which is fueled by the neoliberal ideology unleashed by the Reagan administration and followed by successive administrations. Increasingly regarded as a private rather than public good, state funding for education declined, and student aid support shifted from grants to loans. Cash-strapped universities resorted to several strategies, including raising tuition and diversifying their revenue streams. On the expenditure side, they embraced cost-cutting, especially on tenure-stream (permanent) faculty employment, one of the largest expenses for universities.

Between 1980 and 2018 tuition grew by 213% at public institutions and 129% at private ones. This was higher than the growth in wages or the rate of inflation. Up to 70% of American students currently graduate with debt. According to Business Insider, the average student loan debt per graduating student who took out a loan reached $29,800 in 2018. More than a hundred people owed over $1 million compared to 14 people in 2013! And more than 3 million people aged 60 and above owed over $86 billion. The crippling burden of college tuition has risen to the top of the political agenda in the Democratic Party’s primaries for the 2020 US presidential election. As can be expected in such a racialised society, black graduates have more debt than their white counterparts.

As for faculty, the proportion of tenure-track faculty declined precipitously while that of contingent faculty rose, reaching 73% of all faculty in American colleges and universities in 2016, according to data from the American Association of University Professors. The remuneration and working conditions of contingent faculty are often abysmal; they typically don’t have benefits and some make less than the minimum wage. The academic media is full of heartbreaking stories about some contingent faculty subsisting on food stamps and making less than teenagers working in fast food joints.

Up to 70% of American students currently graduate with debt. According to Business Insider, the average student loan debt per graduating student who took out a loan reached $29,800 in 2018.

The expansion of the lumpen-professoriate of contingent faculty weakens the academy as a whole. It hurts students because these faculty are often hired by the hour, not given institutional support, and tend not to participate in departmental affairs, all of which deprives students of robust faculty engagement. It also undermines all faculty by threatening the integrity of faculty work, limiting the distribution of faculty service responsibilities, creating hierarchies among faculty, and eroding academic freedom, which vulnerable contingent faculty are hardly in a position to exercise.
The case of the US underscores the fact that financial challenges and their implications for students and faculty and the entire higher education enterprise are not confined to the Global South. This should be both a source of solace and sobriety for African universities. Solace because it shows that the challenges are not peculiar to African countries and higher education institutions. Sobriety because we cannot import turnkey solutions from elsewhere. Rather, we must think strategically, smartly, and systematically and devise solutions that will ensure financial stability and sustainability for our institutions.

**Kenya’s bankrupt universities**

In Kenya, it is not an exaggeration to say that the majority of the country’s universities are virtually bankrupt. Many are unable to pay salaries on time, remit statutory obligations for health and pensions, or provide adequate faculty, teaching and learning facilities, as well as student accommodation and support services. The Kenyan media is replete with stories about the billions of shillings public universities, including some of the largest and oldest ones, owe in statutory obligations and to their service providers.

The financial challenges facing most African universities, including those in Kenya, arise from the fact that they are primarily dependent on tuition. There is a mismatch between the rising demand for education, which is escalating because of the continent’s youth bulge, and the ability of students to pay the full costs of a quality university education, as well as the absorptive capacity of institutions to provide student aid. As public funding per university student has generally declined, while instructional costs have increased, both the universities and students suffer, which is reflected in falling quality and standards.

It becomes a vicious cycle: poor quality education undermines graduate employability, which burdens families and undermines their capacities to recover investments already made in education and to cover any future costs. This serves to reinforce questions about the value proposition of higher education. It helps explain the extreme sensitivities about tuition increases among students and their parents or guardians.

The fact of the matter is that notwithstanding the hype about Rising Africa/Africa Rising, one of whose indicators is ostensibly the expansion of the middle classes, the majority of students in African universities are from lower middle income, working class and peasant backgrounds. Upper middle income and rich families tend to send their children abroad—to Europe, North America, and the emerging economies of Asia, such as India, Malaysia, and China—because they have little confidence in the quality of local universities. This is well articulated in a story in the *Business Daily* of May 6, 2019, entitled “Local universities are facing serious crisis of confidence.” Those who vote with their wallets for their children’s education abroad often includes parents who were educated at local universities, at least for their first degrees.

It becomes a double jeopardy for Kenyan universities: they are unable to attract students from their own countries and foreign students with the ability to pay for the full costs of high quality university education. African universities are not serious players in the lucrative international student market. Out of the 5.09 million internationally mobile students in 2018, Africa accounted for a mere 4.39% per cent of inbound students, but 10.26% of outbound students. The financial situation of universities in Kenya has been compounded by student demographics in terms of the number of students qualifying for university entry. For the past four years, the pool of Kenya Certificate of Secondary Education (KCSE) students qualifying for university entrance has been historically low.

In 2018, out of the 660,204 candidates who sat for KCSE examinations, only 90,755 (13.74%) scored C+ and above, the minimum grade for university entry. In 2019, out of the 697,222 candidates,
125,746 (18.05%) got C+ and above. The available capacity in the country’s 74 universities in 2019 was 145,338, and in 2020 it is 193,878. Thus, the proportion of qualified students from the 2018 and 2019 KCSE results was 62.44% and 64.86%, respectively, of available capacity. As late as 2015, before the clampdown on cheating and other fraudulent behaviour in national exams, out of the 521,240 candidates who sat for the KCSE examinations, 32.52% or 169,492 got C+ and above. This has resulted in fierce competition among the country’s universities for the limited pool of qualified candidates, which affects their financial bottom line.

Financial constraints affect the ability of Kenyan universities to train, attract and retain qualified faculty. The core business of universities is teaching and learning, research and scholarship, and public engagement and service. Recruitment and retention of top-rate academics is, therefore, imperative. Kenya suffers from acute shortages of faculty and the graduate student pipeline is severely limited. The yearly production in Kenya of PhDs is about 700, below the government target of 1,000. Not surprisingly, only 34% of faculty in Kenyan universities have terminal degrees (my university, USIU Africa, is an outlier with 73%). The Cabinet Secretary of Education was quoted in the Daily Nation on May 8, 2019 saying that “less than 10 per cent of PhD holders are qualified”. This was attributed to the prevalence of academic fraud, in which contract cheating is rampant. In fact, Kenya reportedly enjoys the dubious distinction of being a leading global centre of contract cheating.

In 2018, out of the 660,204 candidates who sat for KCSE examinations, only 90,755 (13.74%) scored C+ and above, the minimum grade for university entry. In 2019, out of the 697,222 candidates, 125,746 (18.05%) got C+ and above.

Even more critical is the growing discrepancy between the growth in student enrolments and faculty. Between 2011 and 2018, while student enrolments increased fivefold, the number of academics teaching in Kenyan public universities only grew by 13%. Consequently, faculty-student ratios have risen, which in some public universities are close to 1:70. This has severely affected the quality of education and research productivity. In most universities, many of the often overworked and poorly paid faculty are forced into adjuncting, and they rely on outmoded pedagogical practices and curricula. Moreover, student learning is frequently interrupted by employee strikes and student demonstrations.

Higher education is critical to the development of high-level human capital essential for economic growth and sustainable development. Two measures of the contribution of higher education are especially important. One is the employability of university graduates, and the other is research productivity and impact. In African Economic Outlook 2020, the African Development Bank provides a sobering reading on Africa’s unpreparedness for the jobs of the future because of the low quality of its educational systems. The problem cuts across the educational ladder. According to the report, “Many African countries have yet to catch up with the rest of the world in basic skills and education...African students have lower average test scores than students in other world regions. Against global harmonized test scores ranging from 300 to 625, the average African student scored only 374 in 2017.” It is universally acknowledged, that human capital is a key driver of economic growth, but “Human capital contributes less to labor productivity and economic growth in Africa than in other developing regions. This is due partly to the low quality of education, lack of complementary physical capital, and widespread skill and education mismatches.”

The report urges African governments (advice that applies to universities as well) to make strategic choices to build the workforce of the future. “African countries will need to anticipate and build a flexible and productive workforce to meet future challenges. To strengthen worker employability,
firm productivity, and inclusive growth, African countries need a national strategy for education and skill development.” The report notes, “A poorly skilled and educated labor force is typically the top constraint mentioned by global executives when considering manufacturing investments in Africa.”

Furthermore, “Because 'soft skills' are likely to become increasingly important, education and training institutions should be encouraged to inculcate and reinforce positive values, starting with young children. These attributes include a strong work ethic, honesty, tolerance, respect for authority, punctuality, and pursuit of excellence. These are the intangible characteristics of a high-quality workforce.” Massive investments are required for building educational infrastructure, and in addition to soft skills, the development of critical future skills includes job-specific digital skills, job-neutral digital skills, and ancillary skills related to manufacturing.

Reports on graduate employability in Kenya, as elsewhere across East Africa and the continent, show that there are glaring mismatches between what universities are producing and what the economies need, resulting in graduates spending years “tarmacking” (a term used in Kenya to refer to the unemployed and underemployed). In fact, in much of Africa, graduate unemployment and underemployment tends to be higher than for secondary school and vocational college graduates. According to one report, a survey by the Federation of Kenya Employers laments, “at least 70 per cent of entry-level recruits require a refresher course in order to start to deliver in their new jobs.” Further, it notes a study by the Inter-University Council for East Africa that “shows that Uganda has the worst record, with at least 63 per cent of graduates found to lack job market skills. It is followed closely by Tanzania, where 61 per cent of graduates were ill prepared. In Burundi and Rwanda, 55 per cent and 52 per cent of graduates respectively were perceived to not be competent. In Kenya, 51 per cent of graduates were believed to be unfit for jobs.”

The conundrum African countries face is that they have low levels of tertiary enrollments, yet their graduates have limited employability opportunities. In 2017, the gross enrollment ratio of Kenya stood at 11.7%, which was below the African average of about 14%, but above the sub-Saharan average of 9%. North Africa accounted for 45% of all African students in tertiary institutions, giving the region an enrolment ratio of 34%, just below the world average ratio of 38%. The enrolment ratio of high income countries was 77%, for middle income countries 52%, and lower middle income countries 24.4%. The enrolment ratios for South Korea and Singapore were a staggering 93.8% and 83.9%, respectively. Kenya hopes to reach a gross enrolment ratio of 15% by 2030. Essential employability qualities (EEQ) go beyond subject knowledge and technical competence.

Reports on graduate employability in Kenya, as elsewhere across East Africa and the continent, show that there are glaring mismatches between what universities are producing and what the economies need, resulting in graduates spending years “tarmacking”...

Acquisition of soft skills is paramount. Graduates with EEQ are good communicators, critical thinkers and problem solvers, inquirers and researchers, collaborators, adaptable, principled and ethical, responsible and professional, and continuous learners. Cultivation of employability skills raises questions about curriculum design, assessment, and teaching methods. It entails the intersection of the classroom, campus, and community as learning spaces for a holistic educational experience.

The classroom requires a transforming pedagogy, adequate learning resources, curricular relevance, balance between theory and practice, passionate and enthusiastic teachers with high expectations, and motivated students. The campus needs robust career services, extra-curricular activities,
student engagement, employer involvement, and innovation incubators. And the community contributes through the provision of internships and service learning opportunities.

**Low R&D levels**

The second mission of universities, through which they make invaluable contributions to the economy and society, is knowledge production through research and scholarship. The low levels of research and development (R&D) among African countries are well known. On average African countries spend 0.5% of their GDP on R&D, compared to a world average of 1.7%, and account for less than 1.5% of global R&D expenditures. Unlike other world regions, much of the R&D in Africa comes from foreign agencies and foundations, not national governments and the local private sector.

Other research indicators are no less disconcerting. According to UNESCO’s *Science Report: Towards 2030*, in 2014 Africa accounted for 2.4% of the world’s researchers (compared to 42.8% for Asia, the world’s highest), and 2.6% of research publications (compared to 39.5% for Asia, also the world’s highest). The other glaring challenge of research in African countries and universities is its external orientation in terms of focus and outlets. While the world average of publication with external authors was 24.9%, for Africa it was 64.6% (compared to 26.1% for Asia). Thus, like our dependent economies, African scholarship suffers from what I call epistemic extraversion. No wonder the rankings of African universities are the lowest in the world.

Kenya spends about 0.8% of its GDP on R&D, which is among the highest on the continent. The country’s research output is also relatively high compared to other African countries. In 2018, citable documents per one million inhabitants was 565.1, higher than Ghana’s 565.1, and Nigeria’s 366.2, but far below South Africa’s 4,233.5. Much of this research comes from the numerous research agencies and networks located in Kenya and a few universities.

It is critical for African countries and universities to develop effective research policies, and support and reward systems. Also critical is promoting modalities of research collaboration that are transformative in terms of interdisciplinarity, interprofessionalism, and internationalization. No less important is ensuring a productive balance between pure and applied research, and addressing theoretical and analytical issues, as well as pressing challenges as identified in national, regional, and global agendas, such as Kenya’s Vision 2030, East Africa’s Vision 2050, the African Union’s Agenda 2063, and the United Nations’ Sustainable Development Goals.

In many of the developed and leading emerging economies, research grants constitute an important source of revenue for universities. It is also quite common for such institutions to have endowed professorships held by some of their most distinguished research faculty, which further brings additional resources and relieves the operational budget of significant employee costs. As far as I’m aware, endowed professorships or chairs do not exist in most African universities. Also, research grants that not only bring administrative overheads, but also supplement faculty income, do not constitute a major source of institutional revenues.
Clearly, Kenyan and universities in other African countries need to develop more reliable and robust revenue streams.

In the second part of this article, I will discuss the various revenue-generating options that African universities are or should be adopting.

Published by the good folks at The Elephant.

The Elephant is a platform for engaging citizens to reflect, re-member and re-envision their society by interrogating the past, the present, to fashion a future.

Follow us on Twitter.