

# **GLOBALISATION AND KNOWLEDGE PRODUCTION IN HIGHER EDUCATION: THE IMPACT OF INTERNATIONALISATION AND LIBERALISATION ON UNIVERSITY EDUCATION IN RWANDA AND UGANDA**

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## **INTRODUCTION**

The role of higher education, as the broad sector of education that includes all post-secondary education including university and tertiary institutions, in development cannot be overlooked. In this paper, the discussion will specifically centre on universities and other degree-awarding institutions. Universities are of specific importance, since as a sub-sector they are mandated to produce knowledge through research and are the only institutions specialised in producing, reproducing and disseminating the new knowledge necessary for development (Cloete and Bunting 2016; Muriisa and Bacwayo 2014). Universities engage in research and searching for the knowledge required to move countries forward. In addition, they engage in research, community service, teaching and producing new generation scholars who can produce knowledge and disseminate knowledge through service to the community. As Kofi Annan indicated, universities have an important role to play in the transformation of African economies:

The university must become a primary tool for Africa's development in the new century. Universities can help develop African expertise; they can enhance the analysis of African problems; strengthen domestic institutions; serve as a model environment 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 (Annan quoted in Bloom et al. 2014:26).

This important role of universities, however, is challenged by globalisation. In many ways, globalisation challenges knowledge production, or the cluster of related activities in the university that has to do with the production of new knowledge. It is these aspects that will be highlighted in this paper.

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Higher education, and more especially universities and other degree-awarding institutions, have been increasing in many countries. In Africa, many countries were characterised by one university at the time of independence and this situation continued until the 1990s. In Uganda, the Makerere University was the only university until 1998. But little more than a decade later, by 2010, Uganda had 29 universities, 72% of which were owned by the private sector and 28% by the public sector (NCHE 2010). By 2015, this number had grown to 40 universities. In Rwanda, from one university after the 1994 genocide, the number of universities grew to 29 in 2016. As Rwanda has one public university with several centres and constituent colleges distributed across the country, the rest are private universities. This is different from Uganda, which had nine public universities spread across the country at the end of 2018.

Not only have universities in both countries been reforming their curricula; they have also been restructuring themselves to contribute to this noble cause. There are a few studies that have looked at the relationship between universities and development by examining the impact of globalisation and its influence on university education and the manner in which programmes are developed, managed and offered to students. While there is increased demand for universities to have a clear relationship with industry and agriculture, such relationship may not be fostered without looking at what is shaping higher education in general and university education in particular. Recently, there has been increased criticism of the way in which universities relate to industry, the job market and the agricultural sector, which are the key employers of university graduates (Teichler 2003; MINEDUC 2010). As such, most studies on universities have concentrated on the way in which university academic study programmes are developed, and investigate whether these universities address countries' needs; such as how university curricula relate to industry and the development of the country in question. But there is no strong investigation into what shapes curriculum development in the manner it has emerged. Apparently, evidence shows that much of the emphasis on inquiries into the role of public HEIs in regional and national innovation systems has concentrated on developed countries, with a few exceptions for developing countries (Bloom, Canning and Chan 2006).

Findings from sub-Saharan African countries indicate that the connection between universities and national development agendas is quite weak, and in some cases non-existent (Cloete et al. 2011); this despite the long-time existence of international collaboration between the north and African universities, and international donor support. International collaboration and donor funding of African research institutions is not a new phenomenon, but it has evolved from the pre-independence period. As Ssebuwufu (2017) indicated, the Rockefeller Foundation provided funding amounting to 50 000 British Pounds to Makerere College in 1961. The funding was for Bilharzia research in collaboration with the London School of Tropical Medicine. Other long term partnerships were developed with East African schools and colleges and, except for the turbulent times of the 1970s, support from the Foundation has continued up to the present. Of particular importance to note is that funding was directed to building

the body of knowledge through research, and “to strengthen its (Makerere University college’s) capacity for data collection and analysis for policy choices relevant to national development” (Ssebuwufu 2017:629). It should be noted, however, that to date, major funding initiatives are still directed to these major areas: research and capacity development. One is therefore encouraged to ask what is wrong and why these African institutions continue to be weak? What creates the weakness is not well explored to understand the quality of education with regard to university and industry relations.

In this paper, the position taken is that globalisation will be viewed as the key weakening element in Uganda and Rwanda. In both countries, broadening university education, especially through increased enrolment of students, has been a priority. As such, university education has been widening, but in different ways. On the one hand, in Rwanda, like in other countries, there is widening private university education, but a consolidation of public university education by formerly publicly owned tertiary institutions merging to form one university – University of Rwanda (UR), with centres and colleges spread across the country. In comparison, Uganda has responded by transforming the formerly public tertiary education institutions, which were distributed across the country and regions, into public universities. Private universities have equally been allowed to form and register with the National Council for Higher Education. Private universities are spread across the country. Apart from the formation of universities, there is an increased call for universities to align themselves with international universities. We focus on the manner in which higher education has transformed in two countries in the era of globalisation. We argue that the response has been largely influenced by global agendas; with a particular focus on liberalisation and internationalisation, and examine how the two have influenced university education transformation, and consequently knowledge production.

## **METHODOLOGICAL APPROACH**

In compiling this paper, we conducted a thorough review of documents relating to key government ministries and departments, available on a variety of websites. These documents were an invaluable source of primary data on themes of interest and were supplemented by the work of various researchers. This approach was preferred, as going back to collect data when good data already exists would be almost like going back to ask the same questions (Skocpol 1984). A comprehensive analysis of the available literature is considered as a means of collecting relevant and important information on the topic. The process of reviewing the literature involved activities such as identifying, recording, understanding, meaning-making, and transmitting of information – which underpins the methodology used. Besides the official documents, internet sources and documents relating to various institutions and universities, the study also drew data from a rigorous analysis of available scholarly works.

Of note for the compilation of the paper and the comparative analysis is concern for the differences between Rwanda and Uganda: Rwanda was colonised by the Belgians and the country collectively went through a very traumatising event during the genocide. This resulted in a response to recovery which to some extent included providing space for university education and involvement in such processes by other countries. Uganda, on the other hand, was colonised by the British and remained stable, even amidst many political challenges brought about by different political regimes. In terms of similarities, both countries have a university sector which was dominated by one university following independence, with a number of public tertiary institutions taking care of the required technical skills. In terms of its scope, the paper provides a theoretical framework focussing on the globalisation of education; a brief history of the development of higher education in Rwanda and Uganda; the internationalisation and liberalisation of education; the implications of globalisation (with particular emphasis on the liberalisation and internationalisation of education in Rwanda and Uganda); as well as some brief concluding remarks.

## **THE THEORETICAL FRAMEWORK**

The theoretical framework for this paper is the theory of globalisation. Globalisation connotes a situation in which social, political and economic actions reach a world-wide scale. There is homogenisation of patterns of production and consumption. In terms of education, it is seen across the world that investing in higher education is the way forward if countries need to develop. It is argued that through higher education, countries become competitive, attract foreign investment, and have a highly productive workforce. Globalisation is understood as a process and project of neoliberalism and the internationalisation of education. In recent years, the far reaching effect of globalisation is the marketisation of academic programmes and the liberalisation of higher education to allow private investment and selling of knowledge as a commodity (Halvorsen 2010). This has led to corporatisation of university management (Steck 2003), commercialisation of learning, and the commodification of knowledge. Indeed, Halvorsen argues that

Knowledge shopping, that is anything that makes up for lack of public funding or students loans/support: like fee paying students, professor doing consultancies and chasing for commissioned research, or universities securing their finances through patents and parking fees, is first all driving the way the research university work... (Halvorsen 2010: 211).

The biggest influence on the globalisation of higher education has been the World Bank, which in the 1990s recommended investing in primary and secondary education rather than in higher education, with the view that investment in higher education has a low return on capital. Through the 1990s and 2000s we saw higher education in many countries being increasingly funded by the private sector, with more student enrolments taking place in the private sector than in the public sector.

In the 21<sup>st</sup> century there is thus a triumph of capitalistic globalisation in education (Olukosh and Tiyambe 2004). In countries such as Rwanda where there is only one national university spread across the country through constituent colleges, private universities continue to dominate. In Uganda, the situation is not improved by creating more public universities which are distributed regionally. University student enrolment is higher than enrolment in other tertiary institutions: as the example of the 2015/2016 academic year indicates, enrolment in universities constituted 70% of total student enrolment in the entire higher education sector (universities and other tertiary institutions) (NCHE 2016:13). In terms of internationalisation, there has been more of a rush to form partnerships and align academic programmes in developing countries with those in the north. We will discuss the effect of globalisation in terms of neoliberalism and the internationalisation of education on knowledge production.

### **HISTORICAL NOTES: THE DEVELOPMENT OF UNIVERSITY EDUCATION IN UGANDA AND RWANDA**

University education in Rwanda and Uganda, like in other countries in Africa, is young, as these institutions were usually established after independence, in the postcolonial era. Colonial education was set up to aid the colonial administration and help Christian converts read the gospel. Secondary education began as a result of African pressure. Higher education in colonial Africa was largely regulated and controlled. Only a few colleges were built to counter African pressure and demand for higher education. The British preferred to train students in their colonies for fear of them being sent abroad and exposed to foreign influence. Those who managed to go abroad were discouraged from studying law and political science; courses that would destabilise the colonial government. They were also discouraged from going to the Americas by withholding passports. The few schools, such as Makerere High School, were established out of fear of local rich chiefs sending their children to study abroad (Sicherman 2005). Makerere Technical School was started in 1921, and in 1922 changed its name to “technical college” to train administrative staff for the colonial government. In 1939, the college was upgraded to an inter-territorial college to cater for East Africa (Uganda, Kenya and Tanzania (Tanganyika)) and later elevated to a University College for East Africa in 1949, affiliated with the University of London. This status was maintained until 1963; one year after Uganda gained independence, when, together with other colleges which had been established in Kenya and Tanzania, merged to form the Multi-campus of East Africa (Mugerwa 2002, Muriisa and Bachwayo 2010). Makerere University was created in 1970 after dissolving the University of East Africa, and remained the only University in Uganda until 1988 when the Islamic University in Uganda (IUIU) was created as a private university (Muriisa 2010).

In Rwanda, the Belgians forbade education in their colonies, and the French preferred to send a small number of students to study in France (Altbatch and Teferra 2004). Gahama (2010) indicates that formal education in Rwanda was started by the Belgians, but for the small minority, as the Belgians were convinced that they had to reduce

to the best in Africans as much as possible. This is similar to what was happening in Uganda, where according to Sichertman (2005), establishing Makerere as a university college was intended to bring pupils to the minimum level required for university entry and creating it for the whole region was in consideration that a small college was adequate. The only difference was that for Belgian Rwanda, higher education was completely discouraged on Rwandan soil. The consequence of this was that in Rwanda, higher education was delayed such that by independence there was no institution at university level, apart from the grand seminary at Nyakibanda founded in 1936 to train the clergy (Gahama 2010: 145). In the absence of any institution where graduates of rare secondary schools could train, those who finished secondary education were sent abroad to Belgium. It was not until 1963 that the National University of Rwanda was established by the Rwandan Government, in close collaboration with the Congregation of Dominican Fathers from Quebec Province (in Canada). The university remained the only university before the 1994 genocide.

From the brief history presented above, it is clear that higher education was kept small and ultimately the graduates were few as well. By independence, throughout Africa, the academic system was not only small but there were few graduates. Zambia had only 100 university graduates from the university of East Africa; serving a combined population of about 23 million from Kenya, Uganda and Tanzania had 99 graduates by 1961. In some countries there were no professionals in certain fields – for example, at the time of independence the Democratic Republic of the Congo had nationals who were engineers, doctors or lawyers.

In general, between 1952 and 1963, French-speaking Africa had four graduates in agriculture, while English-speaking Africa turned out 150 graduates in this field (Eisemon 1982, as cited in Teferra and Altbatch 2004). For the colonialists therefore, education was only necessary as long as it would aid administration and not contribute to undermining colonial administration and expansion. It is therefore evident that colonial education never focussed on the development of the continent.

After independence, the post-colonial government struggled to fill the gaps by linking education and development. In the 1960s, post-independence African states viewed education as being significant in their commitment to economic and social progress (Yates 1964). The investment in universities was intended to transform society. As Teferra and Altbatch (2004) argue, if Africa is to succeed socially, economically and politically, there is a need to invest in the post-secondary education sector. Moreover, it is argued elsewhere that investing in higher education has been proven to be essential for the improvement of gross domestic product (GDP); thus, many countries are putting investment in higher education at the core of their development strategies (Mulinge, Arasa and Wawire 2017). In this regard, universities are supposed to play a key role in development: they are supposed to equip human resources with relevant knowledge, skills and value systems through diversified programmes, and they should enable individuals to develop their capabilities and potential, shape a democratic and

inclusive society, and produce graduates who can compete in the global knowledge economy (World Bank 2002; 2009).

The goal of higher education was social transformation and economic development. Realising this goal, however, was curtailed by the constant power struggle and political turmoil in most African countries. In Uganda, a political crisis ensued immediately after independence as Obote took over the government from Mutesa (the first president). Amin later took control of government after a military coup d'état in 1972, and was toppled by a combined force of rebels and Tanzanian soldiers in 1979. During the Amin era, higher education faced its biggest crises as university faculty members were exiled and others faced political persecution. In Rwanda the same political crisis was reigning; culminating in the 1994 genocide which saw many academics either fleeing the country to save their lives or being killed. Indeed, it is against this backdrop that it is asserted that governments did little to promote the developmental role of universities immediately after independence (Mulinge, Arasa and Wawire 2017).

## **UNIVERSITY ESTABLISHMENT: COMPETITION WITHIN AND BETWEEN UNIVERSITIES**

The twentieth century saw the growth in the number of people demanding higher education. The growth in the attachment given to university education to contribute to development led to increased demand for it. Attaining a university degree was seen as one way of accessing the job market and a means through which nations and regions could develop. To understand the role of universities in development, universities have been categorised as 'active' or 'passive' actors in the development of their regions (Gunasekara 2006). On the one hand, universities are active actors when they become sensitive to their regional environments and deliberately engage in the social, cultural and economic development of these regions. On the other hand, universities are passive actors in their regions when national governments determine their establishment exclusively on the basis of balanced regional distribution of higher education institutions (HEIs).

In Uganda, the establishment of public universities has more or less concentrated on the regional balance rather than the development of these regions. There has been an increase in the establishment of public universities in the regions of Uganda, to create a balance in the distribution of education centres rather than a balance in development (Muriisa and Kukunda 2010). Recently, the creation of new universities has followed political appeasements in a several areas of Uganda, but is not necessarily a response to the disciplines that address the needs of society (Kasozi 2019). Moreover, the announcement of new public universities often takes place in the middle of political campaigns and their establishment is a response to political sentiment (Kasozi 2019).

An examination of the programmes run in public universities indicates that there is no new value addition to the old programmes run in other universities. Most of the programmes are duplicated, which is indicative of internal competition within universities. Moreover, the government is grappling with the problem of funding these universities and programmes. Reliance on fee-paying students to fund these universities continues to dominate. In the face of competition for students between public universities and private universities, universities (both public and private) are struggling to sell what can be bought and thus there is more focus on the programmes that can generate money than on programmes that can contribute to development. In what we considered academic capitalism, higher education institutions are privatised and educational academic programmes are marketed in a manner similar to selling hotdogs and burgers. The one that is bought is one which is more sugar-coated, thus there is heavy investment in the rebranding and branding of programmes with names that can sell; thus programs such as “Bachelor of Science in Media Computing” may come to the market because of the increasing reliance on the various media as a tool for development. In others, the distinction between programmes and target programmes may not be visible. For example, one may not see a difference between Bachelor of Science in Computer Engineering” and a “Bachelor of Computer Science”. And with oil and gas having been discovered in the country, it is visibly seen that oil and gas degree programmes such as a Bachelor of Science in Oil and Gas and a Bachelor of Science in Petroleum Engineering are slowly finding their way onto the agenda of many universities (see for example, NCHE 2011; 2013; 2015).

In Rwanda, higher education has been viewed as a priority for its transformation. The 1994 genocide left the country with limited or no human resources, with many having either been killed during the genocide or having fled the country as a result of the genocide. Investing in higher education therefore became Rwanda's priority immediately after the genocide. The expansion of higher education is seen as central to the development and transformation of a country; as higher education is “a priority for Rwanda to meet the required competences to transform the economy into a knowledge-based economy” (Mbabazi 2013: 9).

Education is not only seen as a development tool in Rwanda, but is also important for creating responsible citizens committed to the unity of the country and to avoiding the previous ills created by the colonial education policy, which contributed to the genocide of 1994. This is in line with the argument that the relevance of higher education is also politically responsive, as education is watchful; it awakens minds and assists with analysing and understanding social issues (UNESCO 2005). As a result, an investment in education that addresses the challenges that led to genocide must be a primary goal of Rwandan higher education.

In an effort to address the acute shortage of high- and mid-level manpower as a result of the 1994 genocide, three new institutes were created by restructuring the National University of Rwanda (Gahama 2010): the Kigali Institute of Science,

Technology and Management (KIST) was created in 1998 to try to meet the Rwandan need for qualifications in sciences and technology; the Kigali Institute of Education (KIE), created in 1999 to solve the problem of lack of qualified secondary schools teachers in the sciences, languages, human and social sciences; and third, the Kigali Health Institute (KHI) was also created in 1999 to train health professionals to take care of human resource needs in the area of health; a gap that was created by the genocide since many professionals had died or fled the country during the genocide. In addition, the National University and the Higher Institute of Agriculture and Animal Husbandry (ISAE), which was already in existence before the 1994 genocide but which, like other institutions, had suffered a loss of human resources, was transformed to also focus on the human resource needs of agriculture. The School of Finance and Banking (SFB), created in 1987, was also transformed to take care of human resource needs in the finance and banking industries. It is evident from the above that knowledge production centres have increased recently with the realisation that higher education is key to development in any country.

## **LIBERALISATION OF EDUCATION**

Since the 1990s and 2000s, the issue of the globalisation of knowledge has been seen in the neoliberal agenda as a response to increased demand for education. Increased demand for higher education has come about as a result of many factors; including the broadening of secondary education and increased enrolment of students at secondary school level (Kasozi 2003). In Uganda, the increased demand for higher education could not be met by existing public universities, thus calling for the opening up of the private sector to close this gap (Thaver 2004). Private universities thus emerged as a result of the widening market and the increased demand for higher education. The first universities emerged to serve specific categories of the population. In both Uganda and Rwanda, universities emerged to serve the interests of the religious groups. Several of the universities have a Christian or Islamic focus. In Uganda, the first private university was the IUIU in Uganda, followed by the Uganda Martyrs University, and others such as the Uganda Christian University and Bugema Adventist University emerged later.

In Rwanda, most private universities which started immediately after the genocide belong to the Catholic and Protestant churches; the Adventist University of Central Africa (UAAC), University of Lay Adventists of Kigali (UNILAK), High Seminary of Nyakibanda, University of Agronomy, Catholic University of Kabgayi (UCK), and the Faculty of Protestant Theology of Butare (FTPB). It can be noted that this response is similar to what was happening elsewhere in the world, where religious groups were extending their influence through education. The need to have their ideologies and dogmas was well entrenched among the people and their denomination. For this, most of these institutions have foundational courses in theology, religion and bible studies for Christians and Islamic studies for Muslims. These courses are taught across the board to all students (for example, at Mbarara University of Science and Technology

a service course is taught to all first year and second year students in the university and at Bishop Stuart University, *Understanding the Bible*, is taught to all students in the first year).

The second category of private universities emerged largely as for-profit organisations and enterprises. The biggest influence of liberalisation on higher education was from this category. Universities in this category emerged as a result of the influence of the market ideology on higher education (Altbach 1999). The influence of this is that education is seen as a saleable product that can be traded on the market like any other product. This view is related to the global higher education phenomenon, which emphasises education as a private good needed for economic growth (Thaver as cited in Altbach 1998). The institutions were initially created for in-service training of personnel and according to UNESCO (2005: 89), these institutions aimed at making a profit, which distinguishes them from traditional universities motivated above all by academic prestige. From the first private University in Uganda, the Islamic University in Uganda (IUIU) registered in 1988, Uganda now boasts over 40 private universities and eight public universities. It should be noted, however, that there is no clear distinction that can be made between for profit universities and religious universities. Like in Uganda, the number of institutions offering degrees has increased. From one university after the genocide, the degree-awarding institutions had grown to 18 in 2013. Ten of these institutions were public and eight private (MINEDUC 2013). However, it has to be noted that private sector participation in Rwanda remains small compared to Uganda, and unlike Uganda, the government of Rwanda continues to fund a bigger part of the budget for public universities, with more than 90% of university students registered in public universities being funded by government.

The last category of the private education resulting from globalisation is the opening up of public universities for private fee-paying students. Mamdani (2007) details the transformations that took place at Makerere University as a result of this initiative. Other public universities in Uganda also recruit privately sponsored students and depend on them for income. As there is a high demand for universities to engage in income-generating activities, tuition fees from students is one of the most lucrative income-generating activities. Many guest houses and catering facilities at public universities were recorded losses and were closed down (for example, as the Mbarara University Inn ran into losses it was privatised and its catering function was closed down).

The development of private education in public universities was in response to fiscal challenges posed by government declining funding for higher education. Since the 1990s, higher education was not seen as a priority of government (Muriisa 2010). More emphasis was placed on funding primary education. In addition to the independent private universities in Uganda, public universities also recruit students who pay fees and some public universities such as Kabale University and Mountains of the Moon University began as private universities and have since been taken over by government as public universities. For the most part, universities in Uganda; including

public ones, depend on funds generated from recruiting private sponsored students. In 2006, a bigger part (57%) of the budget of Makerere University came from private fees (Mayanja 2007 as cited in Muriisa 2010: 6).

In Rwanda, the emergence of private sector participation in higher education largely grew, not out of increased secondary student enrolment and output of students at secondary level, but out of the demand for higher education by a large number of people who were working, having abandoned their studies during the genocide and who wanted to go back to school, yet the only public university (National University of Rwanda) could not offer room for this category of people. It should be noted, therefore, that while higher education is regarded as a gateway to employment, private education first emerged to respond to the demand by people who were already employed and were not seeking employment. One can therefore say that private education in both Uganda and Uganda emerged as a result of increased demand for education for the sake of education and as a response to declining funding from government (Halvarsen 2010; Mamdani 2007).

## **IMPLICATIONS FOR HIGHER EDUCATION**

The immediate consequence of globalisation has been increased access to education. We have already argued that one of the global responses to education was the widening of avenues for access to higher education. Restructuring and reorganising the higher education sector from a purely publicly owned higher education to one where participation of the private sector in providing higher education took place in both Uganda and Rwanda. This restructuring brought increased access to education. In Rwanda, in 2015, there was merging merger of colleges and institutes of the University of Rwanda with constituent colleges across the country (MINEDUC 2015). The number of students registered at the University of Rwanda has been steadily increasing, as seen from figures over the years; 28 800 students in 2014, 30 445 in 2015 and 31 760 in 2016 (see 2014 to 2016 facts and figures of the University of Rwanda, UR 2018). In general, the number of students enrolling at universities and degree-awarding institutions increased from 53 798 students in 2009 to 86 315 in 2015 (almost 60% or annual increase of about 10%), despite a slight decline in overall tertiary institution enrolment in 2015 (MINEDUC 2013; 2015).

In Uganda, university enrolment has increased since 2000 and between 2006 and 2011, enrolment increased from 137 190 to 198 066 (NCHE 2011). The increase is a response to the liberalisation of education. In both Rwanda and Uganda, we can rightly say that the enrolment rates in higher education have been increasing and that enrolment in private tertiary institutions has been increasing more than in the public sector. For example, in the 2013/2014 academic year, enrolment of students in tertiary institutions was 49% for public and 51% in private institutions (NCHE 2014).

It should be noted that the commodification of higher education had consequences; first, dependence on the market meant that students are now customers and customers must buy what they want. In response, many private and public universities began investing in programmes that could easily be bought by students. The development of these courses and programmes was a result of the failure of the government to cover the funding gap which existed in most public universities. For the private sector, they emerged as a result of the demand for higher education and the need for different institutions to be “competitive” in terms of selling what can be bought. It is no wonder that many private institutions have invested more in social sciences and humanities. Even for those institutions having the name Science and Technology, such as Valley University of Science and Technology, accredited as a private university in 2015, there is no single programme that evidently merits “Science and Technology” in the name of this new institution, since most of the programmes are management programmes – such as the Bachelor of Agribusiness Management (NCHE 2016).

Most of these programmes lack training of students in cognitive skills and content that would benefit the country in general; instead, they focus on making a profit. In addition, applied knowledge is more important than production of new knowledge. It is no wonder that such programmes have in their names words such as management and community engagement because of the perception and critique of universities as failing to train students in business skills and make them community-relevant. There is no question that education that transforms society is one that focusses on appropriate content. Content supported by research and innovations brings about development. Recently, however, universities are concentrating on teaching more than on innovation and research. Research in universities is at the bare minimum, with most of it being done in public universities, with few private universities conducting research (NCHE 2010). Yet, UNESCO (2005) warns that if universities are not conducting research, discovery and innovation, they become tertiary education institutions; mere extensions of primary and secondary levels and glorified high schools (Kasozi 2003; 2019).

The relevance of HEIs is today increasingly measured in terms of how they transform their traditional roles of teaching, research and community service into improving the needs of their environments. A central issue that universities are confronting globally is the increasing emphasis on their role in socio-economic development. However, universities are challenged by the need to fit in the market model of education to play this role. The liberalisation of higher education brought about changes in the education curricula, geared towards satisfying the needs of individual students rather than the needs of society in general. The expectation that education will lead to employment has made universities balkanise programmes. The biggest initiative towards balkanising programmes is seen in the social sciences and humanities (see for example Mamdani 2007), where curriculum change and design has followed pressure from students and parents. Unfortunately, this change in curricula has not addressed the many challenges existing in many countries: the situation of poverty

and unemployment remains high. For some, education which was once considered a gateway to the employment sector is no longer in a position to do so in its current form. A lot of criticism has been levied on the current higher education curriculum with a view that the education is tailored ore towards job seeking than job creation. Thus, there has been a constant demand for education curricula to be transformed to suit the existing conditions and new demands.

It is important to note that while there has been an upsurge of numbers of private higher education institutions in Africa, there is no difference and diversity in respect of what these institutions offer in terms of curricula and programme content. Instead, duplication of content and programmes is the order of the day, thus producing a massive number of students yet the absorption capacity of the industry is low. Moreover, many of the private universities have invested heavily in training in social sciences and humanities, with a greater orientation towards doing the job than creating the job: "The courses taught in most private higher education institutions are generally similar across the continent and narrow in their programme coverage. The most common ones are computer science and technology, accounting and management, banking, finance, marketing, and secretarial science" (Teferra and Altbatch 2004: 34). It should be noted, however, that this is not only limited to the private sector but can also be observed in public higher education institutions. Mamdani (2007) and Kasozi (2017) point out that the courses at Makerere University were largely duplicated with different faculties and some departments offering almost similar content.

Apart from Makerere University, Uganda boasts another 8 universities which are regionally distributed. But there is increased dependence on private students, who form the majority in the public universities. This is different from Rwanda where the government sponsors most students enrolled at the University of Rwanda (UR 2018). The challenge, however, is that the public universities in Uganda are more or less running similar programmes which are duplicated. According to Teferra and Altebatch the courses target the needs of the local market. There is no indication that these courses actually address local development needs. The role of universities has been traditionally considered to be teaching, research and community service. These roles were rarely seen in terms of what impact they have on their environment.

The situation is different in Rwanda. Whereas, like Uganda, Rwanda has invested in widening the higher education sector, Rwanda has however created specialised higher education institutions in addition to the NUR. Several institutions of higher learning were created to meet specific needs by focussing on specialised courses. KIST organised courses in mechanical engineering, environment, electronics, information and new communication technologies; KHI provided courses in the medical field such as in anaesthesia, dentistry, physiotherapy and nursing sciences; the UAAC and High Seminary of Nyakibanda whose teachings focus on theology and religion; and ISAE only provides courses directly related to agriculture and animal husbandry. Within the current context the NUR consolidated its structure by taking on these institutions as

constituent colleges, leading to the formation of the current University of Rwanda. Therefore, rather than leaving these institutions as stand-alone institutions as has happened in Uganda, where former technical colleges and institutes were turned into public universities, they were consolidated and became part of the university of Rwanda as constituent colleges.

The important point to note is that these colleges continue to address Rwanda's developmental needs as it has always been, with only a change in structure and management. Before the starting up other public universities in Uganda, the country almost ran a similar system as that in Rwanda, with specialised colleges taking care of the human resource needs in different fields. Busitema agricultural college was specialised in agriculture-related programmes in the field of animal husbandry, crop and agricultural engineering and mechanisation, Mbarara School of Nursing was training nurses needed in the country, the twin institutions at Kyambogo (Kyambogo polytechnic and Kyambogo Teacher Training College) took care of human resource needs in engineering and education. In response to increased demand for education, unlike Rwanda which consolidated these, Uganda created these colleges into independent public universities (Mbarara University of Science and Technology, Gulu University, Kyambogo University, Busitema University in addition to the existing Makerere University); creating room for competition, not only for meagre resources, but also among themselves in terms of the programmes they offer.

### **SHORTAGE OF QUALIFIED STAFF MEMBERS**

The liberalisation of education brought about increased access to education. However, access to education is limited in terms of quality education. It has to be noted that the increasing and widening higher education sector is not matched by the training and recruitment of academic staff. There is a lack of qualified staff to run academic programmes in the countries. In both private and public sectors, there is an inadequate number of trained academics. In Rwanda, by 2015, the majority of academic staff were represented as follows: 54.2% represent Master's degree holders, 24.5% for Bachelor's degree holders and the lowest percentage of 16.0% is for PhDs (MINEDUC 2015).

In Uganda in 2011, those with PhDs constituted only 11%, with Master's 42% and with Bachelors were 34% (NCHE 2011) and the situation worsened in 2015/2016, where those with PhDs increased to 12.4%, but the number with Master's also increased to 43.2%, and those with Bachelors also increased to 44.2%. Kasozi (2019) asserts that by 2016, on average universities had only 11% of academic staff in Uganda had PhDs. Knowledge production is by senior academics (those occupying professorial positions - Associate Professors and Professors) and these are drawn from those with PhDs. But with an increasing number of those holding undergraduate degrees as staff in universities, knowledge production is challenged. Moreover, there is a challenge in producing new generation scholars to produce knowledge since the supervision of PhDs is supposed to be done by senior academics (Kasozi 2019).

The lack of qualified staff has other consequences for knowledge production. With the increasing number of students and academic programmes, there is an increased realisation that the staff are concentrating on teaching rather than on doing research because of the low staff-student ratio. In addition, most of the academic staff are concentrated in the public sector and therefore the private sector relies on these trained personnel by offering them part-time employment.

## **INTERNATIONALISATION OF EDUCATION**

Recently there has been growth in the reliance of the international system for the development of the knowledge economy. Most institutions in developing countries heavily rely on donor funding for their research and academic programmes. According to Halvorsen (2017), internationalisation became a key requirement for institutions wishing to secure funding for higher education and research. In the 19<sup>th</sup> and the 20<sup>th</sup> centuries, international higher education was seen as a form of export of higher education systems, dissemination of research and mobility of individual students and scholars, usually moving from the south to the north. Many of the scholars who moved north rarely returned to their home countries. To counter this, there was a change in the arrangements in the way the international education system is run. One of the changes made was a focus on developing partnerships between northern and southern universities: international cooperation and exchange in higher education.

In this section, our focus is on the role of partnerships between north and south on the development of Uganda and Rwanda. We have already argued that the university has a role to play in the sustainable development of Africa. Universities are seen as emerging engines of economic growth and development, but this cannot take place if there is no research, teaching and knowledge dissemination. The level of research, including postgraduate training and research supervision, however, is relatively low in Africa, and in Uganda and Rwanda in particular. Evidence shows that universities in Africa contribute less in terms of academic scholarship with less than 1% publications bearing the names of Africans in international referred journals. Over time, research and publications coming from Africa have declined (Olukosh and Tiyambe 2004). The main cause of this is anchored on lack of funding and research capacity and research cultures in some institutions (Harle 2009). The challenges which Africa faces call for stronger partnerships if research has to be promoted. Partnerships, especially through research, enhance knowledge creation. The African universities can benefit from northern universities through enhanced capacity and also revitalise their knowledge creation. According to Teferra (2009), research collaborations are paramount to revitalising African knowledge systems. Such partnerships bring in vital financial resources and much needed academic and research competence, as well as enhancing intellectual capital and confidence.

Universities in Africa cannot play the vital role of sustainable development without partnering with northern universities and research initiatives. Without partnership, universities in Africa may not contribute to social integration and the creation of human capital required for sustainable development. Thus, by collaborating with northern universities researchers from African universities will be published in high-impact journals, making them and the institutions visible (Teferra 2009:23). While north-south cooperation is perceived as the way forward for development, there are challenges associated with the partnership drive. We discuss the different partnerships and challenges faced by universities partnering with international universities in the north.

## **PARTNERSHIPS FOR CAPACITY DEVELOPMENT**

As we have already indicated above, African (Rwanda and Uganda inclusive) universities, lack capacity to carry out research and training. The development of capacity in African universities is stated as one of the core focuses of many partnerships. The ten year partnership programme of association of commonwealth universities, the South African Association of Vice Chancellors and the Association of African Universities has as one of its objectives “to rebuild the infrastructure of higher education institutions, specifically through a major program of investment in the library base and in the development and implementation of ICT strategies”, the Irish-African partnership for research capacity building (IAPRCB) brings together nine universities in Ireland and four universities (in Uganda, Tanzania, Mozambique and Malawi) in sub-Saharan Africa to develop a coordinated approach to research capacity-building in partnership institutions.

The goal of Development Partnerships in Higher Education (DePHE) is to enable HEIs to act as catalysts for poverty reduction and sustainable development. DePHE aims to achieve this by building and strengthening the capacity of HEIs through partnerships. The Partnership for Higher Education in Africa (founded in May 2000 by Carnegie Corporation of New York, Ford Foundation, The John D. and Catherine T. MacArthur Foundation, and The Rockefeller Foundation) was aimed at coordinating the foundations’ support for higher education in Africa. The Partnership was created to strengthen Africa’s institutions of higher education so that they can better contribute to poverty reduction, economic growth and social development in their respective countries. This particular focus was a result of the realisation of the importance of universities in social, political and economic development. The foundations’ objective therefore was to sustain the emerging roles of the African universities. This was to be achieved by building partnerships between northern universities and southern universities. In 2006, in a report prepared for the US, the consortium foundation partnership for higher education in Africa (CHET 2006) highlighted thus:

What is needed is a focused effort to develop African cooperation structures on higher education studies that would allow for relevant graduate programs, research, activities

and capacity building through effective national and international networking. Further, such structures should stimulate the link between higher education studies and the practice of higher education in Africa and Europe, the USA and other developing countries. Such structures could become the catalyst for development of an African expertise network in higher education (CHET 2006: 2).

Funding made under partnership programs have included grants supporting institution building of individual universities, specific departmental activities, and strengthening national and regional higher education institutions and networks. From 2000 through to 2005, the partnership foundations contributed more than \$150 million to build core capacity and support special initiatives at universities in six African countries: Ghana, Mozambique, Nigeria, South Africa, Tanzania, and Uganda. The main focus of the partnership during the first five years was the development of the universities' physical infrastructure and human and organisational capacity. In 2006, new foundations were added to the partnership and the benefiting countries grew from the original six to nine.

Like in Uganda, the University of Rwanda is implementing different partnerships focussed on developing the capacity of academics and institutions. For instance, the African Centre of Excellence in Internet of Things (ACEIoT), a regional initiative to enhance higher education and innovative research capacity of the East and South African Region, is one of them. ACEIoT is a collaborative project with regional and international partners from academia, industry and research institutions. ACEIoT will build on UR-CST's existing collaborations with local and international partners, including Carnegie Mellon University in Rwanda, and the International Centre for Theoretical Physics, Italy. The aim of the project is to develop efficient service delivery solutions for Africa's most pressing challenges in agriculture, healthcare, energy, infrastructure, and education; thus addressing the developmental challenges of the ESA region focussing on innovative, low-cost, open and sustainable solutions, and excel as a focal point for regional and international research collaborations, by providing a forum for researchers to share ideas and results on IoT applications (University of Rwanda 2017). UR-Sweden Program for research, higher education and institutional advancement supported by the Swedish International Development Cooperation Agency (SIDA) is aiming at building the capacity of staff working in universities in Rwanda. The projects target academic staff who want to further their academic training at Master and PhD levels.

Other partnerships are seen from bilateral agreements between Rwanda and international organisations such as the World Bank. In June 2016, the Ministry of Finance and Economic Planning in Rwanda signed a credit agreement of \$20 million (approximately 15.3 billion Rwandan Francs) with the International Development Association (IDA) to support centres of excellence in Rwanda's institutions of higher education and strengthen their capacity to deliver quality post-graduate education and build collaborative research capacity regionally and internationally. According to

the Minister, "This project will promote regional specialization among participating universities within areas that address particular common development challenges, and strengthen the capacities of these universities to deliver high quality training and applied research" (MINECOFIN 2017). It is hoped that these collaborations will promote the development of Rwanda in particular and the region in general.

### **Challenges of North-South Partnerships**

Partnership means that parties involved have agreed to work together in implementing a programme and that each party has a clear role and voice in how that implementation takes place. The underlying principles of partnership are equality, sharing of responsibilities and capacity building. In spite of these principles, there remain structural inequalities between the north and southern partnering institutions. The southern universities lack capacity to act as equal players in the partnership. The southern universities lack capacity in the following areas: they lack equal negotiating grounds, they lack a financial base of their own and therefore financial control is usually from the north, the lack of funds of their own means that certain obligations are not met. For example, most collaborations require that it takes place as a kind of joint venture, that institutions in the south should meet certain costs in terms of space and grant holidays for participants but this is met with lots of structural constraints such as bureaucracy, inefficient use of funds and difficulty in renewing the funding. It is no wonder that Muchunguzi (2017) asserts that:

Essentially, the current donor–recipient framework is based on, and perpetuates, imbalanced relationships between collaborators, and it limits the potential for such relationships to enhance research capacities at Southern universities and research institutions. Too often, North–South research collaborations apply to projects or programmes of limited duration (Muchunguzi 2017:150).

### **Northern Partner-defined Research Agenda**

With much funding coming from the north, research actions and priorities as well as methodological standards come from the north and require conformity with the traditions of the northern institutions. As a result, priorities, methods and ideas coming from the southern universities do not receive the same attention. In some cases, such as the social sciences and humanities research, there is indirect control of the research agenda. Much of the funding for example focussed on curriculum reform, supporting a view that there is a mismatch between curriculum and the labour market.

Issues of poverty as defined from the north emerge. In the 1980s, the main focus was civil society organisations, which saw the birth of nongovernmental organisations (which to some is a third sector), while the current trend is the emergence of the microfinance movement, global peace and environmental concerns. These are receiving more attention than local needs, social needs and poverty at household and

micro level. Indeed, “many donor partners set and shift research and humanitarian agendas without seriously considering local needs. And many programmes are too short-lived to build meaningful research capability” (Teferra 2009a). This implies that institutions will need to set their targets according to local needs and what they could likely achieve (Harle 2009). How do Ugandan and Rwandan universities fit into the new partnership arrangements? To what extent do they define their research agenda? We answer these questions by looking at two emerging partnership programmes’ -cross, multi- and interdisciplinary research agenda, and loose partnerships.

### **Cross-, Multi-, and Inter-Disciplinary Research**

During the 19<sup>th</sup> and 20<sup>th</sup> centuries, single discipline research was seen as the way forward to promote development by way of addressing specific development challenges related to the environment, agriculture and industry. In the 21<sup>st</sup> century, however, there is a realisation that addressing challenges in health, environment and industry cannot be done by focusing on one discipline. Emerging health challenges such as HIV/AIDS and malaria cannot be seen as simply biological/medical which call for biological/medical solutions alone. Rather, they are social and cultural and their mitigation calls for a focus on social as well as cultural environments. Thus there is a constant call for integration of learning and of knowledge systems and interdisciplinary approach to the mitigation of challenges facing countries. There is thus an increasing call for partnerships which are more multi- and, more importantly, interdisciplinary in nature.

The inclusion of interdisciplinary mobility programs such as the New Partnerships for African Development, the African Union Education mobility program funded by the European Union on the existing partnerships is one recent initiative to promote African development. The previous and existing European Union partnerships, especially such as Edu-link, demand for multidisciplinary research proposals. Such a requirement faces challenges of integration, especially with regard to the education set-ups in the south. Since their inception, African universities were organised for students in each faculty to be taught independently. Apart from teaching, there appears to be a disciplinary divide in terms of theory and method between the disciplines in the natural/physical, biological sciences and the disciplines in the social sciences and humanities. Such a disciplinary divide creates disharmony when it comes to carrying out research along multidisciplinary requirements. Developing multidisciplinary research approaches requires research to be approached from different angles, using different perspectives with a common perspective and goal. Integration however, is not accomplished since researchers work separately and lack training in inter- or multi-disciplinary approaches. The EU universities and donors need to ensure that their interests are clearly defined and explained to the African partners so as to appreciate the basis on which support may be available and when it is unlikely to be offered.

## **Loose (informal) Partnerships and Problem of Continuity and Enforcement of Agreements**

The formal partnerships are enforced by the MOUs, which clearly stipulate the roles of each party in the partnership. In the case of loose partnerships where partnerships are not clearly defined, enforcement and continuity is a problem. The problem however is not that such partnerships are bad in nature but because it is by its very nature short term and does not allow for continued and sustained study in a particular area. Areas for research keep shifting within specific short periods, undermining disciplinary base-building and constraining the range of areas or issues studied by researchers. A good example of such arrangements is the Nile Basin Research Program (NBRP). The NBRP program ran for 5 years (from 2006 to 2010) to strengthen the research capacity of scholars in universities in the Nile Basin region and attracted various cohorts of researchers from Rwanda, Uganda, Burundi, Congo DRC, Eritrea, Ethiopia, Sudan, Egypt, Tanzania, and Kenya.

Researchers received support for travel to work on a specific study theme at the University of Bergen for about five months. While the researchers were drawn from universities and research institutes of the Nile basin countries, there was no formal relationship and understanding between NBRP and the universities/research institutes where researchers came from. The challenge associated with this form of partnership is that there is limited continuity and enforcement to facilitate completion of research. To shed more light on this, NBRP would invite a new set of researchers not from the same institutes and universities, which would indirectly formalise collaboration; but from other institutions; this limits sustainability unless the researchers and their leaders develop individual/group interests on other topics outside the NBRP arrangement. It has to be mentioned that major research programmes are funded by respective governments where these programs are located (NBRP, NORAD, SIDA-SAREC) and this creates a vicious circle of dependence for both researchers and universities as they try to consolidate donor-recipient frameworks which dominate research collaborations. Also, when funds run out as already mentioned, the sustainability of collaborations and capacity-building programs becomes problematic (Muchunguzi 2014).

On a positive note, however, drawing different researchers from different disciplines and research environments to work together for five months has a positive contribution to the development of capacity of these individuals who form a team. Each researcher comes with different abilities which when combined facilitates the intellectual and research abilities of the individuals to grow. Apart from research capacities developed, the researchers are exposed to a whole set of literature which they carry home with them at the end of the five-month period. The University of Bergen subscribes to over 6 000 journals and databases, which are inaccessible to those working in an African environment. If African universities could be linked to such a large variety of databases, it would be the best research capacity-building programme for a resource-poor continent.

## **Different Training Programmes**

At a time when Europe is standardising with a view that education offered in universities is the same, university education in Uganda and Rwanda is still offered in way that sees university education as different across universities. Universities work in isolation, departments work independently of each other and often compete with each other in terms of the programmes that they offer (Mamdani 2007) and as such, degrees and transfer of credits is not possible between departments and much less between universities. The lack of a standardised system of education limits student exchange between northern Universities and southern universities. In addition, the unequal length of training limits student exchange between universities.

## **CONCLUSIONS**

As the only institutions whose core business is knowledge production, universities have been transforming to fulfil this key role. In the era of globalisation, however, they are faced with increasing demand for internationalisation and to be market-oriented. We have discussed in this paper the impact of globalising phenomena of liberalism and internationalisation on higher education in Rwanda and Uganda. As was discussed, liberalising higher education had the impact of commercialising education; making it a private good rather than a public good. Knowledge production in this system become pegged to the market, knowledge is no longer produced for the sake of knowledge; rather, it is produced because it can be bought. At the same time, the demand for internationalisation means that knowledge production must follow what is "standard" as prescribed by international donors, and knowledge production must also be pegged to international institutions who not only define the research agenda but the way in which research must be conducted and the expected results.

Therefore, if universities focus on the local environment, they are able to be relevant and contribute to development, but this is dependent on government support to universities. Universities need financial support to become centres of knowledge production. In addition, the effects of globalisation are far reaching and if governments fail to support universities, they must look for new mechanisms in order to survive – privatisation and internationalisation are key options in the 21<sup>st</sup> century.

## **BIBLIOGRAPHY**

Bloom, D.E., Canning, D. and Chan, K. (2006). *Higher Education and Economic Development in Africa*. Harvard: Harvard University.

Bloom, D. E., Canning, D., Chan, K. and Luca, D.L. (2014). Higher Education and Economic Growth in Africa. *International Journal of African Higher Education*, 1(1). Retrieved from <https://doi.org/10.6017/ijahe.v1i1.5643>.

Centre for Higher Education Transformation (CHET). (2006). *An Approach To Developing Higher Education as a Field of Study in Africa*. Wynberg: CHET.

Cloete N., Bailey T., Pillay, P., Bunting I., and Maassen, P. (2011). *Universities and economic development in Africa*. Wynberg: CHET.

Cloete, N. and Bunting I. (2016). Challenges and opportunities for African universities to increase knowledge production. Retrieved from <https://www.oecd.org/sti/Challenges%20and%20opportunities%20to%20increase%20knowledge%20production-%20Draft-%20Nico%20Cloete.pdf>.

Gahama, J. (2010). Higher Education in Rwanda. In Kassahun B., Alemu, Halvorsen T., Mwiandi M. (eds.), *Shaping Research Universities in the Nile Basin Countries*, Kampala: Fountain Publishers.

Gunasekara, C. (2006). Universities and Association Regional Governance: Australian Evidence in Non-core Metropolitan Regions. *Regional Studies*, 40(7): 727-741.

Halvorsen, T. (2010). Between Democracy and Dictatorship, Modernity and Tradition: A contribution to the debate About the Research University in Africa. In Halvorsen T., Kassahun B.A., Mwiandi M. (eds.) *Reshaping Universities in the Nile Basin Countries*. Kampala: Fountain Publishers.

Harle, J. (2009). *The Nairobi Report: Frameworks for Africa-UK Research Collaboration in the Social Sciences and Humanities*. London: Association of Commonwealth Universities.

Kaszi, A.B.K. (2003). *University education in Uganda, challenges and opportunities for reform*. Kampala: Fountain publishers.

Kaszi, A.B.K. (2019). Creation of the next generation of thinkers and innovators: Doctoral training in Ugandan universities. *Makerere Journal of Higher Education*, 10(2): 3-7. <http://dx.doi.org/10.4314/majohe.v10i2.2>.

Kaszi, A.B.K. (2017). *National Council for Higher Education and the Growth of University Subsector in Uganda*. Darkar: CODESRIA.

Kaszi, A.B.K. (2019). Creation of the Next Generation of Thinkers and Innovators: Doctoral Training in Ugandan Universities. *Makerere Journal of Higher Education*, 10(2): 3-17. <http://dx.doi.org/10.4314/majohe.v10i2.2>.

Mamdani, M. (2007). *Scholars in the Market Place: The Dilemmas of Neo-Liberal Reform at Makerere University, 1989- 2005*. Dakar: CODESRIA.

Mbabazi B.P. (2013). Quality in Learning in Rwandan Higher Education Different stakeholders perceptions of students learning and employability. Unpublished PhD Thesis, Linköping University.

Ministry of Education (MINEDUC) Rwanda. (2010). Education sector strategic plan 2010-2015. Retrieved from <http://library.educationcommons.rw>.

MINEDUC. (2013 and 2014). Rwanda Education Statistics.

Ministry of Finance and Economic Planning (MINECOFIN) Rwanda. (2017). Retrieved from [http://minecofin.gov.rw/index.php?id=12&no\\_cache=1&tx\\_ttnews%5Btt\\_news%5D=509](http://minecofin.gov.rw/index.php?id=12&no_cache=1&tx_ttnews%5Btt_news%5D=509).

Muchunguzi, I.J. (2017). North-south research collaborations and their impact on capacity building: a southern perspective. In Halvorsen, T., Nossun, J. (Eds.), *North-south knowledge networks towards equitable collaboration between: Academics, donors and universities*. Oxford: African Books Collective.

- Mulinge M., Munyae, A.N. and Wawire J.V. (2017). *The Status of Student Involvement in University Governance in Kenya: The Case of Public and Private Universities*. Dakar: CODESRIA.
- Muriisa, K.B. (2014). Rethinking the Role of Universities in Africa: Leadership as a Missing Link in Explaining University Performance in Uganda. *Journal of Higher Education in Africa*, 12(1): 69-92.
- Muriisa, K.R. and Bacwayo, K.E. (2010). University education in Uganda: A situational overview. In Kassahun B., Alemu, H. T., Mwiandi, M. (Eds.), *Shaping research universities in the Nile basin countries*. Kampala: Fountain Publishers.
- National Council for Higher Education (NCHE) Uganda. (2011, 2013, 2015). *The State of Higher Education in Uganda*. Kampala: NCHE.
- NCHE Uganda. (2016). *Accredited academic programs of universities and other tertiary institutions in financial year 2015-2016*, Kampala: NCHE.
- Olukosh, A. and Tiyaambe Z.P. (2004). Introduction: The struggle for African universities and knowledges In Olukosh A. and Zeleza, Z.P. (Eds.), *African Universities in the Twenty-First Century*. Dakar: CODESRIA.
- Skocpol, T. (1984). *Vision and Method in Historical Sociology*. Cambridge: Cambridge University Press.
- Sicherman, C. (2005). *Becoming an African university: Makerere 1922 – 2000*. Trenton: Africa World Press.
- Ssebuwufu, J.P.M. (2017). *Managing and Transforming an African University. Personal Experience at Makerere University*. Dakar: CODESRIA.
- Steck, H. (2003). Corporatization of the University: Seeking Conceptual Clarity. *The Annals of the American Academy of Political and Social Science*, 585:66-83.
- Teichler, U. (2003). The future of higher education and the future of higher education research. *Tertiary Education and Management*, 9(3):171–185.
- Teferra, D. and Altbach, G.P. (2004). African higher education: Challenges for the 21st century, *Higher Education*, 47:21-50.
- Teferra, D. (2009). Higher Education in Africa: The Dynamics of International Partnerships and Interventions. In Bassett, R.M. and Maldonado, A.M. (Eds.), *International Organizations and Higher Education Policy: Thinking Globally, Acting Locally?* New York: Routledge.
- Teferra, D. (2009a). African research collaborations must be fair and equal. Retrieved from [https://www.scidev.net/global/policy/opinion/african-research-collaborations-must-be-fair-and-e.html?utm\\_medium=rss&utm\\_source=link&utm\\_campaign=/global/author\\_rss.xml&author=damtew-teferra](https://www.scidev.net/global/policy/opinion/african-research-collaborations-must-be-fair-and-e.html?utm_medium=rss&utm_source=link&utm_campaign=/global/author_rss.xml&author=damtew-teferra).
- Thaver, B. (2004). Private higher education in Africa: Six country studies. In Olukosh, A. and Paul, Z.T. (Eds.), *African Universities in the Twenty-First Century*. Dakar: CODESRIA.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2005). *UNESCO world report: Towards knowledge societies*, Paris: UNESCO.
- University of Rwanda (UR). (2017). African Centre of Excellence in the Internet of Things. Retrieved from <http://ur.ac.rw/?q=content/african-center-excellence-internet-things-aceiot>.

UR. (2018), *Facts and Figures 2013 -2018*, Kigali, University of Rwanda. Retrieved from <https://ur.ac.rw/documents/Facts%20and%20Figures-Final-2018B.pdf>.

World Bank. (2002). *Constructing Knowledge Societies: New Challenges for Tertiary Education*. Washington DC: World Bank.

World Bank. (2009). *Accelerating Catch-Up: Tertiary Education for Growth in Sub-Saharan Africa*. Washington DC: World Bank.

Yates, A.B. (1964). Educational policy and practice in tropical Africa: a general bibliography, *Comparative Education Review*, 8(2):215-228.