Construction and Governance of Transnational Higher Education Research Partnerships in Kenya and Uganda

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Abstract

This study was designed to critically examine and evaluate the organisation, policy frameworks and governance structures of transnational research partnerships in six universities in Kenya and Uganda, and how they interface with national development. Traditionally, universities in the two countries have embraced transnational partnerships mostly as a source of revenue and academic capacity building. The focus has since then shifted to enhancing institutional reputation and ranking. Findings show that the study universities have put in place structures that govern the partnerships. Some benefits associated with transnational partnerships in these universities are building teaching and research capacity and development of curriculum. Challenges experienced include inadequate funding and low university investment in research in both Kenya and Uganda.

Keywords: governance, research, transnational partnerships

Introduction

Higher education institutions can play a critical role in promoting economic competitiveness and sustainable growth through innovative transnational research and development initiatives (Jowi et al., 2015). Transnational research partnerships in this study are those collaborations that involve universities and research institutions, individuals, and groups beyond national boundaries. The significance of cross-border partnerships in strengthening institutional capacities is not disputable (Njuguna & Itegi, 2013). According to the European University Institute (2009), the problem, however, is that most higher education institutions in Kenya and Uganda, like the rest of Africa, tend to be characterised by relatively weak and unstable governance structures and capacities. The problem has been attributed partly to

chronic underfunding, political interference and limited importance attached to developing excellence in institutional governance. The task of constructing and managing boundary-spanning transnational research and development initiatives, therefore, raise fundamental questions and challenges to many universities.

In the case of Kenya, for example, universities have in the past been engaged in transnational partnerships and cooperation but mainly in an ad hoc fashion without established strategic plans, governance structures, or coherent policy frameworks to guide the range of joint initiatives (Obamba, Riechi & Mwema, 2013). Some of the issues and gaps that clearly require systematic investigation include: how can complex cross-border organisational arrangements and research activities be more effectively organised and governed? What kinds of research governance processes, structures, and policy frameworks are prevalent? How do transnational research partnerships interface with both national development and institutional capacity building priorities? These broad issues constitute the focus of this study. The core question of this study can, therefore, be stated thus: *How are transnational research partnerships in African Universities constructed, governed and integrated into national development priorities*?

Continental agenda for partnership governance

Universities exist in political environments and are thus defined and influenced by national policies and, by extension, the regional blocs and international policies. Increasingly, the role of universities is being restructured to emphasise more market-like conditions with states cutting back on funding and demanding accountability (Marginson & Rhoades, 2002).

At the continental level, *Agenda 2063: The Future We Want for Africa* is considered a strategic framework for growth and sustainable development of Africa. The Agenda is pushing for quality education through cutting-edge research, innovation and promotion of experiences sharing and learning from each other, as well as the establishment of communities of practice in the education space. It envisions an increased number of world-class regional or continental research centres established on the continent, which provide critical research outputs that are priorities for Africa. So far, this has been realised partly through the establishment of more than 40 research centres of excellence across Africa. The centres have been established to strengthen specialisation and partnerships among higher education institutions in Africa. They are expected to deliver relevant and quality education and applied research to address key development challenges facing the region (Makoni, 2015).

The centres encourage mobility of academics, researchers, staff and students to foster collaborative knowledge creation and dissemination.

National and regional agenda on research and partnerships Kenya

Kenya's *Vision 2030* seeks to provide a globally competitive quality education, training and research for development. Specifically, the country's long-term plan is to encourage and strengthen partnerships and linkages with key stakeholders, including the private sector, to enhance relevant training and to mobilise funding for research capacity development (Republic of Kenya, 2007). The *Vision* clearly emphasises multiple linkages and cooperation, noting that:

For Kenya to realise the maximum benefits of research [and training], there is a need to adopt a systems approach to address innovation dynamism in all sectors of the economy by examining interdependencies, interconnections and interrelations. The current system does not encourage access, use, generation and diffusion of knowledge within business systems. (Republic of Kenya, 2007, p.24)

Drawing from the country's Vision 2030, Kenya's National Commission for Science, Technology and Innovation aims to coordinate science, technology and research activities to achieve harmonisation of efforts and resources. The commission's strategic plan has spelled out the roles and activities of various institutions and actors. It has itself entered several partnerships aimed at fostering collaborative research among individuals and institutions. Some of the commission's partnerships include: i) an agreement with the Consortium for National Research for Health which provides for collaboration in the promotion of research for health; ii) an agreement with South Africa, Nigeria and Algeria in monitoring management of African resources and environment referred to as African Resource and Environment Management Satellite constellation initiative; iii) a regional cooperative agreement for research development and training to strengthen and enlarge the contribution of nuclear science and technology for socio-economic development; and iv) an agreement with Climate Innovation Centre that aim at promoting technology development, transfer and diffusion in the areas of renewable energy and energy efficiency and training of innovators in entrepreneurship skills. Additionally, the National Commission for Science, Technology and Innovation collaborates with the African Union New Partnership for Africa's Development to strengthen regional collaboration in science and technology research and development.

Uganda

The government of Uganda envisions over the long-term *Vision 2040*, expansion and exploitation of the country's productive potential of her economy by among other micro-economic strategies, increase in research and development activities as well as the utilisation of research and innovation products. The country has an elaborate Science, Technology and Innovation Policywhich recognises that research capacity in Ugandan universities and Research and Development Institutions is very weak due to lack of funding, poor management and capacity constraints (Government of Uganda, 2009). Although not yet realised, Uganda's Science, Technology and Innovation fund with up to one percent of Gross Domestic Product over the medium term. This fund would finance scientific research and innovations of strategic national importance, acquisition of intellectual property rights by local innovators and recognition of scientific excellence among local scientists (Government of Uganda, 2009).

On research governance, the policy environment at the national level certainly seems more elaborate than at the institutional level where, ironically, the responsibility to implement research activities is vested. Uganda boasts of many acts and guidelines including 'the Patents Act (2002), Research Registration and Clearance Policy and Guidelines (2007), National Guidelines for Research Involving Humans as Research Participants (2007) and the National Environment Regulations (2005). It is the implementation of these policies and especially the funding aspect that is, however, yet to be fully realised.

Literature Review

Effective governance and management of research activities has been attracting increased attention of the public (Schutzenmeister, 2010). Some of the studies have focused on research management in African universities, highlighting the existing practices and structural weaknesses (Association of Commonwealth Universities, 2012; Kirkland & Ajayi-Ajagbe, 2013; Nyerere & Obamba, 2018). The heightened interest in more efficient research governance is driven by the increasing scarcity and competitiveness of critical research funding, the growing focus on the economic and social impacts of scientific research, as well as the ever-increasing complexity and interdependence of institutional environments in which research organisations are embedded (College of St. George, 2018). Both universities and governments have found the question of how to secure the best value from academic research

and researchers to be both complex and significant, particularly in the more developed countries. The answer to the question entails maximising research output and ensuring that research is utilised for more comprehensive social benefit. This interest and reawakening has been manifested in the increasing need for universities to centrally manage and support areas of research activity that would previously have been regarded as the primary responsibility of individual academics or their departments (Jansen, 2007). Whereas this paradigm shift is more pronounced in the more developed economies in the global North, many of the less developed countries are also increasingly giving focus to how university-based research could be better organised and managed to contribute to social and economic development.

Although research governance is a relatively recent phenomenon that is still evolving at different speeds across the world (Kirkland, Bjarnason, Stackhouse & Day, 2006), there has been a shift towards what can be described as professionalisation of research management (Association of Commonwealth Universities, 2012). Research governance or management can be understood as 'the day-to-day activity in which the complex and permanently changing institutional environment of scientific work has to be taken into account to make research possible' (Schutzenmeister, 2010, P. 2). Kirkland et al. (2006) seem to draw some distinction between research management at the institutional and at project levels. They define research management as 'any activity instigated at the level of the institution which seeks to add value to the research activity of staff, without being part of the research process itself' (Kirkland et al., 2006, p. 5; Kirkland & Ajayi-Ajagbe, 2013, p. 3). Some authors in this topic have since then expanded the scope and sought to identify the key dimensions of research governance. For instance, Botha, Van Eldik, Waugaman, Kirklandand Ajayi-Ajagbe (2007) discuss research management in terms of vectors. The authors identify six vectors: structure and processes of research management; external research funding capture; managing research projects and stakeholder relations; staffing the research management function; technology transfer and broader dissemination of knowledge; and introducing new structures.

Systematic studies of transnational research partnerships are still rare and far between in most parts of Africa. This means that over the years, the Southern perspective has been prominently missing in the prevailing discourse (Samoff & Bidemi, 2008). Some studies on transnational research partnerships in other parts of the world include a study by Heinze and Kuhlmann (2008) involving Germany and Netherlands universities investigated inter-institutional knowledge flows within the German Research System in the domain of Nanoscale Science and Technology.

Transnational Higher Education Research

This study found that scientists collaborate primarily to expand and improve their research capacity, to benefit from institutional complementarities, and to enhance their visibility within the research field. The other is a study which examined firm-level performance implications of strategic alliances by employing knowledge management practices as intermediaries (Jiang & Li, 2008). Their findings show that joint ventures, as opposed to contractual partnerships, are more effective and influential in facilitating knowledge sharing and creation.

Bammer (2008) conducted a study in the USA on potential lessons for individuals leading and managing research collaborations. The author advised on the need to develop an agreed framework to systematically describe the integration of the various perspectives and elements that are fundamental in harnessing the differences in any particular collaboration. Collaborations formed to capitalise on funding opportunities, while not useful in enhancing researcher productivity in the short run, maybe an essential promoter of productive partnerships in the longer term (Defazioa & MikeWright, 2008).

With regards to Africa, the literature consists of reports whose focus is on the impacts of individual partnerships involving a limited number of participating African universities. Available literature features studies like Morfit, Gore and Akridge (2009); and Gore, Odelland Malcolm (2009) which share a limited focus on describing and analysing the scope and impacts of research partnership initiatives. Koehn, Demment and Hervy (2008) is another study which examined the role of Africa-US partnerships in re-engaging higher education into the domain of international development cooperation. The other is a study based on a single university in Kenya that documented the growing scope, characteristics and role of higher education research partnerships in eradicating poverty and promoting the achievement of the Millennium Development Goals (Obamba & Mwema & Riechi, 2011). The few existing studies do not focus on examining the governance of transnational research arrangements and activities. Within this research landscape, therefore, a distinct gap exists for a coherent analysis and mapping of governance structures, processes and outcomes in the unique context of transnational research partnerships. Given the growing geopolitical and economic importance of crossborder academic cooperation, there is an urgent and justifiable need to develop a more coherent understanding of how transnational research ventures are organised and governed for optimal outcomes. Studies like that of Kirkland and Ajayi-Ajagbe (2013) have looked at research management practices in African universities, and have highlighted some weaknesses. There is also a need to understand ways in which transnational partnerships articulate with national development priorities, as well as with institutional priorities, especially regarding capacity development. Research partnerships have been found to promote capacity building and knowledge production and sharing (Koehn & Obamba 2014) at the institutional level. The increasing focus partly pushes the heightened interest in efficient research governance on the economic and social impacts of scientific research (Kirkland et al., 2006)

Theoretical framework

The current study draws from an analytic framework that contributes towards a better understanding of the organisation, governance structures and functional linkages of transnational research partnerships within the context of institutional and national policy systems. It draws from the innovation system framework, which is defined as "all the important economic, social, political, organizational and other factors that influence the development, diffusion and use of innovations" (Edquist, 2001, p.2). Velho (2002) expounds that an innovation system consists of a network of economic agents together with the policies and institutions that influence their innovative behaviour and performance. Hall et al. (2001) further explains that these diverse economic actors can include governments, universities, enterprises, civic agencies, local communities and Non-Governmental Organisations. The systems involve knowledge or information flows through interactions among universities and public research institutes, as well as enterprises in activities that include joint research, co-patenting, co-publications and more informal linkages (OECD, 1997). The innovation-systems approach directs attention to links among development actors, which are understood in terms of the institutional and policy frameworks within which the actors interact (Velho, 2002); Juma & Ye-Cheong, 2005). According to OECD (1997), innovation systems can help identify leverage points for enhancing innovative performance and overall competitiveness in a partnership.

Purpose and objectives

The purpose of this study was to examine the organisation and governance of transnational research partnerships in six universities in Kenya and Uganda, including how existing research networks interface with national development priorities. Specifically, the study sought to identify and analyse the management processes and structures as well as the actors embedded at the interface between transnational research partnerships, institutional research management structures and national development priorities.

Research Methodology

The study utilised a multi-method and multilevel approach addressing macro- and micro-level contexts of transnational partnerships. The macro-level dimension involved critical reviews of key policy documents and literature that had shaped the trajectory of cross-border academic partnerships at the regional and national levels. National policy blueprints on economic development, higher education and research management in Kenya and Uganda were critically examined and compared. At the meso-level, the study selected six universities (two public and one private in each country). The six universities are: Kenyatta University, Masinde Muliro University of Science and Technology and the United States International University - Africa (USIU) in Kenya, and Makerere University, Kyambogo University and Uganda Christian University in Uganda. The universities were selected purposefully, taking into consideration diversity in terms of age, size as well as representation of public and private institutions. At the micro-level, individuals responsible for transnational research partnerships were targeted. An inventory of existing or recently concluded cross-border research partnerships was done within each participating university to provide an overall picture of the institutional partnerships landscape.

Data collection involved physical administration of questionnaire surveys, document review and analysis, and face-to-face interviews with key administrative and faculty actors involved in overall university management as well as management of the existing international collaborative partnerships in both countries. Specifically, the study investigated the policies and structures governing research partnerships at the institutional and national levels; the profile, activities and goals of existing transnational research partnerships at the institutional level; categories and profiles of actors; funding sources, levels and duration; scope and mechanisms of interaction with local development priorities.

The interviews were conducted with four directors of international offices and one director of research. The questionnaires were administered to deans of faculties totaling 87 -an average of 15 deans per university. While the survey data were being collected, we accessed and analysed relevant documents and policy frameworks. The first year of this project, August 2016 – May 2017, focused on establishing contacts with the relevant institutions and rolling out the survey while the second year (May 2017 - January 2018) focused on interviewing the directors of international and research offices. Combined, the document analysis and interviews set the context to interpret the study data. The quantitative data was analyzed using descriptive

statistics, particularly percentages and frequencies, while qualitative data was analyzed thematically.

Findings

Institutional context for partnership governance

Kenya

Governance of transnational partnerships relates to how decisions are made within the partnership, authority, accountability and lines of communication that support joint research projects and engagements. Research management requires relevant and suitable structures at each level (Kirkland et al., 2006). Our findings show that research and higher education partnerships in the participating universities in Kenya had been anchored in various policy frameworks at institutional, national, regional, continental and global levels. At the institutional level, the findings indicate that policymaking was becoming increasingly common to streamline higher education partnerships across higher education institutions in Kenya. All three universities in this study demonstrated the presence of at least some specific policy framework documents put in place to regulate the planning, establishment and management of higher education partnerships and cooperation. Among the documents were Kenyatta University Partnerships Policy (Kenyatta University, 2015), Masinde Muliro University of Science and Technology Partnership Policy (Masinde Muliro University of Science and Technology, 2015) and United States International University - Africa Strategic plan (USIU, 2015).

Overall, there was evidence of organisational structures for governance of research and partnerships in the universities. Survey data indicates that the three universities in Kenya had established various structures and initiatives for running research partnerships. The efforts included international offices, research and outreach units, university policy frameworks, program directors or coordinators, university committees, school or faculty committees and administrative department units in various combinations to facilitate partnership activities at both university and project levels. This effort seems to have been a notable advancement after the study by Obamba, Riechi and Mwema reported weak structures in 2013.

Uganda

In Uganda, the three institutions that participated in this study did not have policies to guide partnerships specifically. The universities had research policies

Transnational Higher Education Research

within which research collaborations and partnerships were mentioned. Makerere University Research and Innovations Policy, for instance, talks about a research practice that prioritises both national and global challenges (Makerere University, 2008) in which case transnational partnerships are implied. The university seeks to situate its research to contribute to the national economy through knowledge generation and translation. As expressed in the University research and Innovations Policy of 2008, 'it is imperative that the entire research process be pursued within the context of contemporary knowledge, good ethics, effective policy, adequate resources and international cooperation' (Makerere University, 2008, p. 4).

Makerere University's strategic plan of 2008-2019 had tried to respond to research governance matters through identifying the goal of strengthening research capacity for staff and students, strengthening research management and coordination and mobilising more research funds at the university level (Makerere University, 2009). Issues of research governance are also mentioned within the research and innovation policy, where the University recognises that over the years from mid 20th century, the university had experienced vibrant teaching and research engagements (Makerere University, 2008). Still, in later years, 'the volume of research had not only decreased but had also increasingly become project-based and dependent on individual's motivation' (Makerere University, 2008, p. 4). Study participants attributed the reduction in volume of research to decline in government funding for university programmes generally. The shift to projectbased mode of management, on the other hand, was encouraged by lack of central coordination office at the university level and the ad hoc nature of approach to research governance. University involvement in coordination and management of research activities had reduced with the introduction of private programmes, which emphasised innovation at a unit level.

For Kyambogo University, research and development activities are given focus in the University strategic plan 2012/13-2022/23, which seeks to, among other things, strengthen the academic and research capacity. On its part, Uganda Christian University had created a research management committee and actively worked to provide support to research activities undertaken by staff. Specifically, the Uganda Christian University research policy stipulates the provision of research support services that include continuous modern management information systems to facilitate access to international literature and databases. Other requirements include the creation of a stable, internal, conducive research environment including provision of research management support and maintenance of equipment, as well as provision of basic financial management support training to research personnel in key research administrative units across the university (Uganda Christian University, 2014).

Unlike the universities in Kenya, the three universities in Uganda had, however, not established stable structures for governance of research and partnerships in the universities. The structures in the three universities were less elaborate as they did not have independent international and partnership offices. Individuals, concerned departments, ad hoc departmental, and university research committees managed partnership activities.

Number and categories of partnerships in the participating universities

With the structures and policy efforts at the institutional, national and continental levels, we sought to establish the extent to which research partnerships had been developed and implemented in Kenya and Uganda. We were interested in partnerships that existed at the time of study, those that had existed between the study universities and other universities and research institutions within and outside Africa. We also tried to establish existing relations between the universities and other organisations like funding agencies, governmental and non-governmental organisations. Over the past five years, we found that majority (37.5 percent) and (53 percent) of university faculties and schools had been involved in more than 20 partnerships with various institutions in Kenya and Uganda respectively (see tables 1 and 2). These partnerships had on averagelasted over five years (Table 1).

Kenya		
Duration	Frequency	Percent
Less than 2	1	5.26
Less than 3	2	10.53
Less than 4	3	15.79
Less than 5	5	26.32
More than 5	8	42.11
Total	19	

Table 1: Average Duration (in Years) of the Partnerships that University Faculties
and Schools had been Involved

Uganda		
Duration	Frequency	Percent
Less than 2	1	5.88
Less than 3	4	23.53
Less than 4	1	5.88
Less than 5	4	23.53
More than 5	7	41.18
Total	17	

The partnerships represented a mix of collaborations including, intra-regional and continental, as well those involving universities outside of Africa. Perhaps a departure from the past where most partnerships involved universities in the global north, this study established that the majority of partnerships were happening within countries and the region (see Table 2). Partnerships with universities and research institutions in other countries within Africa were also comparably higher than those with institutions outside the continent. Approximately ten percent of the partnerships existed with institutions outside the study countries but within Africa. In contrast, partnerships with institutions in-country accounted for about sixteen percent in Kenya and eight percent in Uganda. The respondents attributed this shift to emphasis being placed on continental partnerships at national, regional and continental levels.

Number of acade	emic partnerships u	niversity faculties an	nd schools were inv	olved in
	Kenya		Uganda	
	Frequency	Percent	Frequency	Percent
Universities in-country	29	16.6	9	8.1
Other research organizations/institutes in- country	28	16.0	7	6.3
Government departments/ agencies in-country	19	10.9	7	6.3
NGOs in-country	5	2.9	7	6.3
Business/ firms/ industry in-country	2	1.1	2	1.8
Think tanks in-country	2	1.1	4	3.6
	85	48	36	32
Universities in Africa	17	9.7	13	11.7
Other research organisations/institutes in Africa	20	11.4	6	5.4
Government departments/ agencies in Africa	4	2.3	3	2.7
NGOs in Africa	2	1.1	5	4.5

Table 2: Partnerships Categories

Business/ firms/ industry in Africa	1	0.6	1	.9
Think tanks in Africa	1	0.6	6	5.4
	45	26	34	31
Universities outside Africa	19	10.9	10	9.0
Other research organisations/institutes outside Africa	12	6.9	8	7.2
Government departments/ agencies outside Africa	4	2.3	5	4.5
NGOs outside Africa	1	0.6	4	3.6
Business/ firms/ industry outside Africa	3	1.7	F0	0
Think tanks outside Africa	1	0.6	5	4.5
	40	23	32	29
International development agencies	5	2.9	9	8.1
Total	175		111	

Partnerships funding

Funding for transnational research projects varied from project to project. In a few instances, the projects were funded through students' fees. This was particularly the case with USIU in Kenya and UCU in Uganda, which are private institutions and whose significant sources of funding are students' fees. Governments were also cited as funders for some projects, especially in Kenya. The Kenyan Government funds research through the National Commission for Science, Technology, and Innovation and the National Research Fund (NRF) in partnership with other national funding organisations like the National Research Fund of South Africa. Uganda's government, on the other hand, has not established a research fund, and thus, funding for projects mostly takes the form of consultancies. Government funding in both countries mainly affects the public universities, which also get capitation that includes research activities. For the two funding platforms, the research projects involved are co-funded by the partnering institutions, departments, or individuals. Most of the activities in this category, however, include students' exchange and research projects.

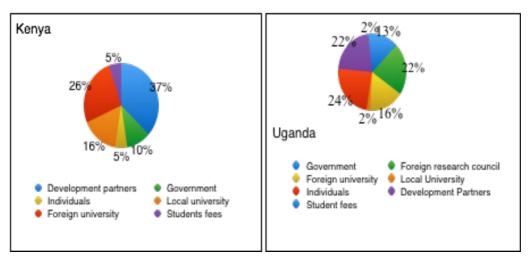


Figure 1: Major sources of funding for partnerships

In cases of co-funding, the findings shown in Figure 1 suggest that foreign university contributed a higher share (26.3 percent) compared to the local universities (15.8 percent) in Kenya. The trend is quite similar to that of Uganda. However, the difference in percentage share is quite high – the foreign university contributed sixteen percent, while the local universities contributed approximately two percent of the research funds in Uganda. This trend is not unique to research partnerships. A lot of engagements and partnerships between institutions in developed and developing countries exhibit skewed levels of financial contributions with institutions in developed countries, contributing a more significant share. This difference in contribution certainly has an impact on the governance of the partnerships.

Besides individual students' fees and government funding, a significant share of research partnerships (37 percent) and (22 percent) in Kenya and Uganda respectively are funded by third-party organisations or development partners like the World Bank, Department for International Development (DFID) among others. The adverse implication of this kind of arrangement is that the funder or the highest contributor gets to define the agenda of the partnership. Institutions contributing less, in this case, institutions in Kenya and those in Uganda, miss the opportunity to design projects that respond to institutional and national needs if varied from those of their partners.

These findings support the long-held view that African countries are not investing much in research to solve problems affecting the continent, which, consequently,

impacts national innovation activities (Varsakelis, 2006). According to Varsakelis (2006), higher investment in quality education and research by the society leads to higher output of innovation activity. He assumes that innovation grows in the framework of a national system of institutions and organisations working towards a common goal and capital intensity (Özçelik & Taymaz, 2003).

Partnerships research focus

Ideally, research projects should have innovative milestones that not only contribute to intellectual thought and discovery in the scientific community, but should also have a positive impact for all parties involved. Organisation for Economic Cooperation and Development (OECD) (2011, p. 4), posits that 'there is not, nor should there be, a universal recipe for designing and conducting research collaborations.' In transnational partnerships, especially, institutions involved would not necessarily share in the context and expected results unless the topics to be addressed are carefully selected and cut across board. For this study, we tried to establish areas of interest in research partnerships by broadly categorizing the topics to those concerning national, regional, continental and global matters).

On this, we received different results for Kenya and Uganda. Whereas in Kenya, the majority of the topics (32 percent) focused on national issues, in Uganda, the focus was mainly on global issues at 23 percent. This perhaps would be explained by the fact that many partnerships in Kenya were among institutions in-country and therefore had common national issues of concern while a vast chunk of partnerships in Uganda were either regional, continental and with other institutions in developed countries. Topics covering global issues and those on developed countries came in last in Kenya at 8.9 percent and 7.1 percent, respectively, which was a total contrast with Uganda. The research focus in both countries followed their funding patterns in which Kenya put in more resources towards research compared to Uganda. The trend also reflects the dominant categories of partnerships where in-region and continental level partnerships are beginning to take up more space, especially in Kenya. It is also an indication that efforts encouraging more regional and continental partnerships in Africa are bearing fruitful.

Benefits of transnational partnerships to the universities

Research has shown that transnational research partnerships have the potential to promote capacity building and knowledge production and sharing; but also partnerships stimulate the mobilization and mobility of financial assets and create

synergies and complementarities among participants to yield mutual benefits and promote economic growth (Kinser & Green, 2008; Koehn & Obamba, 2014). Institutions that participated in this study showed that they had been able to benefit from their partnerships in several ways, including capacity building in both teaching and research. Table 3 summarises the benefits of transnational partnerships for institutions in both countries.

	Kenya		Uganda		
	Frequency	Percent	Frequency	Percent	
Research	18	27.7	17	27.0	
Training	22	33.8	12	19.0	
Funding	6	9.2	16	25.4	
Curriculum development	8	12.3	9	14.3	
Community outreach	11	16.9	9	14.3	
Total	65		63		

 Table 3: Selected Benefits of Transnational Partnerships

Capacity building through partnership projects was a mix between individual and institutional level initiatives focusing on young researchers. Research capacity building *in situ*, especially for young faculty is not only crucial for the substantiality of the research projects in question, but also the sustainability of the partnerships in general. The participants indicated that they focused on capacity building not only in scientific knowledge and skills training, but also in the non-scientific skills to initiate and implement projects. This is a two-pronged approach that is recognised for its ability to develop an all-round researcher (OECD, 2011). Other benefits were in the form of academic mobility for knowledge sharing and collaborative curriculum development.

Barriers of forming transnational partnerships

Transnational partnerships are, by nature, demanding complex procedures and may present a clash in policies at varying levels of bureaucracy (Brew, Boud, Lucas & Crawford, 2013). This study also established that among the challenges experienced by participating universities were complicated and unclear procedures as well as internal bureaucracies, which hindered transnational partnerships. Top among the list of barriers was lack of funding in the case of Kenyan universities

and lack of information on the financing in the case of universities in Uganda. National governments and institutions have been accused of not investing enough in research activities. For example, Kenya has recently recorded a higher number of research projects funded by the national government and consequently, a higher number of domestic partnerships addressing national issues (32.1%) in comparison with Uganda (3.9%). This difference could be explained by the renewed focus on research and innovation activities funded by the newly established Kenya National Research Fund. For transnational partnerships, a significant share of research partnerships (37%) and (22%) in Kenya and Uganda respectively, are funded by third-party organizations or development partners like the World Bank, DFID. Enhancing governments' and institutions' investment in research would help institutions to navigate the asymmetries that are often skewed in favour of funding partners' agenda. Some of the barriers and challenges experienced by the participating institutions are summarised in Table 4. It is, however, encouraging that the study participants recognised the immense benefits of transnational research partnerships and indicated willingness to wriggle through the challenges and engage in the partnerships.

	Kenya		Uganda	
	Frequency	Percent	Frequency	Percent
Lack of information on funding	8	11.9	4	13.8
Inadequate project development skills	3	4.5	2	6.9
Difficult eligibility criteria	4	6.0	2	6.9
Favouritism or unfair practices	3	4.5	0	0
Unfavourable internal policy context	3	4.5	1	3.4
Lack of funding opportunities	5	7.5	7	24.1
Internal bureaucracy	2	3.0	2	6.9
Power inequalities and conflicts	5	7.5	2	6.9
Complex or unclear procedures	5	7.5	2	6.9
Lack of networks or collaborators	7	10.4	1	3.4
Inadequate staffing capacity	2	3.0	2	6.9

Table 4: Barriers of Forming Transnational Partnerships

Transnational Higher Education Research

	Kenya		Uganda	
Unfavorable government policy	3	4.5	0	0
Inadequate research infrastructure/ facilities	6	9.0	1	3.4
Lack of incentives and rewards	4	6.0	2	6.9
Personal/ cultural differences	7	10.4	0	0
Lack of management capacities	0	0	1	3.4
Total	67		29	

Discussion

Effective and sustainable external partnerships are significantly influenced and shaped by positive personal relationships and tend to gravitate around the efforts and networks of at least one individual who is core to the partnership. The six universities that participated in the study have traditionally embraced various forms of transnational partnerships and collaborations as a source of third-stream revenue, academic capacity development, as well as reputation enhancement. In more recent years, the institutions have engaged in partnerships to respond to increasing calls for multidisciplinary research that can solve complex societal problems. The rise in globalization has also certainly fueled more interest in engaging in transnational partnerships.

There are a wide range of factors that trigger the initiation of transnational partnerships among higher education institutions. Participants in this study identified one of the major triggers of partnership formation as calls for collaborative research or development initiatives. Our findings have shown that previous or existing personal connections and informal encounters play a fundamental and indispensable role in enabling a partnership to be initiated, developed, and sustained. These casual encounters are still crucial at the initial phases regardless of whether the partnership is also driven by other factors such as joint research and other interests. The universities are now adopting the practice of developing relatively more formal organization structures as well as policy and regulatory frameworks to guide their partnership development and management practices. This might signal a new shift towards formalization and institutionalization of partnership initiatives. The study, however, established that there is no *one-size- fits all* prescription for governance or structure of transnational higher education partnerships. A variety of models or combinations of approaches can be explored based on mutual agreements and the form of management structure of partnerships can also change over time.

It is clear from this study that the success of a partnership largely depends on the interest that parties have in the project and mutual benefits likely to accrue to each party. Governance of transnational partnerships requires the development and application of an agreed framework that describes the integration of the various perspectives and elements in a partnership. Institutions involved should, at the very minimum, develop memoranda of understanding or agreement to guide their activities. The memoranda should clearly define the roles and responsibilities of the partners, the officers or persons responsible from each side, governance structures, duration of the partnership project, and resource requirements- both monetary and non-monetary. Key agreements should also be on the sources of funding and budgetary responsibilities for each partner. All the partnerships in this study had Memoranda of Understanding, guiding their activities. Majority of the participants also indicated that they enjoyed mutual agreements with their partners on the projects they were jointly undertaking.

Higher Education organisation and governance were traditionally framed and examined within the context of relatively stable national boundaries. However, this familiar notion of the well-bounded national higher education system is quickly diminishing as the boundaries of the higher education 'organisational field' as well as its spectrum of activities become increasingly blurred and porous (Jongbloed et al., 2008). New and diverse actors at multiple levels are increasingly getting involved in various kinds of activities within the higher education landscape (Frølich, Huisman, Slipersæter, Stensaker & Bótas, 2013), whereas universities are also actively involved in knowledge-based entrepreneurial initiatives and linkages outside the traditional boundaries.

The concept of governance within higher education discourse is predominantly concerned with the internal structure, organisation and management of autonomous and semi-autonomous institutions towards the attainment of common goals. Eurydice (2008,p.12) suggests that 'governance refers to the formal and informal exercise of authority under laws, policies and rules that articulate the rights and responsibilities of various actors, including the rules by which they interact.' Another feature of governance is that it can entail multiple stakeholders and consist of both formal and informal dimensions as well as internal and external ramifications (De Boer et al., 2009). Governing structures for higher education are

Transnational Higher Education Research

highly differentiated throughout the world. Still, as noted by Altbach (2005), the different models of governance for higher education across the globe nonetheless share a common heritage. As higher education institutions become increasingly interdependent with their external environment, they are becoming more responsive and accountable to external organisational relationships such as governments and also in managing business and corporate relationships. Generally, institutions are recognised as autonomous actors with varying degrees of interdependence, and legal commitments to the external stakeholders such as local authorities and national governments. This poses a challenge particularly for developing countries like Kenya and Uganda which are more likely to have limited financial and technical capacities for managing complex transnational relationships.

Conclusions

Developing and maintaining a comprehensive policy framework at the institutional level to ensure effective and coherent development, management and evaluation of external partnerships is another key aspect in the governance of transnational partnerships. The findings of this study show that the participating universities had put in place at least some form of policy framework to guide partnerships development. These policy frameworks allow for coherence, predictability, consistency and relevance in the universities' approach to external partnerships. Overall, there was evidence of organisational structures for governance of research and partnerships in the universities in Kenya. The three universities in Kenya have established various structures and initiatives for running research partnerships. The structures include international offices, research and outreach units, programme directors or coordinators, university committees, school or faculty committees, and administrative department units in various combinations to facilitate partnership activities at both university and project levels.

In Uganda, partnership activities are managed by individuals, concerned departments, ad hoc departmental and university research committees formed to implement particular projects. The universities do not have independent international and partnership offices.

Equally important is the sustainability strategies embedded in the projects through adequate involvement of all partners, as well as relevant capacity development. Research capacity development, both scientific and non-scientific, as in the case of partnerships in these universities, is one of the main ways through which sustainability can be achieved. Isolation of some partners especially the local partners from critical activities of any project can work against the sustainability of projects as there would be no sufficient expertise to carry on the activities beyond the project funding period. Another critical aspect is the relevance of the projects to institutional and national priorities. This study demonstrated some level of capacity development efforts inbuilt in the implementation of their projects. The capacity development efforts were both in teaching and research. Several research topics in the research partnerships covered national interests too.

There is certainly no *one-size-fits- all* prescription for construction and governance of transnational partnerships. From the experiences of participants in this study, best practices constitute mutual agreement between partners, capacity development, provisions for staff and students exchange, and established Memoranda of Understanding.

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