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Knowledge Sites and Configurations in Africa: Implications for Future Public University-Based Development Policy Knowing

Abstract

Higher education knowledge sites in Africa have changed significantly over the last few decades. In particular, public universities are no longer the sole drivers of the what and how is to be known in development policy. The outcome of this site and knowledge reconfiguration is that public universities are no longer driving the development policy agenda, as they should be doing. What, then, is the future of public universities-based development policy knowing? Public universities can reclaim the initiative by addressing a number of external tensions. These tensions include: the institutional tension between establishing the traditional disciplinary departments/institutes and departments/institutes with multidisciplinary mandates; the institutional mandate tensions between "for development" and "of development"; the epistemological tension between multidisciplinary knowing and interdisciplinary knowing; the historical tension between the disciplinary knowing and the traditional transdisciplinary nature of policymaking; the career mobility tension between the journal article and the urgent policy brief by the policy makers: the allegiance tension between the institutional academic and the public intellectual; the career tension between the academic need for knowledge attribution and the anonymity of policy inputs; the loyalty but false tension between consulting and academic work which often fails to recognize that a good consultant is often a good academic. Public universities must engineer new institutional norms and practices, including partnering with and borrowing from other sites in public policy knowing. They also need to aggressively work their way back into the policy research limelight.

Keywords: public and private universities, research, policy, policy-research, think tanks, states, public policy, policy-makers, knowledge sites

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1. INTRODUCTION

The quality of public decision making largely depends on the quality of knowledge available in the making of such decisions, or what we call sources, processes and forms of knowing. In other words, it is important to assess the various ways through which policy makers come to know before making public policy decisions. One such way of knowing is through their (policy-makers') engagement with public university researchers. This relationship is based on the knowledge-action dichotomy that assigns the role of production of knowledge (research) to public universities and the role of implementing or acting on the knowledge to policy-makers.

External tensions do exist between and among different players in knowledge production on the one hand, and between knowledge producers and the state, on the other. The tensions between the state and public universities are well known. Not so well known are the tensions between Africa-based private and public research think tanks and universities. We start by looking at the sites and their inherent tensions.

2. SITES AND TENSIONS IN DEVELOPMENT POLICY KNOWING

In addition to policy-makers viewing themselves as knowledgeable about policy, Africa now has many and different sites of knowing for policy, each site coming with its own tensions. However, to understand the place of public universities in the sites arena, one has to start with a look at the universities themselves.

2.1 Public Universities as Sites of Knowing – Tensions over Colonial Missions?

From their colonial origins, universities in Africa were not established for purposes of development policy research. Rather, they were primarily established as production hubs for civil servants. It is these individuals, with different disciplinary orientations, who would then serve their national governments as policy-makers. It is also important to note that, whether research and policy were the part of the primary concern of the colonial authorities in the establishment of universities in Africa, the agitation for and the granting of political independence happened before the full development of the universities as research producing centers, and before the universities were fully integrated into their national development systems.

Apart from their emergent roles as sites of protest against colonial and subsequent oppressions, most African universities have continued discharging their "colonial" roles. Thus, they are informally assessed in terms of the number of graduates they produce per year, their disciplinary diversity, and the employability of their graduates. Rarely is there a major emphasis on postgraduate training, without which, there cannot be research production. Even more worrying is the little attention given to the nature of postgraduate research portfolios and their practical relevance, leave alone their direct contributions to policy. This is not to mean that these issues do not concern higher education thinkers. For example, post-apartheid South Africa has tried to address these concerns from an Africanization-endogenization perspective in the 1990s (Cloete et al, 2015; Bunting et al, 2014).

From the different universities' missions, most universities in Africa do not view policy contribution as a central part of their business. The policy mission is only implicit, hence most university mission statements invoke such phrases as production of knowledge, skilled manpower and conduct of research of national and global significance. Therefore, their main

mission is to produce knowledge (read basic research) for purposes of equipping their students with knowledge and skills. It is then through their educated and skilled graduates (who join the public sphere as civil servants) that universities contribute in the policy-making activities. Thus, most African universities are still executing one of their colonial missions: production of graduates for careers in the civil service.

Snapshot One

Public policy not part of university missions

By their very nature, universities do not view the task of informing policy decisions as their core business. This is despite their (universities') institutional missions being explicit about knowledge production. A quick run-through over a number of university mission statements reveals that the production/generation of knowledge is mainly assumed to be for teaching purposes (see the Appendix). The universities are also confident on their role to produce knowledgeable manpower in the form of their graduates.

From university missions, research is quite visible. However, the universities do not view their research-generated knowledge as directly linked to policy making. At best policy contribution is only implied in the university missions. For instance, the University of Nairobi states her mission as geared toward the "provision of... education and training and to embody the aspirations of the Kenyan people and the global community through creation, preservation, integration, transmission and utilization of knowledge. Thus, this heavily worded mission statement deliberately omits the mention of policy.

Actually, this is not uniquely an African university weakness. Throughout history, universities have had to balance between their training and research functions (Wolfe 1972; Peper 1984). The need for universities to contribute to their immediate environments is a relatively recent phenomenon (Veysey 1965; Castels, 1991). The challenge with Africa is lack of well-endowed, homegrown philanthropic organizations/foundations and individuals to fund university research. This is made worse by the universities' neglect of their third missions (community engaged research), which raises the question: is this an indicator of intellectual laziness or a lack of confidence in charting a new course for themselves away from their initial missions, or both. Why focus on producing for the civil service while most governments cannot even absorb the annual number of graduates with teaching qualifications? The high unemployment rates among university graduates in the continent calls for a rethinking of this preoccupation.

2.2 Public Universities and the State – tensions over funding and autonomy?

This source of tensions is well known. Historically, universities in Africa have had antagonistic relations with the state leading to high levels of state control (Ng'ethe & Mwiria, 2008; Ng'ethe, 1993; Mamdani, 1993). Arguably, this has left little room for universities to think for themselves about what role they should play in their respective national environments beyond the production of graduates. As a result, most universities in the continent have found solace in providing research and teaching in fields (disciplines) and on subjects (topics) that are unlikely to collide with the interests of the state. This has not only limited university-level disciplinary innovations but has also lowered teaching enthusiasm and dynamism, especially in the humanities and social sciences.

University state relations are complicated by the fact that the state is the main source of funding for universities, which means the state maintains close control over the universities (Coleman & Court, 1993). For instance, most public universities in Kenya are heavily

indebted after years of cuts in state funding and after the decline in the number of self-sponsored students under the self-sponsored Module II programme. In this situation, the greatest casualty is the quantity and quality of research conducted in universities, especially considering low levels of non-state funding in the continent. If the number of research outputs and quality go down, it is only natural that such research is highly unlikely to find its way into policy.

Related to this is the issue of research infrastructure. Most universities in Africa, especially the older ones, are still housed within the structures established during the colonial and the immediate independence period. Thus, the universities have had to contend with aging physical infrastructure against an ever-rising number of undergraduate students. The greatest victims have been science courses as they have had to teach their students using outdated equipment and in science laboratories and engineering workshops that resemble museums (Mamdani, 2008). In fact, we recall from one of our many interactions with university administrators, the registrar from a respectable African university noting that some visitors from overseas (on a university familiarization tour) were shocked by the poor state of the university's engineering workshop. How then are universities expected to use such infrastructure to produce cutting-edge research knowledge that can influence public policy?

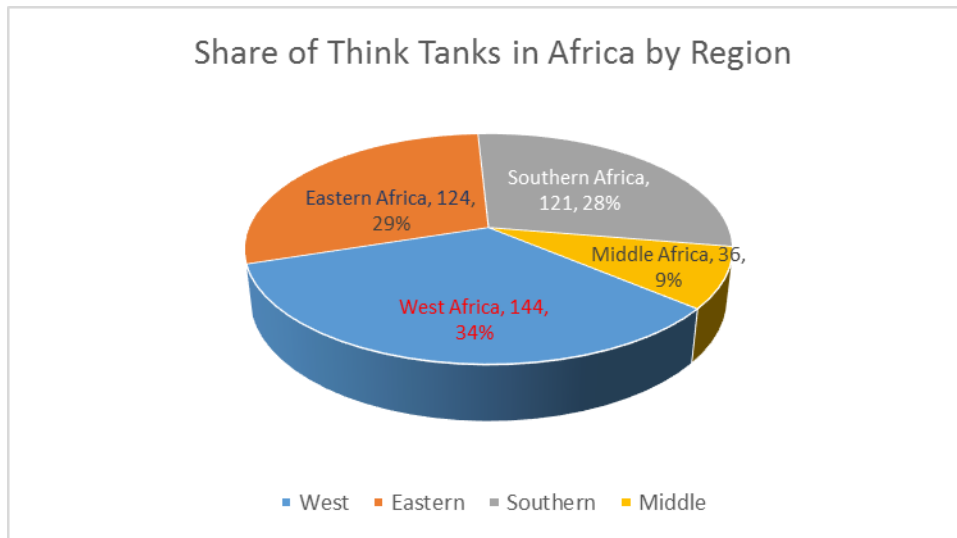
2.3 Inherent Tensions Between Public Universities and Think Tanks

2.3.1 *Tensions as sites of knowing for public policy?*

Think tanks have historically enjoyed a higher role in elucidating research knowledge for policy. This mainly stems from the state's discomfort with universities as policy informers necessitated by the ever-present fear that university research is contaminated by radical student positions (Castels, 1991). Think tanks can be: independent and autonomous; state-affiliated; university-associated; civil society-affiliated; or with a mixture of all the above affiliations (McGann, 2008). This is principally due to their perceived leanings with regard to networks, source of funding, and affiliations of staff and experts. Thus, a think tank can be perceived in either of these ways: autonomous and independent; quasi-independent; university affiliated; political party affiliated; government affiliated; or quasi-governmental. Nonetheless, think tanks are defined as "*independent, non-interest-based, nonprofit organizations that produce and principally rely on expertise and ideas to obtain support and to influence the policymaking process*" (Rich, 2004: 11).

Africa has experienced growth in the number and diversity of think tanks. This growth is partly attributed to the vacuum created by the unceremonial exit or the diminishing role of universities as a source of research knowledge for policy-makers. The other reason is the enlarging space for policy engagement created by the shrinking space of the state and the requirement of wider consultations and citizen participation in public policymaking. Policymaking is increasingly becoming participatory as the state sheds some of its autocratic characteristics. In Africa, there are roughly four geographical regional hubs with regard to think tank concentration and operations. These are: i) Eastern; ii) Middle; iii) Western; and iv) Southern Africa with their respective bases in Nairobi, Kenya; Duala, Cameroon; Dakar, Senegal; and Cape Town, South Africa (McGann, 2008). Based on the available data, Africa is home to more than 425 think tanks spread across 47 countries (see Figure 1). They mainly deal with relevant policy research topics touching on political, economic and social issues.

Figure 1: Distribution of think tanks by region - actual numbers and percentage of total



Source: Adopted from McGann, 2008

In addition to the traditional think tanks, the universities also compete with independent (sometimes) international research institutions that double up as think tanks. In Kenya, these include, the International Livestock Research Institute (ILRI), African Centre for Technology Studies (ACTS), the African Centre for Technology Policy Studies (ACTPS), the International Potato Centre (CIP), and the Partnership for Social and Governance Research (PASGR). Such bodies have the advantage of being independent, having a policy orientation, and being better funded to conduct large-scale research activities, some of which are international in scope. At the same time, such institutions are able to attract collaborations with overseas researchers and universities, which makes them benefit from state-of-the-art policy research ideas and instruments. The international character of their research activities also gives these international research institutions an edge over universities, for their ability to generate comparable findings across different environments, hence making them favourites with policy-makers.

In addition, universities have to contend with state-supported and funded think tanks. For example, in Kenya, these include the Kenya Agricultural and Livestock Research Organization (KARLO), the Kenya Forestry Research Institute (KEFRI) and the Kenya Institute for Public Policy Research and Analysis (KIPPRA). Unlike the universities, these state-funded bodies function as the state's first-stop shops for policy-related knowledge.

2.3.2 Tensions over ownership of policy knowledge and expertise?

Unlike universities, think tanks mainly think policy-informing research from the onset. This makes them more visible to the knowledge-interested policy-maker. They are better branded than universities and they are not covered in deep bureaucracy, which makes them favourites to both policy makers and other organizations interested in funding policy-oriented research. Consequently, think tanks are better funded than universities in their research portfolios. This is one source of tensions between them and universities, with universities claiming that think tanks take much of the university-deserved research funding. Think tanks are also favoured by their perceived independence from the state. Even for the state-affiliated ones, the fact that the state does not interfere with their day-to-day operations makes many research granting bodies to view them as a better choice than universities. Of course the downside of this is that

state-affiliated think tanks cannot be entrusted with conducting research that is critical of the state.

Think tanks enjoy freedom in setting up their own mandates. Such mandates are informed by existing policy research niches within the regions of operation. Thus, unlike the (highly undifferentiated universities, think tanks by their very nature are highly differentiated in their mandates. This is further promoted by their strategic policy missions. Their differentiated policy focus areas enable them to attract certain forms of research funding, and to engage the state in differentiated areas of public policy. Thus, think tanks in a given region rarely compete with each other, unlike universities.

Partly because of their differentiated character, coupled with their strategic policy missions, think tanks are able to establish and exploit networks with key state ministries in their respective research niche areas/sectors. Think tanks are also known to continuously engage with stakeholders during the different stages of knowledge generation. This is unlike universities, whose deep-seated suspicions of the state and their emphasis on basic/academic research inhibits close working relationships with state policy technocrats. At the same time, and as a consequence, think tanks can produce timely and relevant policy-oriented outputs. Much as they encourage the production of scholarly publications such as books and journal articles, think tanks have a bias towards the easy-to-read policy outputs such as policy briefs, research bulletins and pamphlets. Again, they rarely shy away from producing and sharing their research outputs in raw formats through different dissemination platforms, as work-in-progress, hence allowing constant input from policymakers themselves. This not only promotes policy-relevant outputs (due to inputs from policy makers) but it also promotes ownership of results by policy makers themselves.

Think tanks are also good at packaging and branding of research results. From their clear missions with regard to policy, think tanks take research from a policy or a practical basis. Thus, many think tanks operate like research-production factories: with work plans and deadlines, and hence are able to deliver their outputs in a timely manner. University researchers have to juggle between teaching and research. Once the research findings are out, they would rather first use the outputs in teaching than share them with policy makers, since they come from a totally different institutional orientation. Think tanks often stake claims to being the first in the production of this or that knowledge. This is despite the fact that many of the research experts in think tanks come from the universities themselves. Therefore, expertise is another source of tension between universities and think tanks. Many are the times when university-based researchers complain that the think tanks are out to use their (university-based researchers') expertise, sometimes even without acknowledging them in the research outputs.

2.4 Research Funding and Development Policy Sites - The Nexus and the Tensions

In Africa, most research funds are externally sourced. The external sites of knowing are well known. These range from transnational/global, regional, national and sub-national. They include the United Nations, the World Bank and IMF, UKAid, USAid, DFID, SIDA, CIDA, NORAD as well as the OECD (Littoz-Monnet, 2017). In Africa, the funders of development also double up as potential sources of knowing for development policy, a privilege public universities do not enjoy. These organizations, by virtue of their international/regional scope and their engagement with various development initiatives in certain policy settings, they often and legitimately lay claim to first-hand data knowing for purposes of addressing policy.

Universities are also funded by these bodies to conduct research, some of which is expected to have a policy or a practical relevance. Thus, while universities welcome the funding, the fact that these bodies at times also double as policy research experts, creates another source of tension for universities. In addition to the expert claim, the funding bodies can at times meddle in the research activities of the universities, by sending their own so-called researchers to either work with university researchers or to somehow supervise the way such research activities are conducted. This is made worse by the fact that such bodies have a sizeable level of field presence in Africa, hence sometimes claiming to know and understand the issues better than university researchers.

This is further compounded by the fact that some of these bodies are not value free. Rather, some have their own interests which they would either like to advance or promote in their funded research. University researchers may or may not have their own research interests at heart. However, the fact that being funded by these bodies sometimes calls for study results to be presented in certain ways dictated by the funders, creates further tension between universities and the sources of research funding. In addition, due to the practical and policy orientation for some of these bodies, they sometimes publish research results even before or without the knowledge of the university researchers. This can sometimes create tension over ownership of research knowledge.

Thus, public universities are not alone as sites of policy knowing. In fact, university based research is itself overwhelmingly funded by the same development agencies again, diminishing any claim to primary research they might have harbored. In this context, universities are often contented with deploying the research knowledge they generate for internal consumption/teaching purposes, while the funding organizations often deploy their first hand data to engage policy. Not surprisingly this has quite often generated tensions between universities and the funding organizations in the development policy arena.

3. REVITALIZING THE UNIVERSITIES AS A SOURCE OF POLICY KNOWING

In order to become more instrumental in the national public policy discourse, there is need for universities to undergo self-decolonization. This would first require that universities re-examine their own mandates in line with the changing expectations of the time. One, universities need to re-look into the courses that they offer at both undergraduate and postgraduate levels. Two, the universities would need to address the question of how relevant such courses are with regard to the prevailing concerns at national and global levels (Gibbons et al, 1994; Langa, 2010). In particular, there is room to re-examine the prevailing single-discipline-anchored epistemology and pedagogy. As a modest start, universities could start with what they know best. That is, anchoring courses on disciplinary foundations, then be brave enough to seek “better policy knowing” by being liberal enough to allow room for a reflection based on pertinent policy issues from other disciplines?

Three, since the core business of universities is knowledge production, the universities must confront the epistemological question: knowledge by whom, for whom and for what purpose? With regard to research, this question can be reformulated as: how is that research produced and what is its quality? This would help universities to increase and improve their engagement with research itself. Given that most African universities have small proportions of graduate students, an increase in graduate student enrolments, would also increase universities’ research outputs. One would also expect that such research would increasingly be informed by real life challenges or issues. Thus, it would be easy for such research to have an academic and a policy relevance.

Four, with regard to institutional structural re-engineering, public universities in Africa can borrow a leaf from some private universities, such as Strathmore in Kenya, where schools (for example, the Strathmore Business School) can become a body corporate capable of establishing and initiating own policy engagement, hence being able to dilute the heavy university bureaucracy that discourages many would-be policy collaborating partnerships. There is also a lot that universities from the rest of Africa could learn from the South African universities. These universities have established policy hubs and centers of excellence within their own institutional structures that act as frontline units for policy research and engagement. While the institutional hubs are multi- and trans-disciplinary intra-university outfits, the centers of excellence are not only multi- and trans-disciplinary but also multi-university. Thus, the universities in South Africa have managed to propel the idea of Africanization and endogenization of knowledge to come up with innovative ways of university knowing for policy knowledge.

Five, public universities must confront head on the challenge that the continent has yet to decide on what role(s) should universities play and consequently on what types of universities should be established in order for them, taken together, to constitute a “knowing system”, in this case, ‘knowing for policy’ in addition to other teleological concerns. The first step is to agree on the classification of universities. For example, at the continental level which universities fall under the elite category, similar to the Ivy League universities in the US? At the national level, the question still lingers as to how to differentiate between elite, professional and the land grant type of universities. Instead, the continent has universities with contradictory mandates (Castels, 1991; Cloete et al, 2011; 2015). Kenya has begun taking this journey with a proposal to establish a national university. However confusing this may sound, within the understanding that universities are more broadly defined by the universal nature of knowledge generation and consumption, perhaps this is the way to go. In line with this, the suggestion made by Collini (2017) on the setting up of multiversities – different institutions for different roles, should be part of the strategy in establishing a “policy knowing system”. In establishing the European Institute of Innovation and Technology, the EU, seems to have taken a step towards answering the question; what type of knowledge, by whom and for whom?

Six, in summary, public universities must address already noticeable tensions. These include: the institutional tension between establishing the traditional disciplinary departments and institutes vis-a-vis departments or institutes with multidisciplinary mandates; the institutional mandate tension between "for development" and "of development"; the epistemological tension between multidisciplinary knowing and interdisciplinary knowing; the historical tension between the disciplinary knowing and the traditional transdisciplinary nature of policymaking; the career mobility tension between the journal article and the urgent policy brief for the policymakers: the allegiance tension between the institutional academic and the public intellectual; the career tension between the academic need for knowledge attribution and the anonymity of policy inputs; the loyalty but false tension between consulting and academic work which often fails to recognize that a good consultant is often a good academic. The state can help universities to address some of the external tensions, particularly those related to roles of universities in national development. This calls for nationally differentiated institutional mandates of universities in order for individual institutions to establish themselves and their policy roles within their nationally defined expectations

4. CONCLUDING OBSERVATIONS

Drawing from the above discussion, public universities are no longer the sole drivers of what and how is to be known in development policy, even though they alone have a unique claim in the knowing process, by virtue of their central position as knowledge producers (Collini, 2017; Bejinaru & cel Mare, 2017), public funding and their original development mandates (Coleman & Court, 1993). However, they can still re-engineer themselves as important sources of knowing for public policy. They can do this by addressing a number of tensions as indicated.

In the meantime, public universities must address the concerns of the public by relearning and internalizing their development mandates as opposed to paying lip service to them. Furthermore, they must learn from the new knowledge sites as opposed to treating them as interlopers in the chain of development policy knowing. This calls for universities to engineer new institutional norms and practices. The norms include the norm of partnering with and borrowing from other sites in public policy knowing (Sharma, 2012). We recommend that they do this in order to aggressively work their way back into the policy research limelight. For example, they need to re-assert themselves as quality producers of reliable knowledge that can be applied to problems in the society. One short-term way to do this would be by establishing policy analysis and communication hubs charged with teasing out policy relevant information and publishing of policy briefings from leading research outputs. Of course this would require human, physical, and financial resources. On the long-term, universities need to integrate policy within their own faculty reward system of recognition and promotion. This way, policy would become more popular among faculty members.

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APPENDIX

UNIVERSITY MISSIONS

University of Nairobi, Kenya

To provide quality university education and training and to embody the aspirations of the Kenyan people and the global community through creation, preservation, integration, transmission and utilization of knowledge.

University of Dar es Salaam, Tanzania

“The University of Dar es Salaam will advance the economic, social and technological development of Tanzania and beyond through excellent teaching and learning, research and knowledge exchange.”

Makerere University, Uganda

To provide innovative teaching, learning, research and services responsive to National and Global needs.

University of Yaoundé, Cameroon

The University of Yaounde 1 has the following missions: to develop and transmit knowledge; to develop research and the training of men; to bring higher forms of culture and research to the highest level and at the best rate of progress; to provide access to higher education for all those who have the vocation and capacity to do so; to contribute to the support of development and social and cultural promotion; to develop the practice of bilingualism.

University of Rwanda

To support the development of Rwanda by discovering and advancing knowledge, committed to the highest standards of academic excellence, where students are prepared for lives of service, leadership and solutions.

University of Zimbabwe

University of Zimbabwe provides leadership in relevant and cost-effective research, knowledge-based innovative solutions, products and services, advanced educational training and technical advisory for industry, commerce and society to inform modernization processes in developing economies.

University of Malawi

To advance knowledge and to promote wisdom and understanding by engaging in teaching, research, consultancy, public and community engagement and by making provision for the dissemination, promotion and preservation of learning responsive to the needs of Malawi and global trends.

University of Botswana

To improve economic and social conditions for the Nation while advancing itself as a distinctively African university with a regional and international outlook.

University of Cape Town, South Africa

To contribute to the success of individuals and organizations through research-informed teaching, practice and thought leadership that creatively respond to the complex and pressing economic and social challenges of our world today.

University of Eduardo Mondlane, Mozambique

Eduardo Mondlane University strives to be an institution of excellence in the context of education, science, culture and technology, educating for life that enables professionals and assuming responsibilities in the process of innovation and knowledge transfer and sustainable development.

Eduardo Mondlane University strives for integration and affirmation in the world scientific community and being an agent and subject to change and transformation of society.

University of Zambia

To provide relevant, innovative and demand-driven higher education for socio-economic development.

University of Ghana

University of Lagos, Nigeria

To provide a conducive environment for teaching, learning, research and development, where staff and students will interact and compete effectively with other counterparts globally.

University of Benin

Be the most preferred choice of students, faculty and industry in every discipline undertaken by the university, and to work towards making the Republic of Bénin a Socio-Economic success by building requisite talent for emerging information and management based economy, with high level of skills and productivity.

University of Djibouti

The missions of the University of Djibouti are to develop at the level of higher education: initial and continuous general education; initial and continuing education and technical and vocational training; training of public, parapublic and private service personnel; scientific and educational research and production.

University of Addis Ababa, Ethiopia

Addis Ababa University's mission is to produce competent graduates, provide need-based community service and produce problem-solving research outputs through innovative and creative education, research and consultancy service to foster social and economic development of the country.

University of Namibia

To contribute to the achievement of national and international development goals through the pursuit of translational research, quality training and innovation.

The International University of Rabat, Morocco

As a Moroccan university dedicated to the development of Morocco and Africa, is committed to educating responsible citizens, to provide them with expertise, soft skills and interpersonal skills, allowing them to become the decision-makers and leaders of tomorrow. The UIR focuses on its students, who are at the heart of its concerns. Our priority is to meet their expectations and attain their potential, through an excellent academic education and extra-curricular activities (social and recreational activities) that are offered to them during their studies at UIR.

UIR contributes to strengthening Morocco's position and Africa's influence in tomorrow's world, by creating and providing state-of-the-art training and research programs in the most advanced fields of science and knowledge.

University of Tripoli, Libya

The University of Tripoli seeks to: develop scientific competencies and skills that meet the needs of society for development; involve in activities of scientific research and deliver knowledge in order to provide the best services to people, society and the world; provide consultations to state institutions and civil society; educate individuals through various means and channels in order to create role models of good citizens.

University of Tunis El Manar, Tunisia

Respond to the country's training needs, generate and disseminate knowledge and develop skills in various fields. Develop knowledge, master technology and promote it through research and encourage innovation, individual and collective creation in the various fields of knowledge. Ensure scientific, educational and administrative coordination between the establishments which fall under it. Participate in the country's development actions, support the different sectors of national activity and prepare students for the creation of projects and economic enterprises. Encourage cultural, sports and social activities. Establish partnership and cooperation links with similar organizations around the world with a view to establishing co-diplomas, supervising research work leading to university diplomas, exchanging experts and expertise, and to carry out joint research in relation to development priorities.

University of Nouakchott, Mauritania

to contribute to training, scientific research, propagation of the awakening and the dissemination of knowledge.

University of Papua New Guinea

To deliver excellent education and research results for nation building and global advancement towards an innovative and empowered society.