

Developing Sustainable Higher Education Leadership Models in Tanzania

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Contents

| | |
|---|-----|
| <i>List of Figures and Tables</i> | vii |
| 1. Overview of Growth and Budget Trends in Tanzanian Higher Education Institutions | 1 |
| Importance of higher education..... | 1 |
| Funding for HEI..... | 1 |
| Growth of higher learning institutions in Tanzania..... | 3 |
| Financing higher education..... | 7 |
| Integrating income generation and academic excellence..... | 9 |
| Conclusion..... | 10 |
| 2. Higher Education Institutions in Africa and Responses to Decreasing Funding | 11 |
| HEI in Africa..... | 11 |
| Access and equity in African tertiary education systems..... | 14 |
| Commitments and shortfalls in tertiary education systems in Africa..... | 15 |
| Diversifying the resource base in African universities..... | 16 |
| Leadership and management in universities..... | 18 |
| National budget allocations for education..... | 19 |
| Review of some national policies on higher education in Tanzania..... | 20 |
| Sustainability of funding in higher education..... | 21 |
| Challenging graduates' attributes..... | 23 |
| Responsive and reflective higher learning institutions..... | 25 |
| Universities' responses to decreasing funding..... | 26 |
| Conclusion..... | 27 |

| | | |
|-----------|---|----|
| 3. | Study Approach | 29 |
| | Introduction..... | 29 |
| | Desk study..... | 29 |
| | Sampling and sample size..... | 30 |
| | Interviews with key informants..... | 30 |
| | Consultative workshops..... | 30 |
| | Methodological workshop..... | 31 |
| | Mid-term review workshop..... | 31 |
| | Data analysis..... | 32 |
| 4. | Study Findings | 33 |
| | Introduction..... | 33 |
| | HEI funding challenges..... | 33 |
| | Current higher education needs..... | 38 |
| | Current sources of operational funds..... | 41 |
| | Availability of financial resources..... | 44 |
| | Limited government subventions..... | 46 |
| | Mismanagement of financial resources..... | 47 |
| | Delay in remission of funds..... | 47 |
| | HEI funding models worldwide..... | 51 |
| | Purpose-specific purchasing model | 52 |
| | Demand-driven, input-based funding model..... | 53 |
| | Options for higher education financing..... | 54 |
| | Discussion around HEI funding models..... | 55 |
| 5. | Responsive Leadership Model for Attracting Funding | 57 |
| | Introduction..... | 57 |
| | Leadership qualities for attracting funds..... | 57 |
| | The proposed model..... | 59 |
| 6. | Conclusion and Recommendations | 65 |
| | <i>References</i> | 69 |

List of Figures and Tables

Figures

| | |
|--|----|
| Figure 1.1: Distribution of Universities in Tanzania..... | 5 |
| Figure 2.1: Schematic presentation of preferred traits from graduates..... | 24 |
| Figure 3.1: Participants of the methodological workshop in Dodoma..... | 31 |
| Figure 4.1: Financial challenges facing universities..... | 37 |
| Figure 4.2: Major sources of operational funds in universities..... | 41 |
| Figure 4.3: Major sources of research funds for universities..... | 43 |
| Figure 4.4: Availability of financial resources at Universities..... | 44 |
| Figure 4.5: Causes of inadequate financial resources at Universities..... | 45 |
| Figure 4.6: Summary of international trends in funding mechanisms..... | 54 |
| Figure 5.1: The conceptual model..... | 60 |

Tables

| | |
|--|----|
| Table 1.1: Number of universities and university colleges in Tanzania..... | 4 |
| Table 1.2: Annual enrolment of undergraduate students in Tanzanian universities (2007-2012)..... | 6 |
| Table 1.3: Universities' funding sources..... | 8 |
| Table 2.1: Public expenditure on education as a percentage of gross national income in selected countries..... | 15 |
| Table 4.1: Profile of the institutions of higher learning involved in the study..... | 34 |
| Table 4.2: Perceived adequacy of various facilities in universities..... | 39 |
| Table 4.3: Government disbursed funds for UDOM – 2008-2011..... | 46 |
| Table 4.4: Reported factors hindering the responsiveness of universities..... | 48 |
| Table 4.5: Reported innovative strategies to address financial constraints..... | 49 |
| Table 4.6: Suggestions for improving financial situations at Universities..... | 50 |
| Table 4.7: Proposed priorities for university leadership to attract funds..... | 51 |
| Table 5.1: Leadership qualities needed to attract funds in universities..... | 58 |
| Table 5.2: Leadership qualities needed to attract funds in universities..... | 59 |

Overview of Growth and Budget Trends in Tanzanian Higher Education Institutions

Importance of higher education

Higher education provides important private and public benefits, and multiple parties are involved in financing Higher Education (HE) costs. In terms of private benefits, students may view a postsecondary degree as the key to better economic future. In addition to providing such private benefits, HE has also been crucial to the development of the nation's cultural, social and economic capital. In particular, HE helps maintain the nation's competitiveness in a global economy by providing students with the means to learn new skills and enhance their existing abilities. The central governments, students and universities/colleges all play important roles in financing HE costs, thereby influencing affordability. Affordability is an important factor affecting whether students access and complete degrees and is commonly thought of as the cost of HE relative to student or family income (GAO, 2014).

Funding for HEI

Provision of funding to higher learning institutions is an important consideration not only because of the potential role it plays but also because of its functional complexity at large. In particular, higher education comprises many aspects, including field training activities, research and teaching. Governments in African countries allocate funds for high learning institutions to aid the running of various activities. Development partners and international agencies also help higher

institutions in developing countries to fill financial gaps (World Bank, 2010). It is important to note that post-independence, higher education in Tanzania was a one-tier system where institutions were state-owned. Under this system, higher education was considered a public good and the government bore all costs, with no student contribution. However, as a result of economic structure advancement in the 1980s and the implementation of the World-Bank-driven structural adjustment programmes (SAPs) in the mid-1980s, the door was open for private sector engagement in development activities, including higher education. Consequently, in the early 1990s, the government introduced a cost-sharing policy in higher education (Ishengoma, 2004). Costs were shifted to students, parents and private entities in a bid to increase participation in higher education. Similar systems were put in place in many countries across the continent (Kiamba, 2003). The result was an increase in the number of universities and student enrollment in African countries, including Tanzania (World Bank, 2008).

Despite this increase, funding for universities in African countries, including Tanzania, has been insufficient due to a significant decline in government subventions (World Bank, 2010). Public funding in most countries is too limited to cater for the growing needs of higher education. On the other hand, given the rigid conditions for donor funding, dependence on external sources is no longer the ideal model for the growth and development of higher learning institutions. Financial independence is the best route to the attainment of higher institutions' missions and visions. To attain this, good university leadership and management is mandatory; active and effective leadership with advanced and practical strategies and skills to spot opportunities for income generation and attract funds through innovative approaches.

The situation presented in the foregoing discussion calls for immediate action in raising the dynamism of leadership in higher education. Universities now more than ever before require leadership structures that are responsive to decreasing funding and financial resources from both the government and development partners. The measure of the effectiveness of university leadership structures has become their ability to attract funding from various sources without compromising the vision and mission of the university. This pre-requisite seems to be counterproductive.

The general objective of this research was to develop a leadership and management model that will help Tanzanian universities to be responsive to decreasing government financing through diversification of funding sources. Specifically, the research endeavoured to identify Strengths, Areas for improvement, Opportunities and Challenges (SAOC) of the current university leadership, management and funding mechanisms. The research further conducted an in-

depth inquiry into the factors that hinder responsiveness of university leadership structures to emerging financial and funding challenges through a consultative process that involved all key stakeholders, including academicians, university leaders, students, academic staff associations, workers' unions, staff representatives from selected universities, the parent ministry, and the Tanzania Commission for Universities (TCU).

In achieving these objectives, some basic questions were developed to operationalize the research agenda. The research questions included the following: How can university leaders better position themselves to handle the ever increasing challenge of liquidity? Do Tanzanian universities have best practices to share? Can Tanzanian universities develop best practice models to that effect? How and to what extent are the existing higher education leadership structures responsive to the observed challenges? How best should such structures be re-positioned to adequately attract funding from various sources? What needs to be done to properly re-position university leadership structures in a manner that is responsive to decreasing funding? This publication provides answers to some of these questions based on the data collected.

Growth of higher learning institutions in Tanzania

At independence, Tanzania had one public higher education institution established in 1961 as a college of the University of London. In 1970, it became an independent national university and was named the University of Dar es Salaam. Until 1990, the country had only two public universities; the University of Dar es Salaam (with Muhimbili University College of Health Sciences as its constituent college), and Sokoine University of Agriculture in Morogoro.

According to NBS (2013), currently, there are 49 universities and university colleges in Tanzania (Table 1) spread across the country, as shown in Figure 1. Of these, eleven are public universities and three are public university colleges. On the other hand, there are 16 private universities and 19 private university colleges. This increase in the number of higher education institutions in the country is an indication of the realization of the potential of higher education to be a development engine among the communities (Saint, 2004). It aims at producing people with adequate knowledge and skills and the ability to not only solve development challenges but also fit in the labour market (Msola, 2007).

Table 1.1: Number of universities and university colleges in Tanzania (2007-2012)

| Higher learning institutions | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------------------|------|------|------|------|------|------|
| Public full universities | 8 | 8 | 8 | 8 | 8 | 11 |
| Public university colleges | 4 | 3 | 4 | 4 | 4 | 3 |
| Private universities | 10 | 11 | 11 | 11 | 11 | 16 |
| Private university colleges | 11 | 10 | 10 | 10 | 10 | 19 |
| Total | 33 | 32 | 33 | 33 | 33 | 49 |

Source: NBS, (2013)

Table 1 shows that from 2007 to 2012, there was an increase in the number of public and private universities at an overall rate of 40% and 60%, which is an average of 8% and 12% per year, respectively, and 50% for the five years. This implies that the number of private universities increased twice as much as that of public universities in the five years. This high increase in private universities could have been a carry over from the private sector's contribution to other sectors of community development and economic growth in the country.

It is worth noting that, like other private entities, private universities do not rely on government funding, and given the opportunity to invest in tertiary education, individuals and organizations devote their funds and compete to fill the demand for university education. Private institutions outnumber public institutions not only in Tanzania but also in many countries in Africa. In general, this indicates that the number of universities in the country will continue growing and providing greater access to higher education. These universities have been set up in various parts of the country, and will help to accelerate the economic growth and development of the regions as well as the country at large (Figure 1).

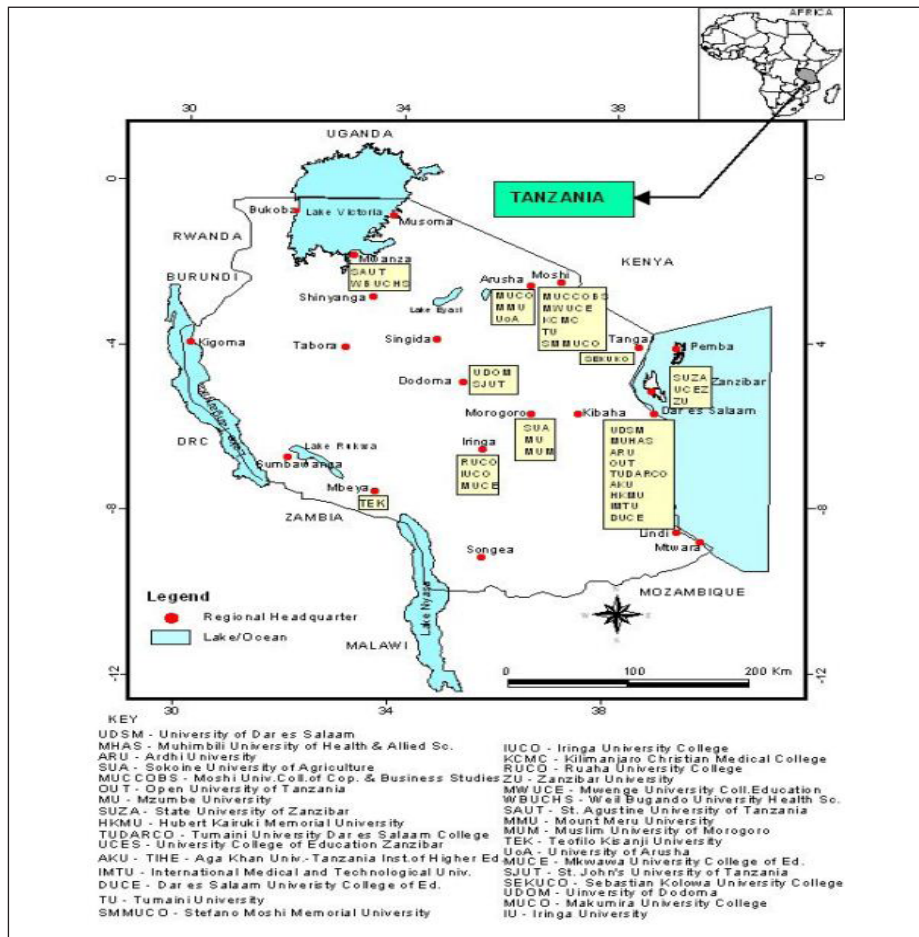


Figure 1.1: Distribution of Universities in Tanzania

Source: Modified from www.kess.co.tz/sesco_files/universities

According to the Tanzania Commission for Universities’ strategic plan 2010-2014, the Government’s plan was to increase student enrolment in higher education institutions from 3% in 2008/2009 to 12% by 2014. Similarly, the Government’s plan was to increase female students’ enrolment from 31.8% in 2007/2008 to at least 40% by the year 2014. Statistics show that there has been a steady increase in student enrolment at universities (Table 2). The increase has been attributed to a number of factors such as the Primary Education Development Programme (PEDP,

2002-2007) and the Secondary Education Development Programme (SEDP, 2004-2009), which were aimed at increasing student enrolment in primary and secondary schools (Msolla, 2007). The PEDP and SEDP programmes produced a pool of students qualifying for admission to higher learning institutions.

However, allocation of resources has not matched the increase in the number of students enrolled in universities, which has compromised the effectiveness and efficiency of governance and leadership. As a result, some universities can neither create a good working environment for their staff nor accomplish their organizational vision, mission and objectives. Successful universities are those whose leadership and management structures have been able to competitively reposition their institutions and attract financial resources from various sources.

Table 1.2: Annual enrolment of undergraduate students in Tanzanian universities (2007-2012)

| Category | 2007/08 | | | 2008/09 | | | 2009/10 | | | 2010/11 | | | 2011/12 | | |
|----------------------|---------|--------|--------|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------|---------|---------|
| | Female | Male | Total | Female | Male | Total | Female | Male | Total | Female | Male | Total | Female | Male | Total |
| Public Universities | 19,505 | 45,159 | 64,664 | 23,613 | 51,418 | 75,031 | 30,632 | 58,817 | 89,449 | 30,003 | 62,974 | 92,977 | 38,228 | 74,345 | 112,573 |
| Percentage | 30 | 70 | 100 | 32 | 69 | 100 | 34 | 66 | 100 | 32 | 68 | 100 | 33.9 | 66.0 | 100 |
| Private Universities | 6,712 | 11,153 | 17,865 | 10,400 | 15,791 | 26,191 | 13,690 | 20,295 | 33,985 | 17,186 | 25,204 | 42,390 | 21,663 | 32,038 | 53,701 |
| Percentage | 37.6 | 62.4 | 100 | 39.7 | 60.3 | 100 | 40.3 | 59.7 | 100 | 40.5 | 59.5 | 100 | 40.3 | 59.7 | 100 |
| Grand Total | 26,217 | 56,312 | 82,529 | 34,013 | 67,209 | 101,222 | 44,322 | 79,112 | 123,434 | 47,189 | 88,178 | 135,367 | 59,891 | 106,383 | 166,274 |
| Percentage | 31.8 | 68.2 | 100 | 33.6 | 66.4 | 100 | 35.9 | 64.1 | 100 | 34.9 | 65.1 | 100 | 33.9 | 66.0 | 100 |

Source: NBS, (2013)

Table 1.2 shows the trend in annual enrollment of undergraduate students in Tanzanian public and private universities from 2007/2008 to 2011/2012. The average increase in enrollment was 74% and 201% in public and private universities, respectively, while the overall increment was 101% (20% average annual increase). Private universities had an annual increase in undergraduate enrollment of 40%, almost thrice the public universities' annual 15% increase in the five years. However, it is worth noting that despite the exponential increase in enrollment at private universities, the number of undergraduate students in public universities has remained higher than that in private universities. This may be attributed to the fact that most of the students enrolled in public university get sponsorship from government through the Higher Education Students' Loans Board (HESLB). In addition, the infrastructure in many public universities can

accommodate large numbers of students. For example, University of Dar es salaam and Dodoma University can accommodate more than 20,000 students each.

In addition, on comparing the number of undergraduate student enrollment in the universities to the number of universities from 2007/2008 to 2011/2012, the ratio shows astonishing results. In 2007/2008 the number of students enrolled was 82,529 and in 2011/2012 it was 166,274 (Table 2), while the total number of universities in 2007/2008 to 2011/2012 was 19 (Table 1). This translates to an annual average enrollment of 4,344 undergraduate students in 2007/2008 and 8,751 in 2011/2012, which is an increase of about 91% for five years and 18% annually. This higher ratio in undergraduate enrollments may have resulted in the increase in the number of higher learning institutions in 2012 (Table 1). In future, the number of higher learning institutions is projected to go even higher as the number of students qualified for higher education continues to increase in Tanzania.

These increases in enrollment naturally lead to questions on student/resource ratio in the universities. Lecture halls, laboratories, hostels, funds and lecturers, to mention a few, are inadequate in most universities. Consequently, the university leadership faces a myriad of challenges.

Financing higher education

Up until the early 1990s, higher education was considered a public good and the state was responsible for both governance and funding (URT, 1999). University operational costs and student costs were entirely carried by the state. However, in recent years, the financing sources for higher education in Tanzania have increased to include public, private and international donors (World Bank, 2010), who provide cost sharing avenues, student loans in the form of revolving funds, and donations.

According to the World Bank (2008), universities receive their funds from a variety of sources, including the following:

- Allocations for teaching (or for teaching and research combined) from governments
- Research allocations or grants for research projects from a range of government sources
- Tuition and other fees from domestic and international students
- Income generated from research contracts, teaching contracts, consultancy services, or royalties
- Surpluses from on-campus services such as conference facilities offered to staff, students, and the general public, and
- Income from endowments, gifts, and investments.

It is important to note that the proportion of income sources varies significantly across countries. In some developed countries, public universities are able to generate a noteworthy percentage of their income from research contracts and teaching projects, among others, demanding only about 20% to 25% from the state for their total budget. However, the situation is different in developing countries, where public universities largely fund their budgets from state coffers and many private universities depend largely on donations and tuition fees (World Bank, 2008). For example, the 2011 survey report by the South African Regional Universities Association (SARUA) indicates government funding as the main source of financial revenue for Tanzanian universities, followed by students fees (Table 3).

Table 1.3: Universities' funding sources

| Source of funding | Percentage of total funding/income (%) |
|---|--|
| Student fees | 36.47 |
| Government subsidy/grants | 47.40 |
| Donations – private individuals/trusts | 0 |
| Donations – private sector/businesses/corporation | 3.3 |
| Other (no specification provided) | 2.97 |
| Other (no specification provided) | 6.30 |

Sources: SARUA university questionnaires, 2011

However, in recent years, higher education across African countries, including Tanzania, has been facing the ever-increasing challenge of declining government funding. According to a World Bank (2010) report, “In the last 15 years, the total number of higher education students in Africa has tripled, increasing from 2.7 million in 1991 to 9.3 million in 2006 (an average annual rate of 16%), while public resources allocated to current expenditure in that sector have only doubled (increasing at an average annual rate of 6%).” The noted decline in fund allocation has been due to poor economic conditions, competing public service priorities and weak support from international donors (NASULGC, 2008). This decrease in funding has been evident in Tanzanian HEIs, and has resulted in operational budget cuts that often frustrate the daily running of most universities.

In effect, most development plans at the university level now largely depend on internally generated funds, thus often making the university leadership re-direct their efforts from academic excellence to income generation excellence. Universities

have therefore tended to increase student enrollment irrespective of the restricted facilities and infrastructure and often at the expense of the quality of education provided. Financial constraints facing universities alongside poorly positioned leaders have frequently been a source of instability among university staff and unrest among students, both of which have a negative impact on academic performance.

Integrating income generation and academic excellence

University leaders across Africa have tried different models of leadership that integrate income generation in their academic endeavors. An example is increasing the number of non-degree programmes and academic sessions per day. This approach has been tried at Makerere University in Uganda but has greatly increased the workload of academic staff. Commercialization of ICT through establishment of facilities and training programmes on ICT has also been applied to generate income for universities. These facilities include cyber cafes providing internet services and computer training centers. Another approach is the renting of university land to commercial investors, which led to the development of 'Mlimani City' on University of Dar es Salaam land. Some universities have engaged in fund raising activities geared at achieving specified targets such as construction of lecture rooms/dormitories. Others have outsourced non-core university activities (e.g. cafeteria services and janitorial activities) to the private sector to minimize university running costs. Additionally, some institutions sell locally produced items to get income. For example, Sokoine University of Agriculture sells lumber from its training and research forest plantation in Olmotonyi, Arusha.

Moreover, the universities have regulated and changed academics' consultancy services to business-based services to generate income other than being skill and practical delivery services to serve and solve public problems for the development and growth of the nation (Mills, 2004). For instance, Sokoine University of Agriculture has established FORCONSULT, a consultancy unit in the Faculty of Forestry and Nature Conservation. This firm competes for tenders with other consultancy firms, both national and international. Such activities help the university leadership in the running of other activities within the faculty and university at large. However, they have made some academic staff devote more time on consultancy work than teaching.

Conclusion

The importance of HEI worldwide, including in Tanzania, is undeniable. Therefore, provision of funding to support to HEI is an important aspect of social and economic development. Unfortunately, funding levels in both the developing and developed world have been declining, more so in developing countries, where we are witnessing a significant decline in government subventions. This scenario calls for immediate action.

This work is an attempt to address this snag. Before presenting and discussing the research results and a proposed responsive leadership model for Tanzania, the next two chapters describe the growth of higher education institutions in Africa, responses to decreasing funding, the research problem, and the approach used in collecting and analyzing data.

Higher Education Institutions in Africa and Responses to Decreasing Funding

HEI in Africa

In recent years, Africa has witnessed tremendous changes in higher education. This is due to the realization that knowledge has become a key driver of growth and development in every country (World, Bank 2007). Through research and increased knowledge, higher education can also help address the challenges arising from population increase, limited arable land, endemic diseases, urbanization, energy costs, and climate change (UNESCO, 2009). People with higher education are better equipped to face new challenges and master technological discoveries.

During the post-colonial era, African higher education was a public good, Universities started offering knowledge and social justice through fair access to knowledge resources as well as a broad range of skills and capabilities through research to accelerate development on the continent (Sawyer, 2004). However, the social and economic challenges that emerged in the 1980s and the subsequent structural adjustment reforms undertaken by many African governments led to the gross underfunding of higher education (Jegede, 2012). By then, education was marginalized by macroeconomic policies where the tone of voice was based on resource allocation to productive enterprises, and higher education was perceived as a non-productive enterprise, thus receiving little funding (URT, 1999). Despite the fact that the potential of higher education as a development catalyst has been noted, fund allocation from the national budget has declined significantly. This has affected universities' functions and mission as centres of education excellence,

resulting in graduates who lack competence in their areas of study. However, the magnitude of challenges and their effects varies across institutions, with the effect higher in newly established institutions.

To address the underfunding problem, higher learning institutions have often responded by increasing student enrolment. The student population in Africa has increased from 2.7 million in 1991 to 9.3 million in 2006. A projection of the recent trends in individual countries suggested that the continent would have between 18 and 20 million students by 2015 (World Bank, 2010)

Nevertheless, high enrolment in higher education in Africa poses its own challenges (Sawyer, 2004). These include shortage of facilities, poor infrastructure, shortage of financial resources, over-reliance on part-time lecturers, absence of research in private institutions as a necessary part of higher education enterprise, and the concentration of profit-focused private institutions that over-invest in directly marketable courses and programmes. Other challenges are shortages of quality faculty; limited capacity of governance, leadership and management; difficulties in diversifying or attracting funding; problems of quality and relevance of teaching and research; limited capacity for research, knowledge generation and adaptation capabilities; and problems in meeting increasing demands for equitable access (NASULGC, 2008).

Much of Africa is in the early stages of ‘massification’ of higher education. In sub-Saharan Africa, with a few exceptions, university enrollments make up less than 10 percent of a rapidly growing age cohort. However, the ‘iron law’ of 21st century higher education cannot be stopped. Countries must cater to increased demand for access to this level of learning. At the same time, the global knowledge economy demands that at least some universities in each country have the research, capacity and ability to work with top universities worldwide. Thus, Africa faces significant challenges at the top and the bottom of the academic system. Key to finding solutions is effective funding mechanisms to support higher education in a rapidly changing environment.

Problems surrounding the financing of higher education institutions are worldwide; however, nowhere in the world is financing higher education more problematic than in sub-Saharan Africa. According to Johstone (2004) the reasons for this stem from two universal forces. The first is the high and increasing unit (or per-student) cost of higher education. This problem can be attributed to a historically entrenched tertiary education production function that is both capital and labour intensive and has proven throughout the world to be especially resistant to labour-saving technology. The second force that greatly exacerbates

the financial problems of tertiary educational institutions and ministries in many countries is the pressure for increasing enrollments, particularly where high birth rates are coupled with a rapidly increasing number of young people finishing secondary school with legitimate aspirations for some tertiary education.

The need (and concomitant pressure on national governments in Africa) to raise enrollment numbers is staggering. In countries where a decade ago thousands of students attended higher education institutions, that figure has grown many times over to become hundreds of thousands. Uganda, which had some 10,000 university students in the early 2000s, now counts more than 100,000 (Johstone, 2004). In Ethiopia, where only two universities operated a decade or so ago, there are now more than 30, raising enrollment figures from some 40,000 to over 400,000 – a whopping tenfold increase. Even with such massive expansions, the proportion of enrollment in the region stands at 5 percent, the lowest in the world. The exploding population growth, not commensurate with economic development, will definitely continue to put even more pressure on the higher education system, even as resources are overstretched.

Countries with higher skill levels are better equipped to face new challenges and master technological discoveries. In sub-Saharan Africa, qualified human capital remains scarce compared to the continent's development needs. This situation hinders growth and undermines the foundation for sustainable development. Because skills required for knowledge economy are built at the tertiary education level, improving tertiary education systems, should be higher on sub-saharan Africa's development agenda. African tertiary education institutions and policy makers must ensure that the workforce acquires the skills to compete, innovate and respond to complex social environmental and economic situations. Furthermore, despite rising enrollment in tertiary level institutions, the numbers of students graduating are pitifully small and despite reform efforts, quality remains well below par (World Bank, 2008).

In Kenya, public universities in particular have been forced to diversify their programmes, establish flexible learning schedules and set up campuses away from their traditional locations (Owanda & Jowi, 2012). Owanda and Jowi also argue that from being ivory towers and national development projects that were solely seen in terms of workforce developments, universities throughout Africa have dispersed to the rural areas both as a strategy to expand access and a bid to position themselves as business entities. However, this expansion has not been driven by the public sector. Rather, it has been driven by the private sector, with branch campuses of public universities in rural areas sometimes serving as private income generation units, outside strict public sector oversight. These developments have

transformed the university in Kenya from 'the ivory tower' perception tag it used to attract from government bureaucrats into an institution that operates closer to the people in the rural areas in terms of location and access.

Access and equity in African tertiary education systems

Obtaining a measure of access and equity is difficult in Africa, partly because it is not always clear what is meant by higher education. In many countries (e.g. Egypt, Botswana) higher or tertiary education implies all post-school or post-secondary education (Mouton et al. 2009). In South Africa, on the other hand, higher education refers only to university education. In this regard, comparing gross enrollment ratios might be inappropriate. For example, South Africa's gross enrollment ratio for higher education is 15 percent while Egypt's (encompassing all post-secondary education) is around 30 percent and Mauritius (also encompassing all post-secondary education) is at 34 percent (ibid).

Notwithstanding this definitional problem, it is evident that participation in HE in sub-Saharan Africa is low in both absolute and relative terms. Of the 23 Sub-Saharan African countries for which data is available, only Mauritius and South Africa have a gross enrollment ratio in double digits. Among these countries, the gross enrollment ratio ranges from 0.4 percent in Malawi to 15 percent in South Africa and 34 percent in Mauritius. Moreover, participation rates in sub-Saharan Africa are substantially lower than the average for both developing countries and developed countries. In addition, the median participation rate for sub-Saharan Africa is 2.5 percent compared to the developing country median of 13 percent and developed country median of 58 percent (UNESCO, 2008). In almost all sub-Saharan countries, with the possible exceptions of Mauritius and South Africa, women have substantially lower participation rates.

As for commitment to HE spending (as a percentage of total national income spending) in the Eastern and Southern African region, the spending is relatively high in comparative sense (Table 1). In fact in countries such as Kenya, Lesotho and Namibia, public expenditure on education is relatively high. However, public spending on HE as a proportion of the education budget varies substantially between countries, ranging from a low of 10 percent in Madagascar to 40 percent in Lesotho (UNESCO, 2008).

Table 2.1: Public expenditure on education as a percentage of gross national income in selected countries

| SN | Country | percentage |
|----|------------------------------------|------------|
| 1 | Kenya | 6.2 |
| 2 | Uganda | 2.5 |
| 3 | Tanzania | 2.2 |
| 4 | South Africa | 5.7 |
| 5 | Democratic Republic of Congo (DRC) | 4.6 |
| 6 | Zambia | 1.9 |
| 7 | Africa | 4.8 |
| 8 | Developing countries | 4.5 |
| 9 | Developed countries | 5.5 |

Source: African Outlook (2005-2008)

Commitments and shortfalls in tertiary education systems in Africa

As part of the external global paradigm to build the knowledge domain for economic success and increase enrollment, some countries – such as Ethiopia, Ghana and Kenya – are spending huge chunks of their national budgets on the expansion and development of higher education (Dougherty & Nattow, 2009). Despite such major commitments, the sub-sector continues to suffer from a shortage of resources for effective generation and dissemination of knowledge. In most countries, the buildings and facilities are in disrepair, the laboratories and workshops are under-equipped, and academic and other staff are poorly remunerated.

African higher education faces considerable and complex challenges because it is endeavouring to expand access while concurrently struggling to maintain quality – both objectives with considerable financial and logistical significance. Prior to the recent mushrooming of private providers, higher education in Africa had virtually been a responsibility of the public domain. Public universities have been deeply reliant on public coffers to offer ‘free’ higher education to all eligible citizens without regard to the capacity to pay. However, public coffers have their limits. With the escalating cost of higher education delivery and simultaneous declining capacity to keep up with this cost, numerous initiatives to mobilize resources – both externally and internally – have been under experimentation. At the national level, governments are vigorously pursuing the cost sharing of

higher education with stakeholders, although with some level of reluctance in some countries, largely due to purported or imminent political implications and security threats.

Riding on strong arguments of more 'private' than 'public' benefits accruing from HE, the sharing of HE costs is consolidating its roots in the region. Cost sharing is now gaining ground as an acceptable mode of educational financing in countries such as Ethiopia, Kenya, Uganda, Tanzania and Zimbabwe, although their modalities and efficacy vary considerably.

In Tanzania, a survey by the Tanzania Commission for Science and Technology (COSTECH) included an estimation of the research and development expenditure, and the total contributions by sources of funding over a nine-year period. From the figures, it is evident that foreign donor contribution to research and development expenditure is the largest, contributing nearly half of the total funds, followed by own funds (31 percent), government funding (14 percent) and the smallest portion is from domestic donors (4 percent).

For example, about 98 percent of research projects undertaken by Sokoine University of Agriculture (SUA) are externally funded through signed agreements between individual researchers, departments, or the university in general, and funding agencies. The other 2 percent is funded by the Government of Tanzania and internal public and non-public organizations. Currently, the Norwegian government, through the Norwegian Agency for Development Cooperation (NORAD), is funding about 51 percent of the research projects at the university (www.suanet.ac.tz). Foreign donor funding in Tanzania contributes approximately 70 percent of the research and development expenditure. Foreign funding agencies concentrate on particular institutions or faculties, notably the University of Dar es Salaam and SUA. Under-funding of higher education has received a lot of attention in African universities. A review by Pillay (2008) highlights the extent of the problem notably in areas of infrastructure and general resource constraints.

Diversifying the resource base in African universities

There is growing recognition and a general pattern of acceptance of diversifying resources of HE beyond public coffers. Cost sharing is the most common method of diversifying resources. It is meant to distribute the cost of HE across potential beneficiaries, including students, parents and guardians, employers and the public. One of the common approaches to implementing cost sharing is establishing a loan scheme for students in financial need. The intention is to develop a revolving fund to help ease the pressure on funding the national HE system. So far, however,

this has been successful in only a few African countries such as South Africa and to a certain extent Kenya. This potentially major resource mobilization effort has been stifled by numerous factors, including ineffective and poorly equipped management, non-committal executives, unenforceable policies, ineffective collecting mechanisms, poor employment environments, high inflation and devaluation.

At the institutional level, a host of resource generation activities have been included. The most common and visible form of resource mobilization has been the development of private programmes in public universities. In what is known as 'the privatization of public universities', programs for 'private' students have become actively operational under Track 1-Track II/Mode I-Mode II regimes. In some countries, the number of slots for the regular students/Track I/Mode I students has been shrinking over the years while the number of fee-paying/Track II/ Mode II students has increased considerably. For instance, the contribution of fees from Mode II students to total university income rose about 38 percent in 1997-1998 to 33 percent in 2000-2003 at the University of Nairobi. At Kenyatta University, tuition fees from Mode II students accounted for 48 percent of the university's revenue in 2009. More dramatically, Makerere University has increased its income from tuition fees from 30 percent in 1990 to as much as 80 percent (Musisi & Muwanga, 2003).

Many institutions have also been establishing businesses as part of or entities separate from the universities' administration and management. Universities now commonly operate services such as bookstores, cafeterias, farms and facility rentals on a commercial basis. In more advanced cases, such as Kenya, for example, Moi University has registered limited private companies independent of the institution and run by a Chief Executive Officer (CEO). Once the taboos of privatizing the public HE system were dismantled, institutions began imposing fees on a variety of services, including exam registration, identification cards, library access and ICT use. Institutions have found these internal resource generation approaches to be less controversial than imposing hefty tuition fees, which are often subject to stiff resistance that draws undue attention from external stakeholders such as politicians, governments and media.

One noticeable pattern of resource diversification is the institutions' tendency to be slow in effectively exploiting and mobilizing initiatives. Universities tend to be disinclined to deploy their academic potential other than intensively engaging faculty in teaching. Needless to say, the tripartite functions of a university ought to be teaching, research and service; all these elements are not yet effectively deployed to enhance resources.

Leadership and management in universities

In the past decades, the control and supervision of higher learning institutions were state responsibilities, and governments ensured effective control over university issues (World Bank, 2008). However, this was possible not only because higher learning institutions were few but also because the resource allocation matched with the needs of the respective institutions. The number of enrollments was low since many people did not consider education an important asset for community development. On the contrary, currently, education is considered the most appealing economic propeller across developing countries. Given the increasing number of higher institutions, both public and private, the state cannot exert effective control and supervision. The complexity of the higher education system due to massification of universities causes difficulties in management and monitoring tasks and thus requires more specialization (World Bank, 2008). This has resulted in control being within the universities (autonomy) while the state retains supervision and monitoring of performances based on policy and pre-determined strategies. As afore mentioned, the challenges facing higher education institutions in Africa are to some extent exacerbated by weak leadership, management and governance (NASULGC, 2008).

The experience in many universities in Tanzania shows that academic leaders often have an inadequate understanding of management, resulting in poor strategic planning, advocacy, financial planning and management, partnership building, networking and diversification of funding sources. Conversely, the new changes in the higher learning institution environment require leaders who can thrive despite the challenges and steer the universities to success. In addition, effective university leaders are required to develop managerial behaviour and quality to adapt to a changing environment. In this scenario, it is important to note that management focuses on developing goals and tasks while leadership influences direction and performance in attaining the university's goals. In achieving the current needs in the universities dynamic leadership that can foster innovation is of utmost important.

Furthermore, improvements are needed in the higher education system and institutional governance. The challenges are in the following areas:

1. Coordination and interpretation of national education policies and goals as well as regional developmental priorities
2. Policy frameworks, institutional support and incentives for science and technology
3. Planning, application and monitoring of higher education funding
4. Institutionalization of national quality assurance systems; and
5. Higher education data collection and management of information systems.

Leadership development (in the broadest sense of the term) will be a priority in addressing these challenges. Yet, if higher education is to contribute to regional development, this perspective will be vital. Thus, there is need for the development of a vision for higher education leadership in the region, involving engagement between institutions, regional and national associations, and education ministries.

National budget allocations for education

In recent decades, a growing number of countries have sought innovative solutions to the substantial challenges they face in financing higher education (Cheboi, 2008). One of the principle challenges requiring innovative strategies is the fact that the demand for education in higher learning institution in most countries around the world is growing faster than the ability or willingness of governments to provide public resources that are adequate to meet this demand. The innovative strategies are described in detail in chapter five (responsive leadership model).

For instance, in South Africa, sources of funds for public higher education institutions include government grants (50 percent), student tuition and other fees (25 percent) and other private income (25 percent) (Ministry of Education, 2004). These proportions are likely to vary widely across institutions. For example, government grants as a proportion of total income can be as low as 35 percent if an institution is able to raise large amounts of private funds through research contracts, donations and investments, but can be as high as 65 percent in the case of institutions which are not able to generate substantial amounts of income.

In South Africa, the Ministry of Education has direct control over only government grants for public universities. The ministry has no control over incomes raised from student fees and other private sources when distributing government grants to individual institutions.

In Tanzania, although financing of the education sector is to a large extent the responsibility of the government, the cost sharing policy introduced in the 1992/93 academic year also brought in the concept of sharing responsibility between the government and beneficiaries. In this context, beneficiaries include parents, students and other stakeholders. Scholars (e.g. Cheboi, 2008; Ishengoma, 2010) attribute the diminishing budget allocations from the government, which have made it difficult for institutions of higher learning to operate smoothly, to the cost sharing policy.

According to Ishengoma, (2010) between the 1999/2000 and 2006/2007 academic years, for example, the allocated budget for the education sector as a percentage of the total budget ranged between 11 percent and 22 percent, with the average being around 16 percent. The author further reveals that out of the

budget allocation for education, only less than 20 percent (around 17 percent) was allocated to tertiary and higher education. Paradoxically, as budget allocation declines, student enrolment has been on the increase. As pointed out by URT, (1998) in the cost sharing model adopted by Tanzania, the government and communities contribute about 82 percent of the funds while students, parents and households contribute about 12 percent. Donors and other sources contribute about 6 percent. Much of the government support goes through HESLB, which was established to facilitate students' access to loans.

Ishengoma, (2010) rightly concludes that most public universities in Tanzania depend heavily on decreasing government subventions and are unable to raise the much needed internally generated funds through enrollment of more privately sponsored students as is the case in Kenya and Uganda. The argument in this publication is that universities need to diversify their funding sources. To realize this objective, special leadership and management traits are required on the part of university administration.

Review of some national policies on higher education in Tanzania

The contribution of higher education and training to national development is of paramount importance. This is because the higher education sub-sector produces the human resource for development in such disciplines as human and animal medicine, engineering, education, architecture and the top-level civil service, to mention a few. As a result, higher education and training in Tanzania is influenced by several policy frameworks and plans. Apart from the Tanzania Development Vision 2025 (URT 1996a) and related Poverty Reduction Strategy Paper (URT, 2004a), the other major relevant policy documents include the Employment Policy (URT, 1995), the National Science and Technology Policy (URT, 1996b), the National Higher Education Policy (URT, 1999), the Higher Education Sub-Master Plan (URT, 2003a), the Science and Technology Sub-Master Plan (URT, 2003b) and the Higher Education Loans Board Act (URT, 2004b). An analysis of these policy documents brings out the following major policy directions related to higher education and the training of professionals in the country:

- To expand student enrolment in science and technology;
- To enhance gender and equity in science and technology access and participation;
- To use science and technology as a key tool towards poverty reduction and sustainable national development, hence cultivating a science and technology culture in the Tanzanian society;
- To improve the national scientific and technological human resource capacity;

- To have youths and adults imparted with entrepreneurial skills to enable them go into sustainable self-employment;
- To encourage flexibility in training programmes, both in terms of contents and course delivery;
- To give emphasis to new and emerging areas of technology such as ICT and biotechnology;
- To promote strategic national research and development priorities;
- To exploit natural resources with no or minimum negative effects on the environment;
- To address and combat HIV/AIDS.

Apart from these policy directives, in terms of expansion of student enrolment, the education sector reforms require that 100 percent of all children reaching the primary school age be admitted to schools and that at least 75 percent of all pupils completing primary school education join O-level secondary education. Ultimately, at least 25 percent of pupils completing ordinary secondary school education should join advanced-level secondary education. Important is also the target to have at least 70 percent of A-level graduates pass their final examinations and become eligible to join universities. Obviously, these targets, if realized, will have a direct bearing on the operation of higher education institutions in Tanzania, especially on capacity (including human resources) to manage and accommodate the anticipated influx of students completing high schools and competing for university education.

In an endeavor to implement these directives, higher learning institutions in Tanzania have formulated missions and strategies aimed at providing access to high quality education and training. As mentioned earlier, it is the challenge of university leadership to accomplish their mission in the midst of limited financial resources, which are the central focus in the proposed research.

Sustainability of funding in higher education

It is evident that the overall picture of HE in Southern African Development Community (SADC) countries, with a few notable exceptions, is characterized by inadequacy, inefficiency and inequity. Nevertheless, there are several examples of good practice that member countries may want to study and possibly emulate. A number of financial practices have been adopted to address the inadequacy of public expenditure on higher education. These include:

- Private-public partnerships (PPP): To address the issue of scarce public resources, Botswana is establishing a new university on PPP basis. In this model, the state will provide substantial funding for capital expenditure while the private sector will be responsible for operational expenditure. A similar venture is being created in Zambia at Mulungushi University.
- The differentiated government funding model: In Mauritius, public institutions are not all funded in the same way. Institutions yielding high private returns (e.g. the University of Technology) receive lower funding compared to institutions yielding greater social returns (such as teacher education).
- Cost sharing: Several countries have recently introduced cost sharing in the form of tuition fees to address the inadequacy of institutional revenue. This is particularly so in Namibia, Mauritius, Zambia and Tanzania. South Africa has always had a fee-paying system in HE. However, not all countries apply cost sharing equitably because of the dual track tuition programmes (e.g. in Zambia, Tanzania and Zimbabwe).

Cost sharing is a common phenomenon applied and implemented in many countries in the world at large (Johnstone, 2003). It involves direct transference of all or some costs from the government or public to individuals or other stakeholders in any development process. Central to this understanding, cost sharing in higher education may be considered to be the shift of at least some of the higher educational cost burden from the government (public), or taxpayers, to parents, students and other donors (Johnstone, 2003). The government partly sponsors a few students and the rest become self-sponsored.

Many countries have adopted and implemented a cost sharing policy that has resulted in increased participation in higher institutions. For example, in Zambia the government used to sponsor all students admitted to the public universities from 1966 to 1996. The University of Zambia was well financed from 1966 to 1974, when the country's economy was relatively sound, with substantial revenues from the mining industries (Masaiti and Shen, 2013). The situation changed after 1975, when the economy declined with a dramatic fall in copper prices and a global economic recession. Masaiti and Shen, (2013) point out that the situation was worsened when another public university (Copperbelt University) was opened in 1987. The Government of Zambia embarked on cost sharing in higher education as a way to improve the declining fortunes of the public universities (Masaiti and Shen, 2013). All students in higher education institutions in Zambia were required to bear some or all costs. Similarly, cost sharing has

been implemented in Tanzania. According to Ishengoma, (2004), “cost sharing in higher education in Tanzania was officially reinstated in the late 1980s largely due to the government’s inability to finance free public higher education in addition to all of the other pressing public needs”. It is worth noting that cost sharing takes different forms as implemented in various countries. For example, cost sharing can include tuition fees and user charges, which may be paid by the students and/or partly by the government (Masaiti and shen, 2013). Despite the fact that most African governments were the chief bearers of higher education costs before reinstatement of cost sharing, the participation was relatively low as compared to after the implementation of the cost sharing policy in many countries. This in effect has resulted in massification of universities and colleges as well as student enrollment. Some financing policies have often been adopted to address the challenges associated with cost sharing, with the purpose of improving access to higher education by low income earners. These include:

- Provincial scholarships: Mozambique provides scholarships to poor students from rural areas.
- Loans to students in private HE institutions: Botswana and Tanzania effectively see these as grants. These grants enhance equity, as students from lower socio-economic groups can attend private HE institutions.
- Loan schemes to address access and equity: South Africa’s national student loan scheme is designed to attract larger numbers of historically disadvantaged students into higher education.

Challenging graduates’ attributes

Literature suggest that graduates from African universities in the 21st century are required to have specific traits that will enable them to be more competitive in the labour market. Some of these traits are briefly reviewed in this section (Figure 2.2). The review intends to consolidate the central challenge that the proposed research will endeavour to address; the hypothesis that without responsive leadership models in Tanzanian universities, graduates with the required traits will not be realized.

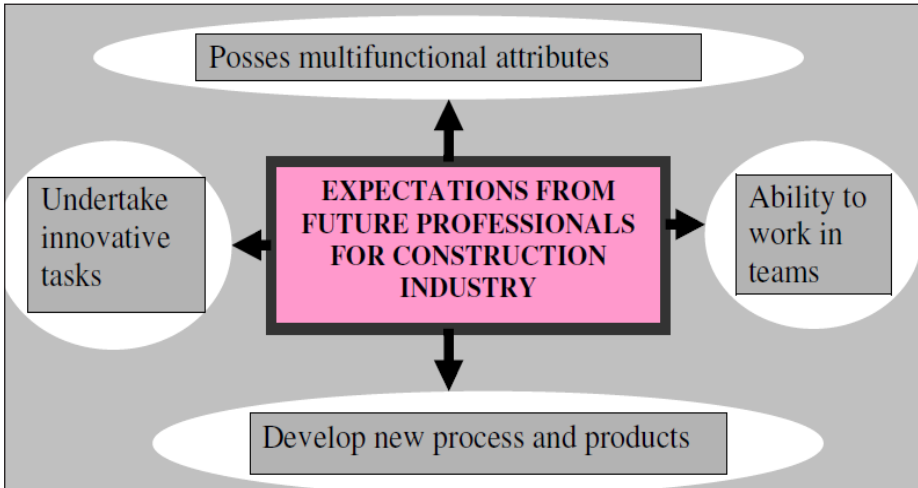


Figure 2.1: Schematic presentation of preferred traits from graduates

Source: (Kaseva, undated)

Figure 2 demonstrates that apart from competence in their area of specialization, future graduates will be expected to have skills in managing their team members to make them focus on achieving organization goals. They will need to be technically skillful, broadly knowledgeable, innovative, and with entrepreneurial and commercial knowledge about world markets. They also need to be professionally flexible and mobile. Within the context of productivity and innovation, professionals of tomorrow shall be expected to play a more significant role in e.g. undertaking innovative tasks and ability to work in multidisciplinary teams. The true wealth of any nation is embedded in its human capital. Future professionals will now be supposed to develop the new processes and products and to create and manage new systems for civil infrastructure, manufacturing, health care delivery, information management, computer-communications, and others. They will have to put knowledge to work for society and in so doing, enable a huge potential for the private sector to create wealth and jobs. Additionally, the changing environment expects future professionals to be able to work in teams and communicate well. They must be flexible, adaptable, and resilient. Equally important, they must be able to view their work from a systems approach, effecting connections, and within the context of ethical, political international, environmental, and economic considerations.

Responsive and reflective higher learning institutions

Since the 1980s, the development of reflective skills has been widely adopted in a range of higher education and best practice professional settings, including education, health sciences, and leadership (Flinders University, 2005).

Organizational change generates new knowledge, which in turn requires a structure of learning that should, when managed properly, result in transformative behavior, supporting the continued evolution of organizational culture (Bradley & Nolan, 1998). Such events are not as predictable as what individuals in organizations have experienced prior to the advent of new events. In viewing technology then as a dynamic variable, and as one that requires systemic and cultural change, we may regard organizational change as an inherent, internal driving force, and which will henceforth be referred to as technological dynamism.

Historically, higher education providers have engaged employers through research, knowledge transfer, placements and internships, as well as the development of curriculum content. This is employer engagement in its widest sense. Such provision, however, involves the delivery of services tailored to the needs of an individual employer or of an employment sector. It also involves more in-depth work with employers.

Employer-responsive behaviour usually involves a shift from the traditional models of provision to a model where the institution responds to the needs of the employer in a variety of ways. These may include the provision of programmes/courses for particular employers or sectors, the development of (small unit) credit-based learning opportunities, the accreditation of prior experiential learning (APEL), and learning situated in a workplace or based around a work situation. Such provision may also feature the involvement of employers in the design and delivery of programmes, the use of the workplace as a site of learning and assessment and the involvement of employers in assessment

As can be seen, there is a variety of provisions that may be classed as employer-responsive depending on the institutional definitions applied. Some institutions see all provisions involving an employer or private provider in any aspect as employer-responsive provision. Such a definition would therefore encompass more traditional provision, such as programmes with placement and professionally-accredited programmes with clinical practice, for example medicine, dentistry and nursing. Other institutions have a narrower definition of programmes that they would consider to be responsive to employers' needs.

Universities' responses to decreasing funding

In different countries around the world, higher learning institutions have their own ways of responding to decreased funding. In America, in response to state budget cuts, public higher education institutions are trying to find creative ways, such as premium graduate programmes, to strengthen their budgets while keeping the public education mission alive (Dell, 2011). For example, George Mason University in Fairfax is working on specialized graduate-level programmes that will bring a profit to the university. They expect the programmes to be designed for professional enhancement.

In Europe, the European higher education systems have also experienced important changes over recent decades, leading to higher autonomy in most cases (Pérez and Zubieta 2011). Additionally, as a university becomes more autonomous, it becomes more able to better compete in obtaining funds from different sources, such as competitive funds, contracts with private companies, and donations from non-profit making sectors. This makes institutions less dependent on a single stream of income and more able to adapt to a changing environment.

In Africa, financing higher education is one of the most compelling and challenging issues in the domain of higher education (Kariuki 2007). The costs of running institutions of higher education are exceptionally high. In spite of this, the management and funding of higher education remain predominantly the roles of governments, even with their dwindling budgets.

Many African countries are responding to the challenge of providing higher education by promoting the creation of private universities. In the recent past, many universities in East Africa have vigorously entered into new programmes – popularly known as parallel degree programmes (PDP) or privately sponsored student programmes – which are geared towards fund-raising for universities, but with a shift towards fulfilling job market needs. These programmes were introduced to cater for reduced funding for the respective institutions due to budgetary constraints and pressure from the IMF and World Bank (Zezeza and Olukoshi 2004).

Conclusion

HEI in Africa have continued to increase at an increasing rate, but this growth has been hampered by decreasing government funding, shortage of facilities, poor infrastructure, weak leadership, and limited capacity of governance. To address these challenges HEI have in most cases been responding by increasing enrolment of students, diversification of resources of higher education beyond the public coffers such as cost sharing, and having leaders who can thrive on the noted changes in higher learning institutions environment. Unfortunately, these challenges to a larger extent have not achieved the expected results. It is argued that Private-Public Partnerships (PPP), cost sharing and differentiated government funding model can in the short-term address the problem.

Study Approach

Introduction

A combination of data collection methods and techniques, hereby referred to as ‘triangulation – looking at a problem from various viewpoints’ was used in data collection. The aim was to increase data validity and reliability. Different scholars (Denzin 1970; Miller & Wilson 1983; Punch, 2000; Olsen 2004) put more emphasis on the need to use a combination of methods in order to corroborate and ensure validity. This does not necessarily provide proof, but improves consistency across methods through a process of ‘triangulation’ (Denzin 1970; Flick 1992; Gilbert, 1993; Bryman, 1996; Bryman, 2003; Tribe & Summer, 2004; Kumar, 2005). The methods used in the collection of primary and secondary data included review of the existing documentation through a desk study, interviews with key informants, and consultative workshops with HE stakeholders, as detailed below.

Desk study

Relevant literature demonstrating the relationship between university financing, leadership structures and deliverables from institutions of higher learning in Tanzania and abroad were reviewed. The review was geared towards elaborating the problems facing African universities in the context of this research. Different sources of literature were accessed and reviewed, including journal papers, books, conference proceedings and the internet. Secondary data review was thought relevant in that it could reveal what was known and what was not known in our thematic research area and access best practices of funding models elsewhere.

Sampling and sample size

Nine universities, representing about 23 percent of all universities in the country, were involved in the survey, and sampling was purposive. This was meant to ensure inclusion of diverse HEI, that is, public and private institutions and representation of the United Republic of Tanzania (including Zanzibar).

The higher learning institutions involved in this study were: Sokoine University of Agriculture (SUA), Mzumbe University (MU), Tumaini University (now Iringa University), University of Dodoma (UDOM), Kilimanjaro Christian Medical Centre (KCMC), University of Dar es Salaam (UDSM), State University of Zanzibar (SUZA), Open University of Tanzania (OUT) and Dar e Salaam University College of Education (DUCE).

Within each university, 100 percent of university top management (vice chancellors, deputy vice chancellors, provosts and deputy provosts) were interviewed. Furthermore, at least 20 percent of the middle-level management (deans, directors and heads of department) were also interviewed. Additionally, about 5 percent of employees (3 percent academic and 2 percent support staff) and student leaders in each university were consulted. These subjects were thought to be knowledgeable on issues being investigated at university level, and their experiences was thought to be of paramount importance.

Interviews with key informants

Key informant interviews with university leaders, members of academic/support staff, Tanzania Commission for Universities (TCU), academic staff associations, academic staff workers unions, the business community and the student community were conducted to collect primary data on the key research questions posed in this research. Pre-designed questionnaires and checklists were used in collecting data from these officials and/or HE community.

Consultative workshops

Two technical workshops, namely the methodological workshop and mid-term review workshop, were conducted to discuss research findings. The details of each workshop are described below.

Methodological workshop

The purpose of this workshop was to share the developed methodologies for conducting the study. The workshop took place during the project inception phase of the research, which involved representatives (planning officers and academic staff) from all the universities that took part in the study. The participants were able to familiarize with the research data collection, analysis and reporting frameworks.



Figure 3.1: Participants of the methodological workshop in Dodoma

Mid-term review workshop

This workshop took place during the mid-term period of the research to assess progress of the project and identify strengths and areas for improvement. During this workshop preliminary results were presented and discussed. The workshop also served as a monitoring and evaluation mechanism.

Data analysis

The data collected were both quantitative and qualitative in nature. Qualitative data analysis techniques including content analysis were deployed. As pointed out by several social researchers, qualitative data analysis has no one 'right' way to proceed (Hesse-Biber & Leavy, 2004). Some argue that qualitative analysis is 'intellectual craftsmanship' (Tesch 1990), and therefore needs to be done 'artificially' (Hesse-Biber & Leavy 2004), even 'playfully' (Goetz & Lecompte 1984). However, qualitative data analysis also requires a great amount of 'methodological knowledge and intellectual competence and/or craftsmanship' (Tesch 1990; Hesse-Biber & Leavy 2004).

Study Findings

Introduction

This study sought to achieve three main objectives. The first was to highlight HEI funding challenges. The second was to document best practices in terms of responsive university leadership structures. The third was to propose a university leadership model that could guide universities to become more responsive to a decrease in financing through diversification of funding sources. In this chapter, only objectives one and two will be addressed. Objective three will be dealt with in chapter five.

To address these two objectives the chapter is organized into two main sections. The first section, which addresses the first objective, is organized into two major sub-sections: the profile of higher education institutions/stakeholders consulted, and financial challenges facing HEI. Further, the section highlights and discusses the current higher education needs, current sources of operational funds, availability of financial resources, and factors hindering efforts to address financial challenges. Other aspects covered in this section are strategies to address financial inadequacy and suggestions to improve the financial situation in HEI. The second section addresses the second objective, including a discussion on HEI funding models. The best practice experiences were instrumental in addressing the third study objective.

HEI funding challenges

Profile of higher education institutions and stakeholders consulted

A total of nine, that is, seven public and two private, HEIs were involved in the study (Table 3). Respondents included academics, non-academics/representatives

of trade unions, and students. Overall, the proportion of respondents was as follows: academic staff (58.1%; n=182), non-academic staff (11.4%), students (29.1%), and trade union representatives (1.4%).

Table: 4.1: Profile of the institutions of higher learning involved in the study

| University/ Institution | Category (Pr/Pu) | Affiliated/ independent | Year of establishment | 2016/2017 | |
|----------------------------|---------------------|----------------------------|--------------------------|-----------|-----------------------|
| | | | | Staff | Enrolled students* |
| KCMC | Private | Independent | 1997 | 1000 | - |
| MU | Public | Independent | 2001 | 587 | 6,000 |
| OUT | Public | Independent | 1992 | - | 40,000 |
| SUA | Public | Independent | 1984 | 1600 | 8,000 |
| SUZA | Public | Independent | 2002 | 250 | 1600 |
| TU | Private | Independent | 2003 | - | - |
| UDSM | Public | Independent | 1962 | 2300 | 19,000 |
| UDOM | Public | Independent | 2007 | 1,400 | 25,000 |
| DUCE | Public | Affiliated | 2006 | 150 | 2,000 |

*Undergraduate, postgraduate, certificate and diploma students

Pr = Private

Pu = Public

The results indicate that the number of universities has increased five-fold in the last two decades. The increases have been in both public and private universities. This, in turn, has provided a greater chance of enrollment and the number of students has increased more tremendously than ever before. This may have been a result of the realization of the potential of higher education in the country.

The results in Table 3 show that Open University of Tanzania (OUT) hosted the highest number of students (40,000), followed by UDOM (20,000) while SUZA had the least number of students among the universities surveyed (1600). These findings are interesting when considering vis a vis the establishment dates of the universities. OUT and UDOM were established in 1997 and 2007, while UDSM and SUA, the oldest universities in the country, were hosting 19,000 and 8,000 students, respectively. However, OUT offers an open and distance learning model, and at a lower cost compared to the regular universities. This allows flexible learning and long-drawn-out periods of course completion. OUT has become increasingly accessible, with centres across the country, and has attracted many students, such that its enrollment tends to increase annually at a higher rate in comparison to the so-called common universities.

Enrollment has also grown steadily at UDOM, despite the fact that it is a traditional university, and newer than UDSM and SUA. This could be contributed to its high capacity, with many buildings that can accommodate large numbers of students at a time. Capacity is a major determinant of enrollment. For example, the growth in student enrollments at the UDSM, especially from academic year 1998/1999 to 2001/2002, followed the opening of three additional hostels (Ishengoma 2004).

The ever increasing number of universities and students observed in the country may conform the projection that Africa will have between 18 and 20 million higher education students by 2015. In about 10 countries, including Tanzania, the number of HE students is expected to triple as compared to the 2006 benchmark (Devarajan et al. 2011). The present and expected increase in the number of higher education institutions and students in Tanzania has been contributed to by a number of factors. According to Ishengoma (2004), “The principal objective of cost sharing in Tanzania was to increase participation at and accessibility to all institutions of higher education.”

The implementation of a cost sharing policy enabled needy students to be enrolled in HEI, increasing the participation at this level of education compared to the previous years. Before the introduction of cost sharing in the late 1980s, all costs were borne by the government (Ishengoma 2004). However, given the limited financial resources and competing public needs, the door for enrollment was narrow and many students did not get admission, regardless of their qualifications. The present findings indicate that student enrollment in higher education in Tanzania has increased and is expected to increase in the near future due to cost sharing. Interestingly, cost sharing was initially seen to have little or no positive impact on enrollment in higher institutions due to the low economic status of many Tanzanians (Ishengoma 2004).

In addition, the progress achieved in primary and secondary school strategies in increasing student participation in the country has resulted in an increase in the number of students enrolled in higher academic institutions. The Government of Tanzania has undertaken different initiatives by implementing cost sharing where the citizens have been involved in establishing secondary schools in every ward in the country; the so called *secondary za kata*. Devarajan et al., (2011), state that the increase in the number of students enrolled in higher institutions in many African countries is a result of the progress achieved in primary and secondary school. It is well known in many developing countries, if not globally, that primary and secondary school levels stand as central foundations for anyone to be admitted to a higher institution. In this regard, the increased number of students

in higher institutions in Tanzania is drawn from primary and secondary schools consecutively. This implies that an increase in infrastructure leads to expansion and more enrollments. It is obvious that the introduction of education privatization in the country resulted in an increased number of colleges and universities, and this in effect increased student enrollment at HE level.

Furthermore, the increase in enrollment has been contributed to by the increase in capacity among universities and colleges. This increase in capacity may be seen in two corresponding dimensions; the increase in infrastructure, and the establishment of new programmes, both degree and non-degree. Many universities have constructed new lecture rooms as well as hostels to accommodate more students at one time. This has resulted in many universities increasing their enrolments. For example, Ishengoma, (2004) showed that very modest growth in student enrollment at UDSM from 1998/1999 to 2001/2002 may have been mainly attributed to the university's increase in capacity by purchasing two student hostels and constructing another. The same applies to SUA, which constructed two hostels in 2011 and the enrollment increased in subsequent years. Similarly, the design and establishment of new degree and non-degree programs among universities has widened the choices for students and resulted in an increase in enrollment levels.

On the downside, the numbers of staff across the universities surveyed does not match the vast increase in the number of universities and students. For example, the student-staff ratio is 29:1 at UDOM. It is important to note that the numbers of staff includes all the university employees and that if one were to consider student-academic staff ratio, the numbers would change tremendously.

The vigorous expansion of HEIs coupled with decreasing funding in some cases has created a competitive environment which calls for university leadership that can attract adequate funds and be proactive in the changing environment without compromising the quality of education provided.

Financial challenges

The financial challenges facing Tanzanian universities are mainly poor fund-raising strategies, poor government financial support, and conflicts between universities and donors (See Fig. 8). The proportion of challenges varies. For example, public universities are more affected than private universities.

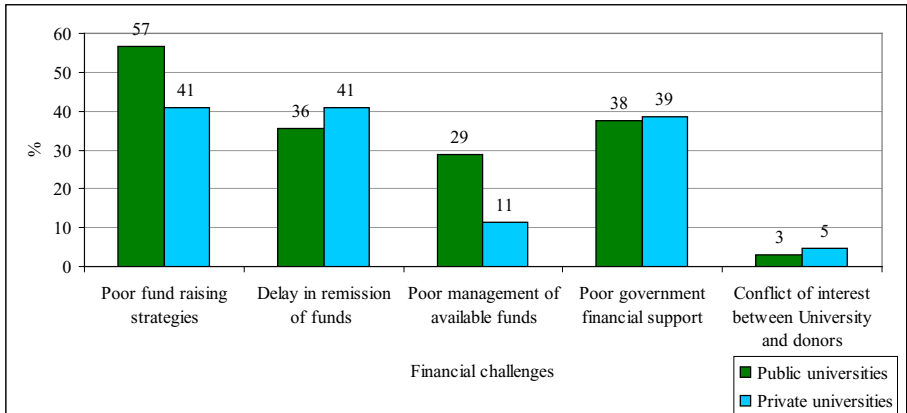


Figure 4.1: Financial challenges facing universities

Most universities, both public and private, do not have fund-raising strategies in place. Many times, universities have strategic plans that are operationalized into annual plans for seeking funds, but there are no strategies laid down to raise funds. This is partly attributed to overdependence on traditional funding sources, namely government subventions and student fees. Overdependence on government subventions is demonstrated in Figure 8 whereby if the remission of funds is delayed or if government support weakens, universities become severely affected. It is time for university leaders to think outside the box and develop workable fund-raising strategies with various options of fund generation.

Of equal importance is the issue of efficient management of the meager financial resources available. As reported in Figure 8, financial management is a great challenge, especially in public universities. This is partly because in a number of universities expenditure cannot be realistically aligned to budgets because government funding to universities is unreliable and often erratic. Universities receive less than 40% of what they budget for. Once the funds are received, they often end up being used for repayment of debts to various internal and external creditors, so the institutions end up trapped in a vicious *borrowing – paying – borrowing* cycle. Such a cycle provides many loopholes for mismanagement of funds.

The sources of fund and funding strategies for many universities in Africa create challenges for the leaderships of many universities, particular with the current decreasing funding from the government. For example, findings revealed that private and public universities in the Democratic Republic of Congo are facing serious challenges related to funding sources and funding strategies, with tuition

fees and donors having been the main sources of funds used to cover operational expenses (World Bank 2005). However, relying on a few sources of funds results in limited financing, making university development difficult. To this end, creativity and advanced strategies in raising funds is critical in higher education institutions.

According to the Nigerian Institute of Management (1988), cited by Famurewa (2014), fund-raising strategies that may be used by higher education institutions include: (1) financial aid such as endowment funds and gifts, development appeal funds and alumni funds, (2) sale of services i.e. sale of admission forms and general services, rental of physical facilities and charging for consultancy services, and (3) business enterprises in agriculture, manufacturing, commercial ventures and portfolio management. However, for this to happen, effective planning and management must be place. Other aspects linked to funding challenges which were investigated include higher education needs, current sources of funding, factors hindering, strategies... and suggestions as detailed below.

Current higher education needs

Stakeholders in higher education in both public and private institutions were asked to assess the adequacy or inadequacy of facilities currently offered by the universities. The ten facilities and/or aspects assessed were those thought by the authors as of prime importance in quality education delivery aspects. These included staff training, building/teaching facility repairs, availability of student hostels, availability of books/libraries, and availability of laboratories and associated equipment. Others were availability of teaching aids (e.g. projectors), practical and field training, transport facilities and availability of internet services. The findings from the assessment are summarized in Table 4.

The adequacy or inadequacy varied. Overall, 65 percent of the respondents were of the opinion that university facilities in both public and private institutions were inadequate, with the most affected areas being laboratories and associated facilities, books and libraries, student hostels, building and repair of classrooms, transport facilities and staff training. These challenges were seen to be more rampant in public universities, with 70 percent of respondents perceiving them as inadequate, compared to 51 percent of private universities. In private universities, the most inadequate facilities mentioned, in order of importance, included student hostels, laboratories and associated facilities, transport facilities, and construction and repair of buildings. Communication facilities were said to be the only adequate aspect of private universities was communication facilities. On the other hand, in public universities, the most limiting facilities were laboratories, books, teaching aids, and practical and field training.

Table 4.2: Perceived adequacy of various facilities in universities

| Aspect | Adequate | | | | Inadequate | | | | Adequate | | Inadequate | |
|---|----------|----|---------|----|------------|----|---------|----|----------|----|------------|----|
| | Public | | Private | | Public | | Private | | Overall | | Overall | |
| | f | % | f | % | f | % | f | % | f | % | f | % |
| Staff training | 39 | 30 | 18 | 44 | 90 | 70 | 23 | 56 | 57 | 34 | 113 | 66 |
| Building and repair of classrooms and teaching facilities | 38 | 30 | 16 | 39 | 88 | 70 | 25 | 61 | 54 | 32 | 113 | 68 |
| Student hostels | 45 | 35 | 4 | 10 | 82 | 65 | 36 | 90 | 49 | 29 | 118 | 71 |
| Books and library facilities | 26 | 20 | 18 | 47 | 103 | 80 | 20 | 53 | 44 | 26 | 123 | 74 |
| Laboratories and associated equipment | 9 | 8 | 13 | 36 | 110 | 92 | 23 | 64 | 22 | 14 | 133 | 86 |
| Teaching aids (computers, projectors) | 31 | 24 | 23 | 61 | 97 | 76 | 15 | 39 | 54 | 33 | 112 | 67 |
| Practical and field training | 33 | 26 | 28 | 76 | 96 | 74 | 9 | 24 | 61 | 37 | 105 | 63 |
| Transport facilities | 40 | 32 | 13 | 36 | 85 | 68 | 23 | 64 | 53 | 33 | 108 | 67 |
| Communication facilities | 65 | 53 | 31 | 79 | 58 | 47 | 8 | 21 | 96 | 59 | 66 | 41 |
| Internet services | 51 | 42 | 26 | 67 | 70 | 58 | 13 | 33 | 77 | 48 | 83 | 52 |
| Average | 377 | 30 | 190 | 49 | 879 | 70 | 195 | 51 | 567 | 35 | 1074 | 65 |

The fact that public universities are worse off than private ones can be attributed to four main factors. The first is the high number of enrolled students, which does not correspond with the available educational infrastructure. The second is the inadequacy of funds allocated to the education sector, which consequently affects public universities. The third is the weakness in research and consultancy units; in most public universities, these units are either not very active or not aggressive enough or both, and as a result, opportunities of generating extra funds are in most cases lost. The fourth factor is lack of innovative ways of ensuring universities, be it public or private, run their activities sustainably. The situation is similar in many universities across Africa, where there are material and non-material needs related to quality faculty; good governance, leadership and management; adequate financial support; facilities and infrastructure; quality and relevance of teaching; capacity of research and training are major challenges (NASULGC, 2008).

Similarly, Mugimu (2009) highlighted almost similar difficulties facing African HEIs, including infrastructure, lack of funding, shortage of human resources, outdated curricula, poor ICT infrastructure, and poor library facilities.

However, it is important to note that admitting an ever-increasing number of students results in a trade-off that often occurs at the expense of quality due to insufficient material and non-material resources. Many universities, both public and private, are finding it increasingly difficult to construct new hostels and other buildings. For example, the University of Zambia was established in 1966 with a capacity to host about 4,000 students. However, it is now admitting over 15,000 students with the same infrastructure (Masaiti and Shen, 2013). Masaiti (2012) cited by Masaiti and Shen, (2013) highlighted that rooms in the student halls of residence were initially designed to accommodate two people but are now made to accommodate more students and lecture halls are overstretched.

In addition, the replenishment of teaching materials, maintain a teaching staff, and investment in research and training for new teachers is insufficient. The shortage of staff and deterioration of staff conditions has been reported as a challenge facing many universities in Africa (Morley et al., 2008), with the consequence of brain drain. In addition, many lecturers supplement their incomes by providing services to the private sector (World Bank, 2010). These challenges must be addressed urgently if the contributions of higher education to economic and social development are to be realized in Africa continent.

Notably, an increase in the number of students joining higher education institutions has been highlighted as the central challenge in higher education provision. Literature shows that the observed shortages in higher education needs are due to the ever-increasing student enrollment. However, it is important to note that higher education institutions tend to expand by increasing student admission, but not in hand along with infrastructure expansions. The two are interconnected and must be handled wisely, with proper planning and discipline, to ensure quality education.

During this study, it was also observed that only a few universities are aggressive in ensuring they run their activities sustainability. The University of Tumaini in Iringa exemplifies this innovativeness. For example, between 2009 and 2012, the university borrowed money from CRDB Bank and Tanzania Education Authority (TEA) for the construction of hostel and library buildings. Other universities should emulate this example. Different approaches have been adopted and shown successful results in income generation for universities in developed and developing countries. For example, the agricultural colleges at Jimma and Debub universities in Ethiopia can cover one-fifth of their recurrent budget with earnings from agricultural production.

Similarly, Addis Ababa College of Commerce and Addis Ababa University in Ethiopia have established evening courses and contracted short courses through which they generate revenues covering about 32 percent and 7 percent for their budgets, respectively (Saint, 2004). These activities supplement the funds provided by the government in a substantial way if well planned and managed by university leaders.

Current sources of operational funds

Higher learning institutions in Tanzania have been receiving operational and research funds from different sources to ensure that the universities' needs are addressed promptly. The main sources of finances for private institutions have been internally generated funds, donors and government subventions. In public universities, the sources identified were government subventions, internally generated funds and companies or industries (Fig. 4). The government, despite its declining subventions to public higher education institutions, remains the major source of financing, specifically financing recurrent expenditure and tuition-dependent private higher education institutions by providing loans to students enrolled in private universities and university colleges through HESLB and the Tanzania Education Authority (TEA).

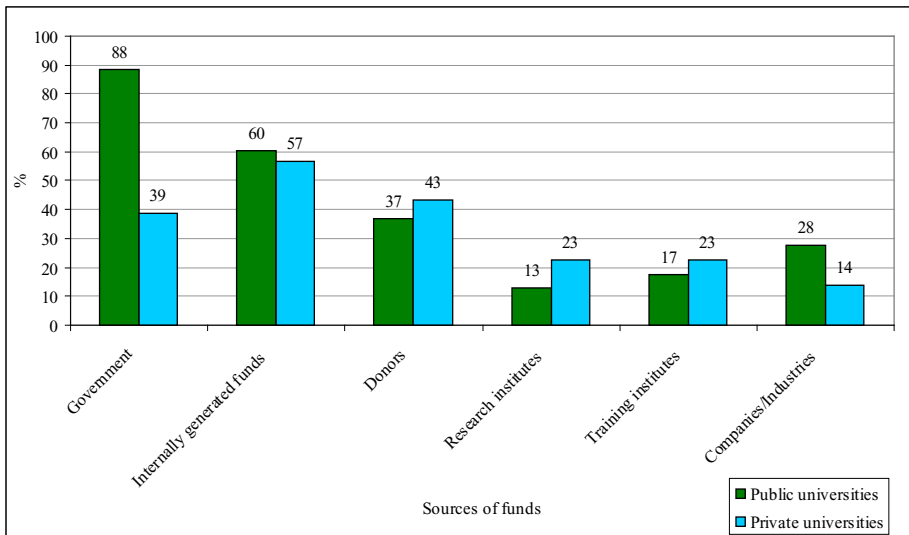


Figure 4.2: Major sources of operational funds in universities

Research findings indicate that sources of funds for university budgets vary significantly between public and private universities in Tanzania. Public universities largely depend on government subventions while private universities depend largely on internally generated funds and donors (Figure 4). In addition, the results show higher reliance on internally generated funds as compared to donors, research institutions, training institutions and companies for both public and private universities. Although the results show that many universities generate funds internally, the strategies used are traditional and lack innovativeness. The most frequently used traditional strategies among the surveyed universities include: fees for tuition, registration forms, hostel charges and renting premises for private use. The same approaches have been reported by the World Bank (2010). These traditional avenues do not raise sufficient funds for the universities to run different activities. Therefore, there is a need for innovative approaches to fund mobilization. Such shift will strengthen the ability of these universities to undertake their responsibilities and plans effectively without being hindered by the declining funding from the state. For example, Munyua et al (2011) noted different funding approaches undertaken by various universities in Ethiopia, including extension students' programme, summer students' program, distance education programme, short-term trainings for organizations and institutions, consultancy services and revenue generated from physical facilities.

In addition, cost sharing in higher education institutions may be seen as an important means of income generation. This is due to the fact that the universities are able to get funds from fee-paying students in time and cover their expenses accordingly without government subventions. Despite the increased enrollment resulting from cost sharing, Mugimu (2009) stresses that the majority of potential students who would wish to access higher education cannot do so, mainly because most of them find institutional costs and tuition fees too high. This may result in low numbers of fee-paying students joining universities and little funding being received, thus affecting the availability of funds for operational expenses.

The main sources of funds for research activities in private institutions have traditionally been donors, research institutions and internally generated funds, while public universities have mostly relied on donors, government subventions and research institutions (Fig. 5). These findings imply that there is high dependence on donors for research funds among higher education institutions in Tanzania. Research is crucial if we are to achieve economic development; thus, increased dependence on donors could in the long run lead to more problems, particularly when such funds are withdrawn by the dispatching donors or countries.

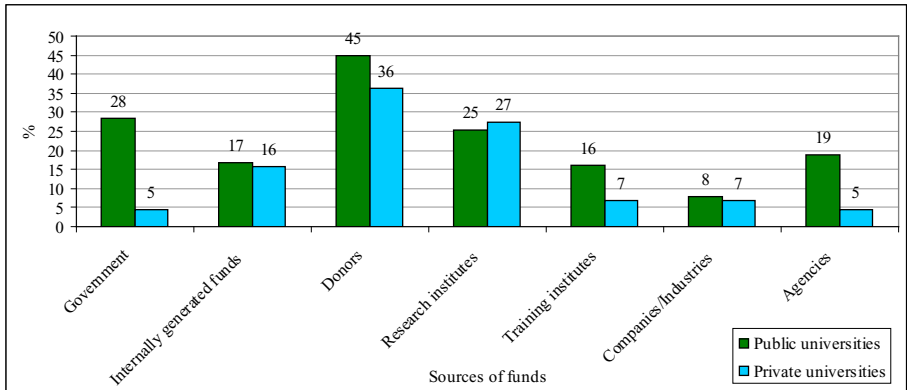


Figure 4.3: Major sources of research funds for universities

Research institutions in the country have been funding applied agriculture research activities at Sokoine University since early 1980s. Similarly, the University of Dar es Salaam (e.g. the engineering courses), Ardhi University (e.g. buildings and disaster management courses) have been receiving research funds from the government, agencies and research institutions to either test their products or encourage innovative research initiatives.

One way forward is for the universities to become aggressive by ensuring that their research and consultancy units are active. This effort has to be supplemented by government efforts through assigning universities research tasks meant to address the most pressing needs and/or problems facing the country. This approach is used in most developing countries, for example the United Kingdom, Germany and USA.

On the other hand, the results in Figure 5 show that companies/industries and agencies appear to provide little support to universities for research activities in the country. However, such situations may be caused by universities to some extent. Ideally, higher learning institutions are meant to serve the society by generating and transferring skills and knowledge relevant to providing solutions and societal development. Knowledge transfer is very important if the impact of universities is to be felt and appreciated, and if funds are to be attracted from the society, particularly the private sector. The private sector may be less ready to transfer money to universities without getting a service in return or without being able to influence their activities (Hirsch and Weber, 1999). To remedy this, the universities should understand the current needs of the private sector and generate services that will achieve their satisfaction and in turn influence funding for their research activities and operational funds.

Availability of financial resources

The respondents were asked to give their perceptions on the availability of financial resources at their universities. The answers were limited to four Likert scales: good, barely acceptable, poor, and very poor. Overall, the situation was termed barely unacceptable (Fig. 6). In private universities, the majority (55 %) reported that the situation was barely acceptable, 34 percent perceived the situation as good and 7 percent considered the situation poor or very poor. At public universities, 55 percent of respondents were of the opinion that the situation was barely acceptable, 34% thought it was good and 30 percent saw it as poor or very poor.

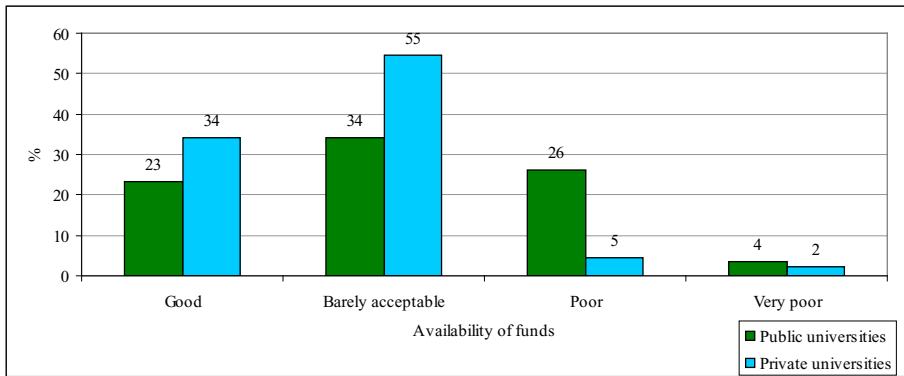


Figure 4.4: Availability of financial resources at Universities

Inadequate financial resources in many universities, particularly public universities, has been a problem to many institutions in Africa. Okojie (2010) reported that most federally controlled universities' administrators in Nigeria complained about inadequate funding. Consequently, the administrators have consistently identified funding issues as a critical challenge in discharging their functions effectively.

Causes of inadequate financial resources in universities were also explored in this study. Three main causes were identified in both private and public higher learning institutions: limited government subvention, mismanagement of internally generated revenues, and delays in remission of funds (Fig. 7).

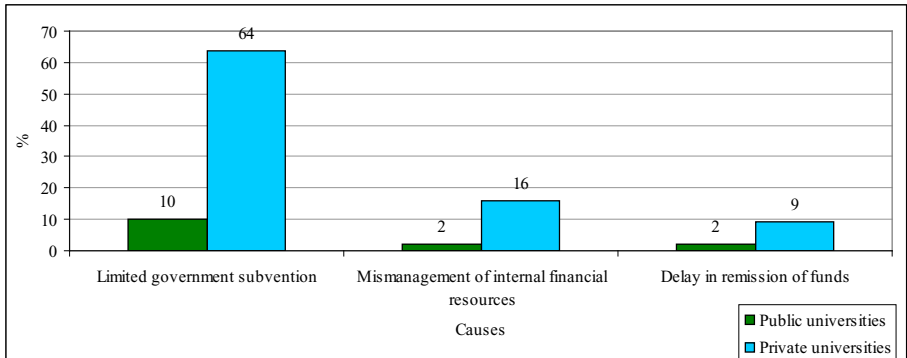


Figure 4.5: Causes of inadequate financial resources at Universities

The results revealed that limited government subventions were the greatest cause of inadequate funds the public and private universities surveyed. However, the problem was more frequently reported in private universities than in public universities. This could be because the public universities receives more subventions than private universities. Generally, government funding of universities has decreased significantly across Africa. According to Akinyemi (2013), “The Federal Government of Nigeria also directed through the National Universities Commission (NUC) that all Federal Universities should generate 10 percent of their total yearly fund internally through various revenue diversification means.” The situation has brought about by the poor economic state of the countries, such that the competing public needs do not allow for adequate funding of higher education from the national basket. In addition, the survey revealed that despite limited government support for higher institutions, student enrollment increased. Saint et al (2003), cited by Famurewa (2014), reported a decline of government fund allocation for higher education institutions by 27 percent between 1990 and 1997 while student enrolment grew by 79 percent within the same period. Famurewa (2014) pointed out that huge foreign and domestic debts, the huge budget that the government earmarked for debt servicing on a yearly basis, mismanagement of economic resources, and a high rate of corruption in all spheres of the economy were among the factors made it difficult for the Government of Nigeria to generate adequate resources for funding public tertiary institutions.

Many governments in African countries, including Tanzania, face similar problems, resulting in inappropriate generation, allocation and management even for the little funding obtained. This in particular causes decreased fund subvention from governments to support universities’ operation expenses. Proactive government leadership is required to evacuate such inconveniencies and manage public resources for the interest of the public at large.

Similarly, mismanagement of internally generated funds appears to be more of a problem in private universities rather than public universities (Table 7). The situation may be due to lack of and/or improper mechanism for financial auditing in private universities compared to public institutions, where the government undertakes regular financial auditing through the Controller and Auditor General (CAG).

Limited government subventions

Higher learning institutions are increasingly facing financial difficulties due to dwindling government funding, particularly for public Universities. Zusman (undated) contemplated that “higher education is the largest discretionary item in state budgets”. As a result, fund allocation and disbursement to universities tend to change, depending on the financial situation and other competing needs. He added that state funding for higher education tends to increase when the economy is good but drop during recessions. When the economy is on an upward trend, there is proper revenue collection and allocation of funds.

As observed, limited government subvention result in inadequate funding to HEIs. This results from the government’s failure to generate internal revenue, high dependency on donors to finance the national budget, increasing the number of higher learning institutions, and low priority setting for the education sector. A good example of the dwindling government funding to universities is the University of Dodoma (UDOM). In the 2011/2012 financial year, government budget allocation to UDOM for Other Charges (OC) was Tshs.2 billion, but for the 2012/2013 financial year this amount dropped to a mere Tshs.175 million (UDOM, 2012). This amount is not even sufficient to pay water and power bills for one month (*ibid.*). Table 5 compares what UDOM requested and what was approved by the government. What is evident is that out of the total Tshs.473 billion requested, only 22.5 percent was disbursed. This trend is replicated in all other public universities in Tanzania.

Table 4.3: Government disbursed funds (Tshs. Billion) for UDOM - 2008-2011

| Income | 2008/09 | | 2009/10 | | 2010/12 | | 2011/12 | |
|--------------|-----------|---------------|-----------|----------------|-----------|----------------|-----------|---------------|
| | Requested | Appr | Requested | Appr | Requested | Appr | Requested | Appr |
| OC | 12.89 | 1.07 | 12.10 | 1.07 | 9.20 | 2.00 | 50.07 | 2.24 |
| CD | 73.49 | 9.09 | 81.53 | 10.44 | 69.60 | 10.44 | 53.65 | 5.95 |
| TOTAL | 105.99 | 26.6 (25%) | 113.98 | 20.48 (18%) | 99.15 | 30.85 (31%) | 154 | 26.6 (17%) |

Source: UDOM (2012)

OC=Other charges CD=Capital development PE=Personal emoluments Appr=Approved

Mismanagement of financial resources

Mismanagement of internal financial resources has been on the increase in recent years through corruption and weak procurement systems. For example, 2012/13 CAG reports confirm the unnecessary expenditure, often not following laid down procedures (e.g. in procurement), influenced by corruption in government institutions. These malpractices have led to the loss of millions of shillings in taxpayers' money (Kiria, 2013). According to the 2012 Annual General Report of the CAG, for example, goods worth Tshs.31 billion had been procured and paid for but not delivered (*ibid*). Inadequate financial management skills and lack of trust among the university leaders may also contribute to financial mismanagement. This results in a shortage of funds at the universities but plenty of cash in the hands of untrustworthy leaders. Proper management and transparency in the use of financial resources build trust in any entity. Consequently, mismanagement of financial resources results in inappropriate management and poor implementation of the proposed budget. Inappropriate budget management leads to unavailability of funds to run various activities in many universities in Africa. The problem stems from lack of transparency in decision-making, fragmentation in budget responsibilities and the absence of measures to curb out-of-control budgets in higher education (World Bank, 2010). Transparency in university governance is key to overcoming mismanagement problems. In addition, the internal audit sections have to be strengthened, and good mechanisms for monitoring expenditure put in place.

Financial and budget management skills are a prerequisite for attaining university missions and visions. University leaders should possess such skills to ensure that even the little funds generated are directed in accordance with the proposed objectives.

Delay in remission of funds

Delays in remission of funds either within or at the beginning of the financial year have affected the availability of financial resources in universities to a great extent. These delays could be attributed to two reasons. The first is dependence on donors, who often tend to delay disbursement of funds for various reasons, including failure to meet conditions attached to the grant and/or loan, economic recession and change of economic policies. The second reason is misappropriation of the disbursed funds.

Factors hindering efforts to address financial challenges

About 68% of the respondents admitted that efforts to address financial challenges in universities are often frustrated by a number of factors. Some of the factors reported were decreased funding from the government, lack of innovative leaders, poor investment strategies and poor financial management (Table 6). Though the problem of innovative leadership is facing both private and public universities, it is much more serious in private universities, as confirmed by 32 percent of respondents compared to 24 percent in public universities. In essence, university leadership structures and staff were reported to have a limited business mindset, lack innovative ideas, be reluctant to change, and not be visionary. With these features lacking among leaders, innovative thinking that could emancipate universities from financial constraints is not applied in solving problems.

Table 4.4: Reported factors hindering the responsiveness of universities*

| Factors | Public | | Private | | Overall | |
|---|--------|----|---------|----|---------|----|
| | f | % | F | % | f | % |
| Decreasing funding from the government | 40 | 29 | 8 | 18 | 48 | 26 |
| Lack of innovative leaders and staff | 33 | 24 | 14 | 32 | 47 | 26 |
| Income generating activities do not maximize production | 12 | 9 | 6 | 14 | 18 | 10 |
| Poor investment strategies and financial management | 20 | 14 | 10 | 23 | 30 | 16 |
| Corruption | 8 | 6 | 1 | 2 | 9 | 5 |
| Lack of accountability | 4 | 3 | 1 | 2 | 5 | 3 |
| Too high administrative costs | 2 | 1 | 0 | 0 | 2 | 1 |

*Multiple responses

Other factors cited included lack of accountability, corruption, high administrative costs and poorly operated income generating activities. The analysis of the cited reasons confirms the fact that most of these factors are related to lack of adequate leadership skills in the universities.

Higher education strategies to address financial inadequacy

Inquiries were made in relation to the innovative strategies undertaken by universities to address financial constraints. The responses from the inquiries are summarized in Table 7, which reveals that increasing student enrollment and

establishment of non-degree programmes are the most frequently adopted strategies by both public and private universities. This was confirmed by more than 65% of the respondents from public universities and more than 80% of the respondents from private universities. Much as the two strategies have the potential to address financial challenges facing universities, they have one serious inherent limitation, that of inadequate facilities. The two strategies require expansion of the existing facilities in the universities to minimize congestion. This rarely happens, partly because even the funds generated by the increased enrollment of both regular and non-degree programme students are not always directed towards the improvement of facilities. Instead, the funds are used to address other problems, including administrative ones. As such, universities become congested and service delivery deteriorates. Thus, unilateral increase of student enrollment becomes ineffective in solving the financial problems facing universities in Tanzania.

Table 4.5: Reported innovative strategies to address financial constraints

| Strategies | Public | | Private | | Overall | |
|-----------------------------------|--------|----|---------|----|---------|----|
| | f | % | f | % | f | % |
| Increase student enrolment | 93 | 67 | 37 | 84 | 130 | 71 |
| Establish non-degree programmes | 95 | 69 | 33 | 75 | 128 | 70 |
| Commercialization of ICT | 23 | 17 | 1 | 2 | 24 | 13 |
| Rent university land to investors | 32 | 23 | 1 | 2 | 33 | 18 |
| Fund raising activities | 32 | 23 | 13 | 30 | 45 | 25 |
| Outsource service provision | 46 | 33 | 26 | 59 | 72 | 40 |
| Investment projects | 37 | 27 | 11 | 25 | 48 | 26 |
| Consultancies | 47 | 34 | 13 | 30 | 60 | 33 |

Other innovations reported in their order of priority included outsourcing of service provision, commissioned consultancies, fund raising, renting of land to investors and commercialization of ICT. Much as the reported innovative strategies can contribute to solving financial challenges facing universities, it is equally true that all these strategies require university leaders with outstanding leadership skills. For example, most universities have failed to tap the potential of generating income from consultancies conducted by their staff. Academicians are widely involved in consultancy work, often utilizing their employers' time but without contributing to university incomes. This happens simply because the existing university leadership structures have failed to put in place mechanisms to monitor consultancy work conducted by staff and of ensuring that a percentage of

the realized income goes to the universities. This situation calls for an assessment of the leadership traits required to realize the existing potential within universities, as discussed in the following sub-chapter.

Suggestions for improving the financial situation in higher education

The findings from the survey reveal that there are great talents within the universities, and which can be used to address the cited problems. It is possible that the existing leadership structures do not have enough avenues or platforms to tap ideas from within the university systems and utilize such ideas in addressing financial constraints facing universities. Some of the proposed suggestions for improving the situation have been summarized in Table 8. The suggested strategies include promotion of partnerships, increasing budgets for research funds, and the use of administrative costs from research funds as a source of income. Others include attracting investors to invest in university land and improving various sources of internally generated income, including income from consultancies.

Table 4.6: Suggestions for improving financial situations at Universities

| Suggestions | Public | | Private | | Overall | |
|---|--------|----|---------|----|---------|----|
| | f | % | f | % | f | % |
| Promote global university partnership | 14 | 10 | 7 | 16 | 21 | 12 |
| Promote research (i.e. to earn administrative costs) | 33 | 24 | 12 | 27 | 45 | 25 |
| Promote consultancy works | 11 | 8 | 4 | 9 | 15 | 8 |
| Fund raising (e.g. loans, more donors) | 29 | 21 | 10 | 23 | 39 | 21 |
| Promote external investors in universities | 22 | 16 | 4 | 9 | 26 | 14 |
| Improve internal income generating activities | 49 | 36 | 17 | 39 | 66 | 36 |
| Enhance government financial support to universities | 42 | 30 | 17 | 39 | 59 | 32 |
| Proper and transparent management of available funds | 15 | 11 | 1 | 2 | 16 | 9 |
| Increase student enrolment and non-degree programmes | 11 | 8 | 8 | 18 | 19 | 10 |
| Treasury and HESLB should remit funds (fees, allowances) timely | 10 | 7 | 7 | 16 | 17 | 9 |
| Cut down administrative costs | 5 | 4 | 0 | 0 | 5 | 3 |

Additionally, the suggestions were put forward in terms of prioritizing interventions that would improve the capacity of university leadership structures to attract funding from various sources. Table 9 presents a summary of interventions in the order of priority.

Table 4.7: Proposed priorities for university leadership to attract funds

| Priorities | Public | | Private | | Overall | |
|---|--------|----|---------|----|---------|----|
| | f | % | f | % | f | % |
| Encourage investment | 36 | 26 | 15 | 34 | 51 | 28 |
| Capacity building of top management | 41 | 30 | 15 | 34 | 56 | 31 |
| Use staff innovative ideas | 22 | 16 | 5 | 11 | 27 | 15 |
| Enhance revenue collection strategies | 21 | 15 | 6 | 14 | 27 | 15 |
| Make best use of fund raising committee | 16 | 12 | 2 | 5 | 18 | 10 |
| Leaders be recruited competitively | 14 | 10 | 4 | 9 | 18 | 10 |
| Effective law enforcement | 2 | 1 | 0 | 0 | 2 | 1 |

According to the suggestions in Table 9, capacity building among the top management of universities should be priority number one while other priorities, in the order of preference, should include encouraging investment, making use of innovative ideas from staff, developing new revenue collection strategies, improving fund raising strategies, recruiting competitive leaders, and effective enforcement of laws and regulations governing universities.

HEI funding models worldwide

According to Jongbloed (2001; 2004; Scot, 2001), four types of HEI funding exists. These are (1) planned, input-based funding through providers (2) performance-based funding of providers (3) purpose-specific purchasing from providers and (4) demand-driven, input-based funding through clients.

Planned, input-based model

This is a traditional type of budgeting, where allocations are based on requests (activity plans and budget proposals) submitted to budgetary authorities. This is known as negotiated funding. In this mechanism, the budget allocation is often based on the previous years’ allocation of specific budget items. Separate budget items are then negotiated between representatives of educational institutions and the funding authorities (i.e. the ministry or funding council). Funding is line item based, and shows other different expenditure items as separate lines of budget. These line items are determined by referring to norms with respect to indicators such as unit costs (or unit cost rises) or capacity (e.g. funded number of students).

East African universities, and in particular Tanzanian ones, follow this funding model. Each financial year, public universities are asked to submit their estimated

budget to the Ministry of Education for scrutiny and approval. A similar approach is used for private universities. The proposed budgets are usually discussed and approved by the university councils. The main advantage of this approach is that the university, to a large extent, is sure of getting funding for that particular year though it might be short of targeted amount. The major disadvantage is that the funding might be on paper while in practice universities end up under-funding some activity items, thus affecting enrollment, teaching and research.

Performance-based funding model

In this system, a formula is used to generate funds for institutions that are successful in terms of their students passing exams. Depending on the number of credits (i.e. weighted number of passed courses) accumulated by their students and the subject categories concerned, funding is disbursed to the higher education institution. This type of model is operated in Denmark (taximeter model), while in Sweden a mix of enrollment numbers and credits determines the funds allocated to higher education institutions. In the Netherlands, a mix of the number of first-year students (freshmen) and the number of Master's degrees conferred determines the funds allocated to the universities (Jonbloed and Vossenssteyn, 2002). Other examples can be found in the United Kingdom, where research is funded in proportion to the measure of research quality. Research quality is assessed and rated every five years (in research assessment exercises).

Purpose-specific purchasing model

This is a market-oriented funding system. Higher education institutions are invited to submit tenders for a given supply of graduates or research activities. The tenders that are selected by the funding agency are those that are the most price-competitive. In this tendering process, higher education institutions are encouraged to compete with each other to provide education, training and research to meet the national needs. Another example is research awarded by research councils. The system makes use of contracts signed between the funding agency and higher education institutions, with the latter agreeing to deliver graduates for targeted labour market needs, or research outputs targeted at strengthening the innovative capacity of the country.

Demand-driven, input-based funding model

This funding system makes use of vouchers. The core funding of higher education institutions is supplied through their clients. Students obtain vouchers, which can be traded for educational services (i.e. educational, consumption), at the higher education institution of their choice. For the higher education institution, the vouchers represent a certain value that can be cashed at the Ministry of Education. Each (prospective) student is given a limited number of vouchers, representing a value which can be used up in a flexible way (during a certain period of time and for programmes supplied by a given number of accredited education providers). In this kind of funding, the consumer that drives the system – the system is demand-driven. The client (student) decides what institution to attend and what programmes to enroll in.

Overlooking the four funding mechanisms in place, there has been a move away from negotiated line item funding towards more transparent, rational-formula based mechanisms, particularly in the developed countries. Additionally, there is a tendency to replace block funding for research with competitive funding mechanisms or performance-based funding mechanisms. The extent to which this has been achieved varies across countries. In some countries, universities have access to additional funding for specific initiatives such as strategic research in areas of excellence, public-private research partnerships, setting-up research infrastructure, postgraduate training et cetera. In all cases, the allocation of block grants or targeted funding is tied to specific conditions in terms of quality and accountability requirements.

If we were to make a summary of international trends in funding mechanisms, the direction in which they are developing looks like the one shown by means of the upper arrow (A) in the following graph. Whether developments will lead to a more demand-driven system (a further movement along arrow B) remains to be seen.

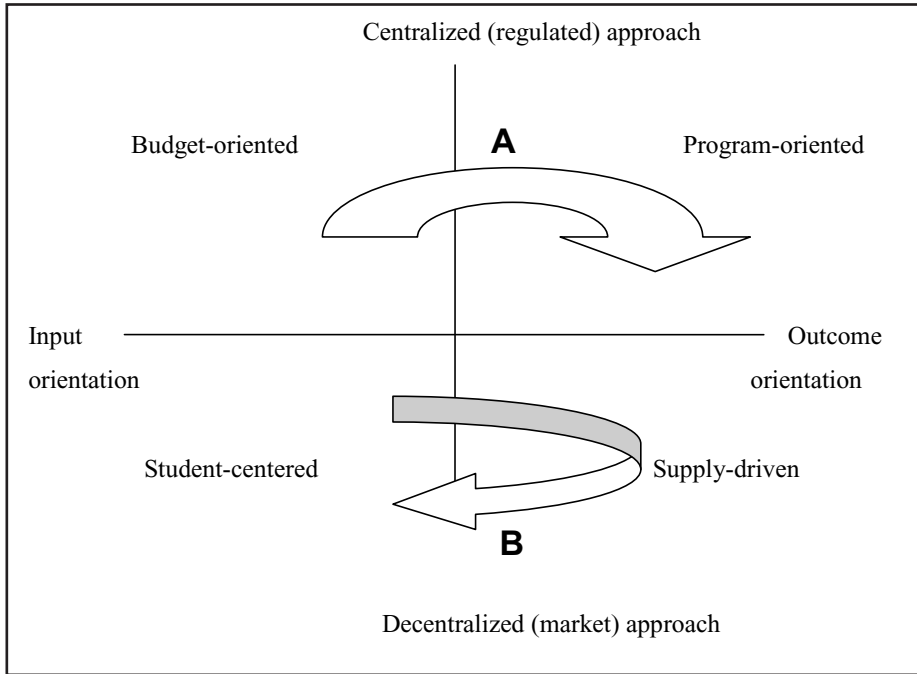


Figure 4.6: Summary of international trends in funding mechanisms

Options for higher education financing

The question here is how to strike the right balance between centralized (or public) approaches and decentralized (or private) approaches. This debate is broader and includes the question as to what extent funding would have to be supply-driven versus demand-driven and whether it should be input-oriented or performance-based. All in all, funding would have to achieve a multitude of goals. At the same time, funding mechanisms would have to be flexible enough to accommodate important global trends, such as individualization, internationalization/globalization and injection of (in particular, information and communication technology) technologies. The best option of funding will depend on the goals to be achieved and how the system that is in place is actually working towards those goals. An ideal funding system does not exist. It all depends on the goals the policy-makers would like to achieve on behalf of students and society in general.

Discussion around HEI funding models

Higher education finance continues to be an albatross around the neck of institutional growth (Michael, 1995). Cost restraints, whether self-imposed or a result of state mandates, restrict institutional flexibility, growth and search for academic excellence. The results of current cost restraints at all levels of higher education have been noted in departmental cuts or eliminations, programme downsizing, reduction in auxiliary enterprises, and even the elimination of entire academic units (De Bruyn, 1992; McMiller, 1989). Although some institutions have turned to fund raising to achieve financial security (Miller, 1991), improved financial management has become a necessity (De Bruyn, 1992). The most fundamental of these financial management techniques are various budgeting strategies (Sears, 1992).

Financing higher education has been a consistently difficult issue for policy-makers and administrators during the past decade (Pickett, 1989). Although the results of financial stress and coping with fewer resources have varied among institutions (Campbell, 1982), many administrators and business operation personnel have concurred on the importance of paying increased attention to budget practices (Doley, 1991; Sears, 1992). Sears (1992), in particular, has stressed the importance of institutional budgeting in and for all aspects of higher education decisions and policy-making. He identified the need to understand and comprehend income and expenditure sources and factors influencing those sources. The reference by Sears to the need for the identification of such expenditure areas as institutional expenses, student recruitment, depreciation of equipment, occupancy expenses, salaries and personnel services was similarly voiced by McCracken (1989). The strength of financial management, she claimed, is based on the ability of various parties involved to reach consensus on the financial sources available, priorities, and funding decision methodology.

The implications of the identification of these financial management strategies play a vital role in at least two areas: administrator training and faculty consensus development. In administrator training, staff must be made aware of the diverse approaches to financial management required to operate a short-cycle higher education institution. Administrators must be more than simply aware; they must be provided with the opportunities for training that expands their existing realm of knowledge and practice. Perhaps more important, administrators must be made aware of the advantages and disadvantages of various management strategies and the procedures required for implementation. Administrator training

programs, therefore, must have a dual focus: one focus on awareness, alerting administrators to the advantages and disadvantages of different approaches to financial management, and the second focus on procedures for implementation.

The foci of knowledge and application must be tailored to the specific needs of HEI and extend beyond traditional approaches to leadership development. Financial management training must take the form of continuous in-service programming and relate paradigm knowledge with the real-life problems of application. Dialogue between administrators and faculty is also of prime importance, particularly in how to apportion money throughout institutions. A consensus understanding formulas is needed for open communication between these parties involved in campus operations. As many scholars and practitioners have argued, the need for common understanding and agreement on basic negotiation guidelines is of paramount importance to successful planning.

Higher education finance, in general and specific terms, will continue to be a factor of concern to administrators and students alike. For HEI, a short-cycle higher education component that has often been lauded for open access, fiscal restraints have the power to limit student access, cripple programs and even close campuses. For HEI to remain viable, financial management must become a more central issue for administrators to consider in their daily application of talents and skills. These talents and skills must be nurtured, however, and continuing education's focus on budgeting strategies and funding formulas are but one part of an answer to a larger, more complex question of how to finance higher education.

Responsive Leadership Model for Attracting Funding

Introduction

The main objective of this study was to develop a good leadership model for Tanzanian universities, and document best practices in terms of responsive university leadership models in the country. In achieving this objective, several basic questions were explored, including: how can university leaders better position themselves to handle the ever increasing challenge of liquidity? Do universities have best practices to share? Can universities develop a best practice model to that effect? How and to what extent are the existing higher education leadership structures responsive to the observed challenges? How best should such structures be re-positioned to adequately attract funding from various sources? What needs to be done to properly re-position university leadership structures in a manner that is responsive to decreasing funding?

This chapter is organized into three sections. The first section describes the leadership qualities necessary for attracting funding in both private and public universities. The second section describes how decision-making systems could be improved. The last section presents and discusses the appropriate proposed higher education responsive leadership model.

Leadership qualities for attracting funds

The leadership qualities required to attract funding as reported during the survey are presented in Table 10. The qualities, in order of importance, include integrity, commitment, leader vision, teamwork, and possession of managerial skills. Other qualities include leadership experience and transparency.

According to Kotecha (2008), improvements are needed in higher education systems and institutional governance. The governance challenges are in the areas of coordination and integration of national policies and goals and regional developmental priorities; policy frameworks, institutional support and incentives for science and technology systems; planning application and monitoring of higher education funding; institutionalization of national quality assurance systems; and data collection and management of information systems in higher education (*ibid*).

Leadership development (in the broader sense of the term) will be crucial in addressing these challenges, leading to regional development. The development of a vision for higher education requires leadership in the region to develop; it also calls for the engagement of institutions, regional associations, and educational ministries (Butcher *et al.*, 2008).

Table 5.1: Leadership qualities needed to attract funds in universities

| Qualities | Public | | Private | | Overall | |
|-------------------------------|--------|----|---------|----|---------|----|
| | f | % | f | % | f | % |
| Academician and knowledgeable | 24 | 17 | 7 | 16 | 31 | 17 |
| Project management skills | 37 | 27 | 10 | 23 | 47 | 26 |
| Integrity | 43 | 31 | 19 | 43 | 62 | 34 |
| Commitment | 37 | 27 | 15 | 34 | 52 | 29 |
| Entrepreneurial skills | 11 | 8 | 8 | 18 | 19 | 10 |
| Decision-making | 5 | 4 | 7 | 16 | 12 | 7 |
| Transparency | 22 | 16 | 9 | 20 | 31 | 17 |
| Team worker | 36 | 26 | 12 | 27 | 48 | 26 |
| Aggressiveness | 14 | 10 | 9 | 20 | 23 | 13 |
| Visionary | 37 | 27 | 12 | 27 | 49 | 27 |
| Leadership experience | 26 | 19 | 11 | 25 | 37 | 20 |
| Creativity | 3 | 2 | 0 | 0 | 3 | 2 |
| Credibility | 9 | 7 | 0 | 0 | 9 | 5 |
| Influence | 4 | 3 | 0 | 0 | 4 | 2 |

A study by the Southern African Region Universities Association (SARUA) on funding frameworks revealed that higher education financing in the SADC region is generally characterized by inadequacy, inequity, inefficiency, poor oversight and poor integration with planning (SARUA, 2007). However, good practices were also identified and the existing potential that can be further developed. These practices include private-public partnerships, differential public funding and introduction of forms of cost sharing, loan schemes and funding formulas.

Fund attraction needs to go hand in hand with having appropriate decision-making systems in place. These, among other things, include having aggressive planning units, provision of incentives for those who attract funds, transparency in the use of realized funds and enhancement of consultancy and contract research (Table 11). According to SARUA (2007), research capacity development is a major requirement in universities, including such aspects as governance, research management, funding and academic research staff capacity development.

Table 5.2: Leadership qualities needed to attract funds in universities

| Aspects | Public | | Private | | Overall | |
|---|--------|----|---------|----|---------|----|
| | f | % | f | % | f | % |
| Decentralization of power | 9 | 7 | 0 | 0 | 9 | 5 |
| Incentives to those who attract funds | 25 | 18 | 11 | 25 | 36 | 20 |
| Proper control of internal funds | 9 | 7 | 8 | 18 | 17 | 9 |
| Inviting new ideas and criticism | 16 | 12 | 3 | 7 | 19 | 10 |
| Transparency in financial matters | 26 | 19 | 5 | 11 | 31 | 17 |
| Promoting research projects | 23 | 17 | 6 | 14 | 29 | 16 |
| Supplying improved teaching facilities | 12 | 9 | 10 | 23 | 22 | 12 |
| Encouraging participatory system | 9 | 7 | 2 | 5 | 11 | 6 |
| More active planning units | 33 | 24 | 15 | 34 | 48 | 26 |
| Government support for higher learning institutions | 16 | 12 | 3 | 7 | 19 | 10 |
| Developing entrepreneurial skills in management and staff | 3 | 2 | 2 | 5 | 5 | 3 |

The proposed model

The proposed model has been developed based on higher education stakeholders’ suggestions, strengths and weaknesses of the current university structures, good practices from elsewhere, researchers’ expert judgments, and their vast experience in HEIs. The model consists of four main components: leadership skills of university leaders, an adequate mix of resources, focus on university vision, and performance control and constant monitoring. These components need to be operationalized using several key considerations as detailed in Figure 9.

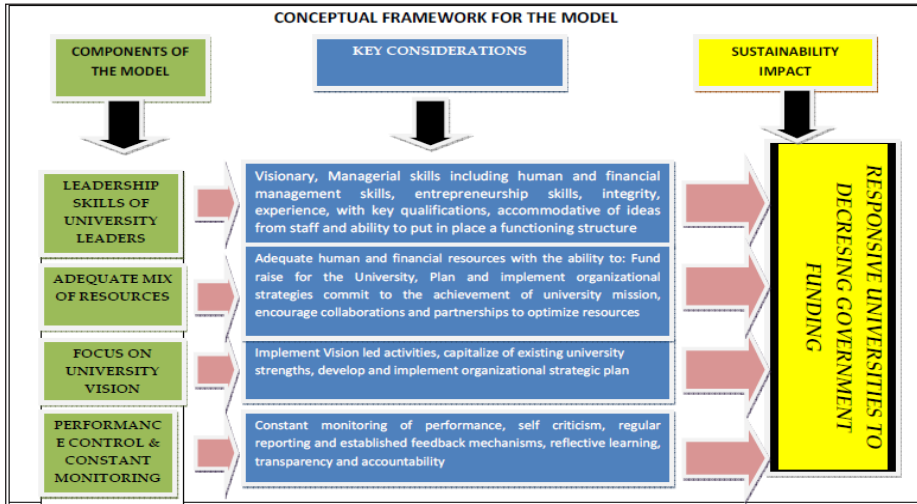


Figure 5.1: The conceptual model (next page)

Autonomous corporates

Autonomy and academic freedom are highly significant substructures that are integral to the idea of a university. Universities have always regarded the two ideas as indispensable values and have defended them as such due to their inestimable values. Autonomy protects the corporate rights of self-regulation, which the state confers upon the university as an institution in the law setting it up. Its extent and definition therefore depends on the nature of the state, and may need to be negotiated from time to time, between the academy and the state. University autonomy cannot connote independence from the state. It is best understood in the spirit of partnership with the state.

University autonomy and academic freedom are essential to the advancement, transmission and application of knowledge. They relate to the protection of the university from interference by government officials in the day to day running of the institution, especially on issues related to: the selection of students; the appointment and removal of academic staff (including vice chancellors); the determination of the content of university education and the control of degree standards; the determination of size and the rate of growth; the establishment of the balance between teaching, research and advanced study, the selection of research projects, and freedom of publication; and the allocation of recurrent income among the various categories of expenditure.

Academic freedom finds its basic justification in its functional significance with regard to the advancement of knowledge, which demands that ideologies and interests should not corrupt the processes of seeking objective truth or hamper creative minds in their attempt to follow the path of discovery which they consider the most promising. The essence of insisting on university autonomy is that in certain circumstances governments tend to place unnecessary limits on the scope and/or the nature of knowledge acquisition in the universities to the detriment of scholarship.

Leadership skills

Good leadership has the ability to inspire, influence and motivate. University leaders at different levels, from head of institution to head of academic faculties and/or departments, should possess a good mix of qualities. They need to be visionary, and should possess managerial and entrepreneurial skills, integrity, experience, key qualifications, willingness to accommodate ideas from staff and the ability to put in place functioning structures. Through these leadership qualities, universities are likely to achieve their goals, in other words, to develop capacity and quality in all core functions of higher education – teaching and learning, research and community engagement – in order to contribute to human capital formation and knowledge generation.

Adequate mix of resources

For higher learning institutions to achieve their goals, availability and adequacy of both human and financial resources is of prime importance. Unfortunately, higher learning institutions in developing countries, and Tanzania in particular, face a critical shortage of these resources. The problem is more pronounced in privately owned institutions. These institutions, apart from receiving interest-free tuition fees from the Higher Education Students' Loan Board (HESLB), do not get government subventions for operational and/or development costs. Universities can only achieve human and financial resource sustainability through creating conducive environments, including putting in place financing practices that address the inadequacy of public expenditure, equity, efficiency, transparency in the use of funds and accountability.

In addressing the inadequacy of public expenditure strategies such as encouragement of private-public partnerships (PPP), differentiated government funding models (not everything should be funded in the same way), and cost sharing should be implemented. For example, Botswana and Zambia have

established new universities on PPP basis. In this model, the states provide funding for capital expenditure while the private sector is responsible for operational expenditure.

The differentiated government model advocates that universities be funded differently depending on the nature of the institution. Institutions yielding high private returns (e.g. technology) should receive lower funding compared to institutions yielding greater social returns (e.g. teacher education).

Cost sharing could also reduce inadequacy of public expenditures. This could be in the form of tuition fees. Ishengoma (2008) advocates the use of the market model as a way to address the problem. The advocated market model has seven market segments, namely higher education institutions, students and their parents, the government, private sector/potential graduates, external donors, financial institutions/banks, and alumni.

In financing policies that address equity, provincial scholarships, loans to students in higher education institutions and loans to address access and equity need to be re-examined. In Mozambique, for example, the government provides scholarships to poor students from rural areas (SARUA, 2007). South African's student loan scheme is designed to attract large numbers of historically disadvantaged students into higher education. Although there is some controversy about how 'disadvantaged' is defined, the scheme attracts a high level of funding from the government, operates at a high level of efficiency in terms of cost recovery, and uses 'means testing' to ensure that loans go to those who are at the lower end of the socio-economic spectrum. For policies addressing efficiency, strategies could include linking higher education planning to planning and funding to improve the quality of education provision. There should be a close link between planning (at both the institutional and system levels) and funding. Universities' (public) rolling plans should be part and parcel of government's planning and medium-term expenditure framework budgeting process.

University vision

Vision is considered a major element in leadership and strategic planning. In managing educational change processes, the planning and production of vision-driven strategies and policies by leaders and management teams not only enhances the quality of organizational performance but also ensures a dynamic implementation of a change process (Ghavifekr *et al.*, 2013). In this regard, formulating an appropriate and efficient 'vision' means examining and re-examining the strategic plans for the organization as well as making clear the

purpose of change for management (*ibid.*). This is because implementation of such a change would affect all levels of the educational organization from various aspects, which is called 'systematic change' (*ibid.*).

Monitoring and evaluation

Monitoring of plans and strategies is vital for the survival of any institution. Therefore, if this area is strengthened, higher learning institutions are likely to operate in the most efficient way. According to Marriot and Goyder (2009), monitoring is an ongoing function that uses a systematic collection of data related to specified indicators to provide the management and other major stakeholders of a development intervention with indications of the extent of progress and achievement with regard to the expected results and progress in the use of funds. In general, monitoring is an integral part of evaluation; information from previous monitoring processes is used to understand the ways in which the project or programme was developed and stimulated the change.

Marriot and Goyder (2009) argue further that monitoring provides an early indication of the likelihood that the expected results will be attained and provides an opportunity to validate the programme theory and make the necessary changes in the programme activities. In addition, monitoring helps to learn from experiences so as to improve practices and activities in future; to have internal and external accountability of the resources used and the results obtained; to take informed decisions on the future initiative; and to promote empowerment of beneficiaries of the initiative. In other words, monitoring provides inputs for evaluation and is therefore part of the overall evaluation process.

On the other hand, evaluation – assessing systematically and objectively as possible a completed programme – appraises data and information that inform strategic decisions, thus improving the project or programme. Evaluation helps to draw conclusions over five main interventions: relevance, effectiveness, efficiency, impact and sustainability.

Conclusion and Recommendations

Both public and private universities were found to have great demands in terms of staffing, financial resources, infrastructure, teaching facilities, and transport and communication services. All these requirements were reported to be inadequate in all the surveyed universities in Tanzania, mostly because of limited funding. The situation in private universities was worse compared to public universities, and the reasons for this included low student enrollment (partly because these universities were recently established and had limited capacities), inadequate government subventions and lack of substantial alternative income generation options.

There is a variation in terms of funding sources for public and private universities in Tanzania. While most public universities depend greatly on government subventions coupled with other sources such as research/administration funding agencies and internally generated funds, private universities rely heavily on student fees and other internally generated funds. Both public and private universities compete for research funds from various research sponsoring institutions. Generally, about 56% of the interviewed stakeholders were of the opinion that availability of financial resources to universities in Tanzanian universities was either poor or very poor. Differences in terms of financial resource endowments between universities exist depending on the kind of courses/specialties offered by the respective universities. The major causes of inadequate financial resources for universities were reported to be limited government subventions, delays in remission of funds to universities and mismanagement of funds.

A model has been recommended by this study to guide higher education institutions' leaders in the country. The model consists of four main components, namely the need to improve leadership skills for university leaders, the need for

leaders to ensure that their institutions have an adequate mix of resources including human and financial resources (resource mobilization skills), the need to focus on institutional vision and ensuring that performance is controlled through close monitoring and evaluation. To operationalize the model, a number of institutional leadership reforms would be required. The current leaders would need to be willing to unlearn old leadership practices in favour of more contemporary leadership considerations as summarized in the model. There would be a serious need for re-orientation of university leaders as well as re-tooling the university machinery with new issues and approaches, which would ensure that the institutions are more responsive to financial shocks in a constructive way. Tailor-made leadership programmes for heads of department and faculties would need to be enhanced under the assumption that once they are knowledgeable, aggressive and creative they would then likely create more opportunities for generating funds.

References

- Bradley, S. P. and Nolan, R.L. (1998). *Sense and Respond: Capturing Value in the Networked Era*. Boston: Harvard Business School Press.
- Bryman, A. (1996). *Quantity and Quality in Search Research*. Routledge, London.
- Bryman, A. (ed.) (2003). *Encyclopaedia of Social Science Research Methods*. Sage Publications, London.
- Butcher, N., Strydom, M., Hoosen, S., MacDonald, C., Moore, A. and Barnes, L (2008). *A profile of Higher Education in the Region*. SARUA, Johannesburg.
- CAG (2012). *Annual General Report of the Controller and Auditor General*. National Audit Office. Dar es Salaam
- Cheboi, C. (2008). *Financing Model for Higher Education in Africa: A Discussion Paper on the National Higher Education*, Ministry of Higher Education. Nairobi
- Denzin, N.K. (1970). *The Research Act in Sociology: A Theoretical Introduction to Sociological Methods*. Butterworths, London.
- Devarajana, S., Mongab, C. and Zongoc, T. (2011) Making Higher Education Finance Work for Africa† in *Journal of African Economies*, Vol. 20, AERC Supplement 3, pp. iii133–iii154 doi:10.1093/jae/ejr020
- Famurewa, I. O. (2014). Inadequate Funding as the Bane of Tertiary Education in Nigeria Available in *Greener Journal of Economics and Accountancy*. Vol. 3 (2), pp. 020-025.
- Flick, U. (1992). “Triangulation Revisited: Strategy of Validation or Alternative?” *Journal for the Theory of Social Behaviour*, 22: 169-197.
- Flinders University (2005). *Alumni association Annual Report*
- Gharifekr, S., Afshari, M., Siraj, S. and Razak, A.Z.A. (2013). *Vision-Driven Strategies and Policies for Managing Educational Systematic Change: A Qualitative Analysis*. *Australian JRN of Basic and Applied Sciences*, 7 (4): 333-341, 2013.
- Gilbert, N. (ed.) (1993). *Researching Social Life*. Sage Publications, London.
- Goetz, J.P. and LeCompte, D.M. (1984). *Ethnography and Qualitative Design in Educational Research*. Academic Press, Orlando.
- Hesse-Biber, S. and Leavy, P. (eds.) (2004). *Approaches to Qualitative Research: A Reader on Theory and Practice*. Oxford University Press, Oxford.
- Ishengoma J.M. (2010). *Higher Education Financing in East and Southern Africa: The case of Tanzania* Edited by Pundy Pillay. Centre for Higher Education Transformation (CHET) South Africa.

- Ishengoma, J.M. (2008). Financing Public Higher Education in Tanzania: Towards a New Model and Implications for Development and Retention of the Next Generation of Academics. Paper Presented at the University Leader's Forum: Next Generation of Academics, Accra, Ghana, November 22nd – 25th 2008.
- Ishengoma, M. J. (2004) Cost sharing in Higher Education in Tanzania: Fact or Fiction? JHEA/RESA Vol. 2, No. 2, 2004, pp. 101–133
- Jegede, M. (2012) The status of Higher education in Africa. Being an invited contribution to the panel Discussion in the Launch of weaving success: Voice of Change in African Higher Education. A project of the Partnership for Higher Education in Africa PHEA, Institute of International Education, New York
- Johnstone, B. (2003) Cost Sharing in Higher Education: Tuition, Financial Assistance, and Accessibility in Comparative Perspective, Czech Sociological Review, Vol. 39 No. 3 pp. 351-374.
- Johnstone, D.B. (2004). Higher Education Finance and Accessibility: Tuition Fees and Student Loans in Sub-Saharan Africa, Journ of Higher Educ in Africa, 2(2), 11-36.
- Kariuki, G. (2007). The Challenges of Financing Research in Institutions of Higher Education in Africa, University of Buea, Cameroon
- Kaseva E. M. (undated). Challenges in training of professionals for the construction industry in Tanzania: A case of Ardh University. www.ncc.or.tz/ctp.pdf
- Kelvin L, H., Stuart, D. E. and J. Lewin (2011). Employer's perceptions of the employability skills of new graduates. The Edge Foundation/University of Glasgow. UK.
- Kiria, I (2013). Parliament: Make Time to Discuss CAG Report!. www.sikika.or.tz.pdf
- Kotecha, P. (2008). Revitalising Higher Education in the SADC Region, Johannesburg, SARUA.
- Kumar, R. (2005). Research Methodology: A Step-by Step Guide for Beginners (2nd ed.). Sage Publications, New Delhi.
- Mamdani, M. (2007). Scholars in the market place. The dilemmas of neo-liberal reforms at Makerere University, 1989-2005. CODESRIA, Dakar, Senegal.
- Marriot, N. and Goyder, H. (2009). Manual for Monitoring and Evaluating Education Partnerships. Institute for Educational Planning, France.
- Masaiti, G. and Shen, H. (2013). Cost Sharing in Zambia's Public Universities: Prospects and Challenges in *European Journal of Educational Research* Vol. 2, No. 1, 1-15.
- Michael, T. (1995). Administrator opinions of budgeting and funding formula use in community colleges, *comm.. college journ of research and practice*, 19:2, 109-115
- Miller, P.M. and Wilson, J.M. (1983). A Dictionary of Social Science Methods. John Wiley & Sons. Chichester.
- Ministry of Education, (2004). Higher education Finance and Cost Sharing in SouthAfrica. http://gse.buffalo.edu/org/inthigheredfinance/files/Country_Profiles/Africa/South_Africa.pdf
- Msolla P. (2007). Issues of Higher education in Tanzania Comments at the Joint Japan – World Bank Graduate Scholarship Programme Regional Conference in Dar es Salaam.

- Mugimu, C. B. (2009). The State of Higher Education in Africa. *Comparative & International Higher Education*
- Munyua, K. W., Abate, S., Huka, G. S. and Dawe, S. M. (2011). Financing of higher education in Africa: A case of Ethiopia public universities revenue diversification Strategies in *International Journal of Business and Public Management* Vol. 1(1): 15-21.
- NBS (2013). Tanzania facts and figures. National Bureau of Statistics, Dares Salaam.
- Oanda, I.O. and Jowi, J. (2012). University expansion and the challenges to social development in Kenya: Dilemmas and pitfalls. *JHEA/RESA* Vol. 10, No. 1, 2012, pp. 49-71.
- Olsen, W. and Morgan, J. (2004) A Critical Epistemology of Analytical Statistics: addressing the Sceptical Realist. Paper presented to the British Sociological Association, March 2004. Available from: www.dur.ac.uk/case.2004/papers/Critical%20Epistemology%20.pdf
- Olson, G.W. (1974). Land Classifications. *Search Agriculture*, 4: 1-34.
- Perez S. E. and Zubieta, A.F. (2011). European university funding and financial autonomy. A study on the degree of diversification of university budget and the share of competitive funding.
- Punch, K.F. (2000). *Introduction to Social Research. Quantitative and Qualitative Approaches*. Sage Publications, London.
- SARUA (2007). Annual Report, Johannesburg, SARUA, Technology and Higher Education, Dares Salaam.
- Sawyer, A. (2004) African Universities and the Challenge of Research Capacity Development:http://www.codesria.org/Links/Publications/jhea1_04/sawyer.pdf
- Scott, G. (2001). Getting the fuzzy end of lollipop: the problems with devolved budgets in further education colleges. *Int. Journ of Edu. Mgt.* 2001, 252-257
- Tesch, R. (1990). *Qualitative Research: Analysis Types and Software Tools*. Falmer Press, London.
- Tribe, M. and Summer, A. (2004). The Nature of Development Studies. Paper Prepared for DSA Annual Conference, Church House, London, 6 November 2004.
- UDOM (2012). Rolling Strategic Plan 2012/13-2016/17. Inter Press (T) Ltd.
- URT (1995). National Employment Policy. Government of Tanzania.
- URT (1996a). Tanzania Vision 2025. Government of Tanzania.
- URT (1996b). Science and Technology Policy. Government of Tanzania.
- URT (1998). Financial Sustainability of Higher education in Tanzania; a report of the Task Force Ministry for Science Technology and Higher Education Dar es Salaam.
- URT (1999). National Higher Education Policy. Government of Tanzania Education.
- URT (2003a). Higher Education Sub-Master Plan. Ministry of Science Technology and Higher Education, Dar es Salaam.
- URT (2003b). Science and Technology Sub-Master Plan. Ministry of Science Technology and Higher Education, Dar es Salaam.
- URT (2004a). National Poverty Reduction Strategy. Government of Tanzania.

- URT (2004b). Higher Education Students' Loans Board Act No.9. Government of Tanzania
- World Bank (2007), Higher Education Quality Assurance in Sub-Saharan Africa. *Status, Challenges, Opportunities, and Promising Practices*
- World Bank (2010). Financing Higher Education in Africa. World Bank
- Zezeza, P.T. and Olukoshi, A. (2004). African Universities in the Twenty First Century, Vol.1 Liberalization and Internationalization, South Africa: UNISA Press.

