MAKERERE UNIVERSITY TOWARDS 2017 STRATEGIC CHOICES

\mathbf{BY}

JOHN KIZITO WANJALA WABWIRE DIRECTOR, PDD MAKERERE UNIVERSITY

February, 2007

TABLE OF CONTENTS

		Page No.
1.0	INTRODUCTION	1
2.0	SURGICAL RESTRUCTURING	1
3.0	ENVIRONMENTAL TRENDS	3
3.1	Mega trends in higher education	4
3.2	Macro (National scene)	11
3.3	Meso (Sectoral trends)	11
3.4	Micro (organizational) scene	19
3.4.1	Achievements	19
3.4.2	Challenges	19
4.0	STRATEGIC CHOICES	25
4.1	International positioning	25
4.2	Research-Teaching mix	26
4.3	Research mix	27
4.3.1	Research typology	27
4.3.2	Science technology and humanities mix	28
4.3.3	Whose research agenda	28
4.3.4	Strengthening organizational capacity for	30
	research execution	
4.4	Response to the projected increasing	31
	demand for university education at	
	national level	
4.5	Internationalization	33
4.5.1	Multinationalization	34
4.5.2	Undertaking joint ventures with some	34
	institutions in China	
4.5.3	Running African cultural studies program in the UK	34
4.5.4	Designing international programs	35
4.5.5	Setting up summer schools	35
4.6	Competitive advantage	35
4.6.1	Revision of curricula and pedagogic	36
	concept	
4.6.2	International accreditation	37
4.7	Income generation	37
4.7.1	Research and innovations based income	38
	generation	
4.7.2	Consultancy	39
4.7.3	Setting up a credit and savings society	39
4.8	Establishment of an endowment fund	39
5.0	CONCLUSION	39
6.0	REFERENCES	40

1.0 INTRODUCTION

Prior to 1970 Makerere was a constituent college of the University of East Africa. It was during this period that Makerere enjoyed pre-eminence as a top ranked institution of higher learning in Africa and beyond. Makerere was then popularly referred to as 'The Harvard of Africa' owing to her scholarly productivity and intellectual vibrancy. Makerere University had a stock of top flight, controversial academics like Ali Mazrui, Taban Lo Liyong, David Rubadiri, James Ngugi (sorry Ngugi wa Thiong'o), to name but a few.

The 1971 military coup marked the onset of a hostile context, in whose wake Makerere University witnessed consistent ebbing of intellectual vibrancy, a scenario that continued until the early 1990s.

2.0 SURGICAL RESTRUCTURING 1993-2000

In the business management parlance, *surgical restructuring* is the execution of initiatives geared at returning a bankrupt corporation to black ink or to a break-even point.

Around 1993, the acute financial crisis faced by the University coupled with the neo-liberal economic agenda pursued by the Government of Uganda constrained the University to embark on innovations geared at the surgical restructuring of the University. Makerere University undertook innovations as a strategic response to the fiscal austerity it was reeling under. The roller coaster of innovations was wheeled into motion in 1991, when Makerere University, in an effort to increase and manage resources, admitted tuition paying distance learners in the Institute of Adult and Continuing Education. The Faculty of Law and the then Faculty of Commerce followed suit in 1993 with the flagship programmes of Bachelor of Business Administration (BBA) and Master of Business Administration (MBA). Other academic units in the University then followed suit in the subsequent years. Fees to support non-instructional activities were also introduced. Makerere also established business enterprises. For example, all previous service units like the guest house, the bakery and the grinding mills were turned into commercial units governed under the Board of Commercial Units.

The World Bank, in its 2004 report in the section mapping the reforms undertaken in Uganda's tertiary sector, noted the following about Makerere University:

"Teaching programs have been greatly expanded and diversified, with over forty to fifty new demand-driven courses added. The semester system has now replaced the term system, and evening, long-distance [sii], and short-term courses have been introduced" (World Bank, 2004:85).

For a detailed treatment of the reform mapping at Makerere University, see Musisi and Muwanga (2001) and Court (1999).

The achievements notched by Makerere University emanating from surgical restructuring undertaken in the early 1990s have elicited mixed reactions from disparate quarters. While the reform effort has been painted glowingly in certain circles, some aspects of the reform have been acidly censured. For example, Court (1999) characterized the achievements arising from the surgical reform as a 'quiet revolution' in the late 1990s while Mamdani (2007) takes a swipe at Makerere University for bending too backwards to the whims of the market and for uncoordinated planning. He contends that new academic programs introduced especially in the faculty of Arts have a vocational bent thereby 'bastardizing' or creating an identity crisis for the otherwise academic Faculty of Arts. Furthermore, he observes that the new programs were introduced without reference to the capacity of the 'innovating' units to mount and conduct those academic programs in terms of human, physical and pedagogical infrastructure.

It is tempting to view the reactions of both scholars to Makerere University's reform effort through ideological lenses; i.e., Mamdani (2007)'s criticisms as powered by an anti-market standpoint while the accolades showered by Court (1999) as emanating from the neo-liberal standpoint.

However, Mamdani (2007)'s criticisms of Makerere University's strategic decision-making behavior then cannot go without comment. On the strategic decision making behavior of Makerere University in mid-1990s, Mamdani (2007) observes that the character of the reform process was 'less a linear development than a trial-and-error process' and that 'there was no blueprint that guided its unfolding' (Mamdani, 2007:5).

It should be pointed out that the University's strategic decision-making behavior then was anchored in the adaptive mode rather than the planning mode. According to strategy guru Henry Mintzberg, adaptive mode strategic decision-making model, sometimes referred to as 'muddling through', is characterized by reactive solutions to existing problems, rather than a proactive search for new opportunities (Wheelen and Hunger, 2004:19). This means that strategy formulation in organizations whose strategic behavior is characterized by adaptive mode tends to be fragmented rather than systematic and coordinated. Organizations that tend to follow the adaptive mode strategy formulation route are those that are reeling under a crisis. Given the fact that Makerere University was reeling under severe fiscal austerity then, adaptive mode strategic decision-making behavior was best suited in the circumstances in order to give the University's constituent units more legroom to react, in their own way, to the then severe financial crisis and the attendant paltry remuneration of staff.

Mamdani (2007)'s criticism of the University's strategic decision-making behavior then should have been tempered with a sense of the reality obtaining then. Moreover, adaptive mode strategic decision-making model is typical of universities. On the pervasiveness of the adaptive mode strategic decision-making in universities world-wide, Wheelen and Hunger observe, 'This mode

is typical of most universities, many large hospitals, a large number of governmental agencies' (Wheelen and Hunger, 2004:19).

In response to the criticisms leveled at Makerere University especially with regard to the tension between the student population and the constrained supply environment, the University started to scale down the student intake in the humanities-based disciplines by 10% in academic 2005/06. This is set to continue until enrollment is brought to match the supply capacity of the University.

As to whether the restrictive admission policy for the humanities-based disciplines is the best course of action in the circumstances is debatable. To some, the adopted solution is the best since it attempts to bring demand in tandem with supply thereby assuring quality provision. To others, the adopted solution is viewed as a mere knee-jerk reaction given the fact that access to tertiary education in Uganda is still low. The Gross Enrolment Ratio (GER) for tertiary education in the country is estimated to be in the order of 4.1% (NCHE, 2006). This compares very unfavorably with the African continental average of 7.8% and even worse with some countries in the developed world such as the United States of America (USA) whose GER for tertiary education is in the range of 55%. Furthermore, the exponents of that view continue to occupy the position that rather than the University cutting down intake, more efforts should have been engaged to improve the supply capacity of the University. We take leave of this debate by saying that the Makerere University's reform train that was set in motion in the early 1990s has elicited cheers and jeers from both scholars and lay persons.

As Makerere University embarks on plotting her strategic route for the next 10 years, the question that should be uppermost in the minds of her different stakeholders is, 'Which route should we take in the next 10 years?' The route chosen should be the one that enables the University to navigate through the likely turbulent environment that lies ahead and the one that assures it to excel by prevailing on the higher education landscape, not only in this region, but the whole of Africa, if its past glory is to be rekindled.

In order for us to suggest the possible strategic interventions that should pave the University's road to 2017, it is imperative to first scan Makerere University's environment in its aggregate.

3.0 ENVIRONMENTAL TRENDS

In order to form an inkling of the range of feasible strategic options from which the University can choose its preferred trajectory, it is of essence that we present some of the environmental trends that are likely to have a positive or negative implication on the strategic positioning of Makerere University depending on the nature and intensity of the University's response to its evolving environment. The environmental trends are categorized into mega (international), macro (national), meso (sectoral), and micro (organizational).

3.1 Mega trends in higher education

The mega trends in higher education have been influenced by globalization. Globalization is the summation of the broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable (Altbatch, 2004:3). Altbach (2004) identifies these trends as information technology, the use of common language for scientific communication, and the imperatives of both mass demand for higher education (massification) and societal needs for highly educated people.

For one to understand the trends in higher education at the international level, one has to have a mental grip on the impact of globalization on higher education. Below we discuss the effects of globalization and their implications for higher education.

(a) Mass demand for higher education

Since 1980, the growth of enrollment in higher education world wide has been positive. In 1980, enrollments stood at 51.2 million while in 1990 enrollments surged to 68.6 million (World Congress on Higher Education, 1995). In 1998 enrollments were estimated at 90 million and in 2002, enrollments were reckoned to be in the region of 121 million (EFA Global Monitoring Report, 2006). The enrollment growth from 1998 to 2002 stood at 34%.

Global demand for higher education is projected to burgeon from 97 million places in 2000 to 263 million places in 2025 with 60% of global demand stemming from Asia (BC/IDP in JWT Education, 2006).

In China alone a record 20 million students enrolled in Chinese tertiary education in 2004. China boasts of the largest college-student population in the World (JWT Education, 2006). It is reckoned that over 1300 private universities were set up in China in a less than a decade but they have not been able to mop up excess social demand for higher education.

Owing to the acute shortage of skilled human resources in China, a Chinese car manufacturer called Geely was recently constrained to build the Beijing Geely University. The University boasts of student enrolment of 20,000 (Akingbola, 2005). The soaring demand for higher education in China is attributed to its rapid economic growth. China is now repositioning herself to shift from mass industrial production to production of 'value'. There is, therefore, heightened focus on up-skilling her workforce.

The burgeoning demand for higher education is not only happening in Asia. Even in Africa there is excessive thirst for higher education, which is yet to be quenched. In countries like Malawi, university education is extremely competitive. Higher education in Malawi only admits a minute population of the eligible school population. For example, the University of Malawi only offers 1000 places every year. The Government of Malawi recently set up another university in

Msuzu but that has not helped much in reducing high demand for higher education in that country. The Gross Enrolment Ratio (GER) for higher education in Malawi stands at a paltry 0.3% (Chimombo, undated).

Soaring demand for higher education world-wide is putting pressure on the mangers of higher education institutions to think outside the box on how to innovatively respond to high social demand for higher education.

(b) The rise of the knowledge economy

From the 1980s the world has witnessed rapid technological advances epitomized by developments in the Information Communication Technology (ICT) sector. The advances in the ICT sector have spawned a knowledge economy. The knowledge economy has been characterized by the remarkable growth of the service sector at the expense of the 'blue collar' segment in the economies of developed countries. The stock-in-trade of the knowledge economy is knowledge and skill requirements in both the backroom and in the frontline operations. High level skills are imparted through higher education. Furthermore, rapid advance in technology has led to a dynamic labour market in developed countries making it difficult to anticipate the evolution of occupational structures in these countries. This has led to the phenomenon of lifelong learning in which individuals who already have higher education qualifications (second biters) and/or without (second chancers) but employed continue to study to make themselves flexible so as to compete in the dynamic labour market. This phenomenon has implications on curriculum development and the pedagogic concept in higher education institutions, especially universities.

A situation in which it is rather difficult to anticipate the evolution of occupational structures poses a challenge to higher education institutions as to the adequate level of skills to impart and how to impart them to their students.

"There is a growing recognition of the need to enhance graduates' skills for them to find suitable jobs in an increasingly diverse and competitive labour market. The 'employability' debate has centred on the adequacy of the skills graduates develop during their courses. There is a growing consensus that it is no longer sufficient for graduates to possess traditional academic and subject specific skills" (HEFCE, 2003 as cited in Nabudde, undated:7).

On the skill set that higher education should impart to their students in this era of globalization, there seems to be now consensus on the way forward.

"Many research studies have revealed a consistent core set of desirable skills, consisting of interactive attributes – as well as communication skills, interpersonal skills and team working personal attributes. These include intellect and problem solving; analytic, critical and reflective ability; willingness to learn and continue learning; flexibility, adaptability and risk-taking. In some cases,

subject knowledge and understanding are desirable, as are specific technical skills" (HEFCE, 2003 as cited in Nabudde, undated:7).

This means, in designing their curricula, universities have to ensure that there is a balance in the generalist skills and subject matter knowledge. Furthermore, producing graduates who are able to learn will force universities to rethink their pedagogical model which is centered on lecturing or the lecturer.

The rise of the knowledge-and-information driven economy has also imposed demands on universities. Universities now have to vigorously carry out research to generate knowledge to power national economies.

Scientific research and development of technologies are crucial activities in a knowledge-and-information driven society and will become even more important in the future (Damme in UNESCO, 2002:22).

Owing to the centrality of the knowledge economy to the 21st-century development, higher education has become more important than before both at national and international levels. This is because of the roles higher education plays in educating people for the new economy and spawning new knowledge (Altbach, 1998 a in: Altbach, 2004).

On the critical role universities play as engines of economic growth through fostering national competition, Richard Levin, President of Yale University had this to say:

"As never before in their long history, universities have become instruments of national competition as well as instruments of peace. They are the locus of the scientific discoveries that move economies forward, and the primary means of educating the talent required to obtain and maintain competitive advantage. "At the same time, the opening of national borders to the flow of goods, services, information and especially people has made universities a powerful force for global integration, mutual understanding and geopolitical stability" (Richard Levin as cited in: JWT Education, 2006).

(c) Information technology

The centrality of the Internet in the information revolution cannot be over emphasized. The Internet has revolutionized the mode of acquiring, transmitting, storing and applying knowledge. Terms like 'database', 'servers', 'home pages', 'search engines' or 'portals' are increasingly becoming part of the commonplace lexicon (UNESCO, 2002).

The ICT revolution is not only changing pedagogy but also the subject matter of training and research. ICT is increasingly becoming a vehicle for the delivery of distance education. Universities are now harnessing the power of ICT to transform the asynchronous mode of education delivery. In order to extend their educational provision to as many people as possible, universities are now restructuring their traditional distance education units into Open, Distance and e-Learning (ODeL) units.

(d) Internationalization of research

Internationalization of research especially of a scientific kind is growing at a blistering pace. Universities that have an eye to the research university status have to engage in international communication in form of publishing, and electronic networking within the scientific community (Damme, 2002).

Damme (2002) further observes that owing to the globalization of research and development, a highly competitive international market for researchers is emerging. Consequently, academic professionals firmly grounded in research are beginning to be highly mobile.

(e) Emerging borderless higher education market

The staggering social demand for higher education coupled with budgetary and capacity problems of many countries to respond to this high demand and the prospects created by new information communication technology, especially the Internet, have created opportunities for some universities to meet this high demand in innovative ways (Damme, 2002).

There is an emerging trend called *multinationalization*. Multinationalization is defined as academic programmes or institutions from one country offered in other countries (Altbach, 2004:3).

Universities in two or more countries can now engage in joint degree offerings. This is what is referred to as *twinning*. Some universities are beginning to establish branch campuses in other countries either as green field operations or through franchising.

Higher education joint ventures are growing in number (John Hopkins/Nanjing, MIT/Singapore, MsM/ESAMI) and overseas campuses (Nottingham, INSEAD, etc.) are rapidly being established

(f) Assault on cultural diversity

Globalization has unleashed forces that are scaling down cultural diversity. People's lifestyles and expressions are becoming more homogeneous. The assault of the variegated heritage of humankind has raised the challenge of conserving variety and richness of the heritage of humankind worldwide. This includes languages and lifestyles (UNESCO, 2002).

The assault on cultural diversity has brought tension between those who value cultural diversity and those who romanticize cultural homogeneity. This tension is likely to play out powerfully in developed countries that hugely absorb immigrants, like the United Kingdom.

In the United Kingdom it is reckoned that immigrants, who are defined as all those that were not born in the United Kingdom, account for 8% of the total UK population or nearly 10% of the working age population (Crown, 2002). This proportion translates into nearly 4.8 million people of whom 3.6 million are of working age (Crown, 2002).

The immigrant population in the UK is not homogeneous; it consists of people from different continents. According to a study commissioned by the UK's Home Office and the Department of Work and Pension in 2002, the immigrant population in the UK is distributed as follows: from the European Union (23%), Indian sub-continent (20%), Africa (19%) and from the Americas (11%) (this includes immigrants from both Canada and the USA) (Crown, 2002).

This challenge of cultural conflict has created new roles for higher education institutions.

Aside from the new role of universities as knowledge enterprises or centers, universities are now beginning to execute other functions in the domains of society and culture. They now act as mediators in conflicts, deepen democracy, dynamize cultures, function as centers of critical debate and ethical conscience (Damme, 2002:23).

On the role education can play in cultural development or conservation of culture, two case studies – one on cultural conflicts and the other on how education can be leveraged to promote cultural diversity and harmony in families – help to illustrate opportunities that African higher education institutions can exploit in some countries in the developed world.

* Cultural Conflicts – The dilemma of the Diaspora

Background

The typical African child raised in a typical African society of the twenty first century undergoes a dual educational upbringing. First, the African cultural upbringing and second, the Western education obtained through exposure to Western academics as obtains in the school curricula. As such, it becomes inevitable that some will remain more African oriented while others will be caught up in the dilemma of two conflicting educational upbringing models.

Where then does that leave the parent living in the Diaspora but desirous of having his child raised the traditional African way? He has to make a decision that he thinks would be most beneficial to the good interest of his child. What would guide his decision? If he, himself, has not been to Africa or if he was not raised in mother country, and therefore not familiar with the African ways of raising a child, how would he compare the standard in the West with that of his mother country?

The African Perspective

The African perspective ought to be known. Traditionally, the Ugandan child, for instance, is raised by the community and educated in the culture and traditions of his people. The child is seen as an asset of the community in whom the community maintains a stake. As such, every member of the community contributes to the upbringing of the child whether the child is an offspring, family relative, extended family member or simply another member of the clan.

Colonial Influence

The introduction of Western model schools perpetuated the colonial religions and culture into the African socio-political mainstream. It was an imperialist move that was sustained by colonialism and it is now so imbibed in our socio-political system that many Africans have almost entirely replaced their cultural education with Western education. Today, the Ugandan national curriculum is largely structured along the British system.

However, all is not lost. Ugandan parents who are interested in the typical Ugandan education system have remained cognizant of the fact that although the school system in Uganda may be Western in style, Ugandan culture still influences the upbringing of the child in the typical Ugandan society. In all our Primary and Secondary schools, the child is basically tutored on the principles of taking responsibility for one's actions. The dilemma arises when this child attains High School or University age and especially when he/she happens to be living in a foreign country.

The Bright Lights of European Cities

Against the wish by Ugandan parents abroad to hang on to their cultural roots, there remains the strong attraction of the European city life. The pressure of easy life as presumably lived in the West or represented in Western books, movies, music, the media, technology etc. is making it more difficult for Ugandans to raise their children like their counter-parts or relatives back home in Uganda. The challenge seems to be getting tougher by the day and our own cultural education seems to be loosing the battle to Western education, influence of technology and the strong pull of Western civilization.

Although there is an ever-increasing interest among Ugandan parents living in the West to send their children to Africa to obtain African cultural education and upbringing, resistance among the children is increasingly stronger as their attachment remains with their peers in the country of adoption (those they have grown up with). The need has now, more than ever before, arisen for the African elite to nurture the African re-naissance both at home and in the Diaspora. A carefully-weaved African-oriented syllabus could be adopted into a powerful tool that will rewrite the disintegrating story of Africa. The writers of the new syllabi must give Africa its true image of richness in culture, spirit and intellect.

Two Case Studies illustrate this dilemma:

CASE STUDY - I

Roger Kamara, a resident of Woodgreen North London has lived in England since his childhood. A Banker by profession, Roger relocated from his native Cameroun in the early 1960s to pursue his postgraduate studies in England. After his graduation, he was soon to marry and later begot his two sons (Alex and Etienne) and one daughter (Vivianne) – all born in the local neighborhood of Woodgreen.

For all purposes and intents, Roger's is a typical affluent family ensconced in the comfortable trappings of Western civilization. This, partly, as a result of his own well-paying job at the ABN Bank, and his own social orientation. Back home, Roger was born into a royal family of the Bamleke tribe which controls the plateau of central Cameroun. His father was a wealthy and powerful traditional chief who inherited this chieftaincy in a lineage of great grandfathers.

True to custom, Roger had been groomed through royalty and obtained his early education at the best primary and secondary schools in Cameroun. Equally, the dictates of African royalty had trimmed him into a suave, social and respectful young man – a trait that saw him make innumerable friends and record a successful career at the Bank.

So imbedded were his cultural upbringing traits that Roger went all the way to inculcate what he considered true African culture into his British-born offspring. So strict was his approach that he wouldn't accommodate any deviation from the traditional norms of the Bamleke. He was at pains to ensure that his children should never greet his visitors in an upright standing position – this is considered

disrespectful in the Bamleke culture. Roger ensured that all his children learnt and communicated in his mother tongue while at home.

The dichotomy was starkly evident. Alex, Etienne and Vivienne were born, raised and cultured into the English tradition. They behaved English, had English friends and preferred the English way of doing things. Their only linkage to their African (Camerounian) roots came in the form of mandatory dictates of their father. And the clash was bound to happen.

Tired of the forceful and, to them, distasteful mannerisms that their father had all along imposed upon them, the children, one by one, began to rebel. They wouldn't have any of the traditional foods that Roger brought down from the African supermarket. They considered it appalling to have to kneel to Roger's peers while greeting, let alone to ensure that they do not turn their backs on a visitor or an elder. On the contrary, these traits were, in the African cultural setting, the symbols of a civilized and well groomed family. To the kids these were appalling, retrogressive and embarrassing symbols of backwardness.

The climax came when Roger, in a fit of rage, after having discovered pornographic literature in the room of his last-born daughter, decided to mete out a true African punishment – that which a father metes out to a child; even if the child isn't his own. Without any word, Roger promptly pulled out his long wooden umbrella and lashed at his daughter till she almost fainted.

The incident was relayed to the kids' school and created the biggest embarrassment amongst their peers who related the incident to what they termed "primitive African culture". The result? A deep sense of dejection and shame.

The reaction of Roger's children was catastrophic; they hatched and executed the most heinous murder of their own father!

CASE STUDY - II

Jamil Mahmoud and his family of three live on the outskirts of Leicester, UK. He relocated from his home country Egypt and was granted asylum status in England eight years ago.

Jamil lives a simple hand-to-mouth life as he tries to fend for his wife and daughter of six. Having spent two years on the dole, Jamil has finally landed himself a modest job of a track-driver. He is now able to buy the basic groceries and pay fees for his daughter at the local council school.

In spite of all manner of financial handicaps that have faced this family, the Jamils remain the envy of their neighborhood. Every morning and evening, Jamil leads his family to the local mosque for prayers in true Islamic tradition. His wife has maintained all the cultural traits of a true Moslem wife. Besides formal education at the Council school, Jamil insists on taking his daughter to attend the Madrass (Islamic Quoran teaching) everyday.

Jamil's two bed-roomed flat is part of a larger Egyptian community who pride in guarding their culture and passing it on to their youths – at all costs. So intense is their determination that regular contributions are made by the community members to attract cultural leaders from Egypt to come and contribute to the strengthening of their cultural identity on special occasions.

Little wonder, therefore, this seemingly underprivileged community has for a long time kept their youths out of trouble in spite of the strong onslaught of racial undertones in Britain.

* The text in the box above titled 'Cultural conflicts –The dilemma of the Diaspora' and the accompanying two case studies were contributed by Mr. Kagoro, Deputy Director, Planning and Development Department at the request of the author of this paper. The author is grateful to Mr. Kagoro for his contribution.

(g) The rise of English as a language of research and scholarship

In the last one decade or so, the English language has emerged as the language of research and scholarship. English is now the vehicle for communicating knowledge worldwide, for teaching even in countries where previously English was not the language for higher education, and for cross-border degree arrangements and other programs (Altbatch, 2004:6). The rise of English as a language for communication and research has implications on the language of instruction in higher education in countries like China and South Korea that are traditionally not Anglophone.

3.2 Macro (national) scene

The Poverty Eradication Plan (PEAP) is the overall planning framework that signals action to tackle mass poverty in Uganda. Through the PEAP, the government seeks to transform the country into a middle income country via the structural transformation of the production system. The catalyst of the envisaged transformation is industrialization. In other words, the PEAP is the accentuation of the country's ambition to catalyze rapid and sustainable economic growth. The PEAP is based on the following building blocks: economic management, enhancing production; competitiveness and incomes; security, conflict resolution and disaster management; good governance; and, human development.

The privileged position of the pillar relating to enhancing production, competitiveness and incomes in the overall PEAP matrix is betrayed by the fact that Government went ahead to craft a development framework known as the Plan for Modernization of Agriculture (PMA) to operationalize this pillar. This implies that the Government has an overriding ambition to shift the country's production possibility frontier outwards.

As the PEAP framework is the country's strategic agenda as far as development is concerned, it has implications on the strategic trajectory of higher education institutions in the country in curricula development and research agenda.

3.3 Meso (sectoral) trends

(a) Size of the sub-sector

The higher education sub-sector did not escape the brush of the public sector reforms keyed on the New Public Management Paradigm (NPM) that were pursued by the Government of Uganda

in the 1990s and early 2000. The sub-sector was deregulated and private higher education providers were allowed on the scene.

There are 27 universities and other tertiary institutions in the country out of which five are public. Although public universities account for only 18.5% of the total number of universities in the country, their share of student enrolment stood at a respectable 76% by 2005 with Makerere University accounting for 60.8% of the total share of student enrolment in public universities. In AY 2007/08, another public university – Busitema University – is expected to come on board bringing the number of public universities in the country to six. The new university is expected to kick off with the initial intake of 500 students.

Given the rate at which the state is establishing new universities, it would not be far fetched to forecast that another public university is likely to come on board before 2017 in Bunyoro region to be based at the present Cooperative College at Kigumba.

The share distribution of student enrolment by public universities in the last two years is shown in table 1 below:

Table 1: Student enrolment share of Public Universities in Uganda 2004-2005

Table 1. Student enrollment share of 1 ubite Universities in Uganda 2004-2005									
Institution			% share	of					
	Enrolme	ıt	enrolmen	t					
Year	2004	2005	2004	2005					
Makerere University	34,955	33,108	75	60.8					
Mbarara University	1086	1139	2.3	2					
Makerere University Business School	6562	10,111	14.2	18.6					
Kyamboggo University	3323	7588	7.1	14					
Gulu University	640	2489	1.4	4.6					
Sub-total	46,566	54,435	100	100					
Aggregate University enrolment in Uganda	68,079	71,279							
% Share of public university enrolment to total university enrolment in Uganda			68.4	76					

Source: computed from data in *The State of Higher Education in Uganda* 2005 and 2006 editions of the National Council for Higher Education

(b) Strategic direction of the sub-sector

The forward march of the higher education sub-sector will be defined by the nature of implementation of the strategic thrusts enunciated in the sectoral and sub-sectoral strategic plans. The education sector strategic plan was rolled out in 2004 while the higher education sub-sector strategic plan was unveiled in 2003. Another strategic initiative with the potential to impact significantly on higher education is the Millennium Science Initiative that was rolled out in 2006. The other major policy intervention that will certainly impact greatly on the size and structure of the sub-sector and the strategic positioning of the different institutions populating the sub-sector is the Universal Post-Primary Education and Training (UPPT) loosely called Universal Secondary Education (USE) to be rolled out in February 2007.

(i) Strategic Plan for Higher Education 2003-15

The strategic plan for higher education is supposed to serve as an overarching framework for reference and action by the public higher education institutions in the course of undertaking strategic thinking.

The plan defines the core business of higher education as provision of quality higher education through teaching and research, employing technologies. It envisions higher education in Uganda by 2015 as providing relevant quality education accessible to all eligible Ugandans.

The plan envisages outcomes to the country by 2015 as enhanced quality and relevance, increased and equitable access, efficient and effective higher education, improved governance and management in higher education and reduced spread of HIV/AIDS.

The plan also specifies the end product of higher education as being a graduate who is 'versatile, re-trainable, and well informed (and) who can operate in both local and global market' (MOES, 2003:4).

The plan further commands higher education institutions to add an ethical or moral touch to their curricula. It also lays emphasis on producing graduates who possess problem-solving skills. The implications of the strategic plan on the strategic thinking of higher education institutions like Makerere University are as follows:

- (1) Higher education institutions should clearly specify learning outcomes in their curricula consistent with the image of a graduate envisaged in the strategic plan.
- (2) Higher education institutions should strive to scale up their supply capacity so as to extend their educational offering to as many eligible Ugandans as possible.
- (3) Higher education institutions should institute or continue with admission criteria that factor in positive discrimination to enable access by the marginalized groups such as women, people with disabilities, ethnic minorities and far flung rural areas.
- (4) Higher education institutions should start rethinking the current model of pedagogy based on the lecture method (factory model) with a view to adopting the apprentice-based model of learner-centred Problem-Based Learning (PBL) if problem-solving skills are to be developed so as to realize the vision of a 'new graduate'.

(ii) Millennium Science Initiative

This intervention is geared at improving the teaching of science and engineering in universities and creating linkages to the private sector. The initiative is designed to have a competitive grant fund. The fund is to support three elements, namely: advancing research connected to graduate training, strengthening or developing new undergraduate programs in science and technology disciplines, and addressing research needs defined by the private sector.

The design and eventual implementation of this initiative by the state gives a clear signal that the state is attempting to steer universities to put science and engineering disciplines and academic subjects and research up in their pecking order of priorities.

(iii) Projected demand

The growth in demand for higher education in general and university education in particular over the next 10 years is captured in the simulation model of potential Senior Six students' flow over the next 10 years shown in table 2. The model was developed by the EMIS section of the Planning Department of the Ministry of Education and Sports on the request of the author of this paper. We are grateful to the Ministry for its support.

	Table 2: Simulation model of S.6 students' potential flows 2006-2017.											
S.6 projected	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
enrolment												
Male	42,978	51,782	56,528	61,708	67,362	73,535	80,274	87,630	95,660	104,426	113,995	124,441
Female	29,211	31,517	33,882	36,425	39,159	42,098	45,257	48,654	52,305	56,231	60,451	64,988
Total	72,189	83,299	90,410	98,133	106,521	115,633	125,531	136,284	147,965	160,657	174,446	189,429
Projected												
Tertiary												
eligible												
applicants												
Male	23,704	28,560	31,177	34,034	37,153	40,558	44,274	48,331	52,760	57,595	62,873	68,634
Female	16,111	17,383	18,687	20,090	21,598	23,219	24,961	26,835	28,849	31,014	33,341	35,844
Total	39,815	45,943	49,864	54,124	58,751	63,777	69,235	75,166	81,609	88,609	96,214	104,478
Projected												
Arts												
Male	14,987	18,057	19,712	21,518	23,490	25,643	10,704	11,685	12,756	13,925	15,201	16,594
Female	10,950	11,814	12,701	13,654	14,679	15,780	6,487	6,974	7,498	8,060	8,665	9,316
Total	26,030	29,871	32,413	35,172	38,169	41,423	17,191	18,659	20,254	21,985	23,866	25,910
Projected												
Sciences												
Male	8,717	10,503	11,466	12,516	13,663	14,915	35,270	38,502	42,030	45,881	50,086	54,676
Female	5,161	5,569	5,987	6,436	6,919	7,438	17,322	18,622	20,020	21,522	23,137	24,874
Total	13,878	16,072	17,453	18,952	20,582	22,353	52,592	57,124	62,050	67,403	73,223	79,550

Source: EMIS, Ministry of Education and Sports 2006

J.K W Wabwire

As shown in table 2 above, the number of eligible applicants defined as 'students with two principal passes' is conservatively estimated to soar from 39,815 students in 2006 to 104,478 students, representing a jump of 162.4% in a temporal space of about 10 years!.

The projected dramatic increase in the demand for university education poses a vast challenge to the supply capacity growth of especially public universities in the next 10 years given the fact they dominate the university education market. As depicted in table 1, the market share of public universities was in the order of 76% in 2005 having upped from 68% in 2004. If this trend continues, it will mean that public universities will have to grow their supply capacity tremendously in order to catch up with the soaring demand of university education.

Circumventing this enormous challenge will entail not only increasing the pedagogic-oriented builtup space but also to challenge the notion of brick and mortar model of a university given that there are innovative models such as Open, Distance and e-Learning on the higher education scene worldwide.

(iv) Trends in State Funding of Tertiary Education

Table 3 overleaf shows the projected government funding of the education sector in the 10 years as envisaged the Education Sector Strategic Plan 2005-2015.

A casual scrutiny of the projected state funding of the education sector as envisaged in the education sector strategic plan 2005-2015 clearly shows that in the next 10 years, both the primary and academic secondary sub-sectors will enjoy priority call on the education sector resource envelope. As shown in table 3 overleaf, the funding share of both sub-sectors in the total education sector funding is projected to be in the order of 72%.

The tertiary education sub-sector is placed third in the pecking order in terms of funding over the next 10 years with its proportion of funding to the aggregate sector funding projected to average slightly over 12%.

The funding situation of the tertiary sector will be exacerbated not only by its low funding share but also by its projected decline in the years to come.

Table 3: Education Sector Strategic Plan: Government funding 2005-2015, in billions of Uganda shillings

Sector	2004-5		2005-6		2006-7		2007-8		2008-9		2009-10		2010-11		2011-12		2012-13		2013-14		2014-15	
Primary	400.4	46.1%	407.5	43.7%	486.2	43.9%	449.9	39.2%	461.1	37.2%	487.5	38.0%	558.1	39.1%	613.4	41.4%	687.9	43.3%	777	44.9%	891	47.0%
Academic	227.8	26.3%	266.2	28.6%	338.1	30.6%	391.6	34.2%	454.7	36.6%	456.9	35.6%	506.7	35.5%	473.2	31.9%	460.9	29.0%	462.2	26.7%	460.5	24.3%
Secondary																						
BTVET	64.8	7.5%	75.7	8.1%	93.7	8.5%	108.3	9.4%	116.8	9.4%	128.3	10.0%	144.6	10.1%	162.2	10.9%	184.6	11.6%	205.6	11.9%	218.9	11.6%
Tertiary	134.1	15.5%	133.5	14.3%	137.7	12.4%	144.5	12.6%	153.3	12.4%	152.9	11.9%	156.7	11.0%	170.5	11.5%	191.2	12.0%	217.5	12.6%	254.1	13.4%
Central and																						
Administrative	40.7	4.7%	48.7	5.2%	50.6	4.6%	52.2	4.6%	54.9	4.4%	57.9	4.5%	60.9	4.3%	62.9	4.2%	64.9	4.1%	67.1	3.9%	69.3	3.7%
Costs																						
TOTALS	867.8	100%	931.6	100%	1106.3	100%	1146.5	100%	1241	100%	1284	100%	1427.0	100%	1482	100%	1590	100%	1729	100%	1894	100%

Source: ???

J.K W Wabwire

In the long-term, it is projected that Government will scale up its financial input into the Business, Technical and Vocational Training (BTVET) as reflected by the steady climb-up of state funding of the sub-sector. As shown in table 3 above, the projected BTVET share of funding is set to ascend progressively from 8.5% in FY 2006/07 to 11.9% by FY 2013/14.

The progressive climb of Government funding to the BTVET sector implies that the Government is placing premium on the strategic place of the sub-sector in the future development equation of the country.

As depicted in table 3 above, from 2008/09 to 2010/11 it is projected that the share of tertiary education funding will slide from 12.6% to 11%.

The coming on board of new public universities in the face of both low share of tertiary education state funding and the projected slump in state funding of the sub-sector will set intra-tertiary education sub-sector competition for state funding staggering.

It should also be noted that the funding projections embedded in the education sector strategic plan were made before Universal Post-Primary Education and Training (UPPT) came on board. The bringing forward of the launch of UPPET is likely to further reduce the funding to tertiary education as the government is likely to opt for re-allocation of resources from within the education sector rather than increasing the share of education sector funding as a proportion of the total government budget.

The projected decline in the share of government funding of the tertiary sub-sector has implications on the future resource capacity of public universities to support effective delivery on their respective enterprise strategies. The projected funding slide-down to tertiary education creates both challenges and opportunities for higher education institutions in the country. For managers of higher education institutions who are proactive and have a strategic thinking mindset, the projected decline in state funding creates an opportunity for them to respond creatively and innovatively to the challenge. To the managers of public universities in Uganda who have a tunnel vision, the projected decline provides an excellent opportunity for endless lamentation.

It is our view that the expected funding decline points to the need for public universities to aggressively engage in entrepreneurial activities within the realm of their disciplinary competencies.

3.4 Micro (organizational) scene

3.4.1 Achievements

As a corollary of the surgical restructuring reform effort of Makerere University since 1991, the following have been realized:

- (i) The portfolio of academic programs has been diversified and expanded. By 2005 there were 77 Bachelors programs; 14 undergraduate certificate programs; 10 postgraduate diploma programs; 60 Masters programs; and 12 PhD programs; up from 22 Bachelors programs; 2 certificate programs; 8 postgraduate diploma programs; 9 masters programs and 4 doctoral programs in 1993.
- (ii) The student population dramatically expanded from 6,352 in 1990/91 to 34,506 in 2005/06 representing an increase of 443% in a space of 15 years with the student population on the distance delivery mode accounting for 11.7% of enrollment. Postgraduate student population accounted for 6.9% of the enrollment base. The diversification of the program portfolio based on needs of the market coupled with increased student population marked the transition of Makerere University from an elitist institution to an institution that is responsive to the needs of society.
- (iii) Internally generated income grew from Ushs.1.6 billion in 1994/1995 to 53 billion in 2005/06 representing an increase of over 3000% in just a space of 11 years
- (iv) Donor funding grew from Ushs.3.9 billion in 1996/97 to Ushs.17 billion in 2005/06 representing an increase of over 300% in a temporal space of 10 years, with the bulk of support targeting science-based disciplines and revitalization of research.
- (v) Space increased from an estimated 66,881 square metres in 1993 to the current 99,160 square metres representing an increase of 48% in a space of 13 years.
- (vi) The University has established a private sector forum with the principal strategic agenda to link the University with the private sector.

3.4.2 Challenges

Despite the achievements enumerated above, Makerere University still faces enormous challenges. Some of the challenges include the following:

(a) Image or reputation ranking of Makerere University

While scholars, lay persons and Makerere University managers continue to lock horns about the implications of the reform effort on the quality and/or image of Makerere University delivery system, a reputation ranking company called Social Capital Gateway has given its verdict on the positioning of Makerere University in Africa's higher education market. The company uploaded the reputation rankings of African Universities on the World Wide Web in January 2006. The rankings were based on Webometrics indicators, namely: size, visibility, popularity and number of rich files. The University of Cape Town in South Africa topped the league with most of the top honors going to Universities in South Africa. The only universities in the East African region that showed up on the radar were University of Dar-es-Salam and Makerere University. University of Dar-es-Salam appeared on the radar at position number 13 while Makerere University appeared at position number 20 meaning that University of Dar-es-Salam outclassed Makerere University on the Webometrics indicators. In October 2006, the same company again released rankings and this time around although University of Dar-es-Salam appeared on the radar, it had slipped by two places to position 15. Sadly, it is not apparent whether this time Makerere University showed up on the radar or not since only the first 20 universities are shown (see exhibit 1 attached).

Whatever the case, what is certain is that Makerere University did not feature among the 20 ranked universities in Africa in October 2006 according to the Webometrics ranking.

It is tempting not only to dismiss reputation rankings as biased but also to question their utilitarian value. In order to disabuse less informed skeptics of the negative perceptions they may harbor against reputation ranking of universities, especially as regards the techno-validity and the utilitarian nature of university reputation rankings, let us plunge into a detailed exposition, in both historical and contemporary terms, of reputation rankings with regard to their mechanics and how they are applied in the different parts of the World.

Reputation ranking in higher education means listing of universities based on a system of rating that presumably reflects a record of superior performance of universities in terms of teaching, research and service to the community. According to the Burke (ed. 2005)'s taxonomy of accountability, reputation ranking or rating is a program of the market accountability model.

Reputation rankings or ratings are based on reputation surveys of teaching staff of universities and graduate education (Diamond; Graham, undated).

Diamond and Graham trace the origin of reputation rating to the pioneering work of Raymond Hughes in the 1920s through to the 1930s and advanced work by Hayward Kenniston in the late 1950s. There are a host of initiatives that rank universities at country and world levels. In the United States, the prominent ones are that of the National Research Council (NRC) – the research arm of

the National Academy of Sciences. The methodology used by the National Research (NRC) consists of asking faculty raters or experts to evaluate the quality or reputation of the faculty in different programs. The findings are then published in the Blue Book and the report is titled 'Research-Doctorate Programs in the United States'. This report contains program data on indicators such as research output. The other initiative is a publication titled *News & World Report* produced annually. Diamond and Graham point out the utilitarian nature of the reports in the United States: top ranked research-doctorate programmes or, those seen to be within striking distance of the top tier, may win increased funding, recruit nationally recognized faculty and talented students, and place their graduates in the academic job market (Diamond; Graham, undated:1).

In Canada, one of the famous initiatives is the Maclean's rankings, which places Canadian universities in peer groups. Johnston and Dwyer explain the purpose of MacLean's rankings as: to offer students and parents a rare view into the ivory tower – and a unique opportunity to make informed decisions on the comparative strengths of public universities across Canada (Johnston; Dwyer, undated:1). The MacLean's rankings place universities into peer categories of primarily undergraduate, comprehensive and medical-doctoral (Johnston; Dwyer, undated). The MacLean's rankings are based on the following indicators: the caliber of the student body through average high school grades, the attraction power through the proportion of out-of-province students and the percentage of international students, graduation rates, class sizes, access of new students to top faculty through percentage of first year classes taught by tenured and tenure-track professors, caliber of faculty through percentage of those with PhDs and the number who win national awards, the amount of money available for current expenses per weighted full-time equivalent student and the percentage of the budget spent on student services and scholarships and bursaries, the quality of the library through number of volumes and volume equivalents per number of full-time-equivalent students; total holdings measurements in the medical-doctoral category; percentage of a university's operating budget allocated to library services; percentage of the library budget spent on updating the collection; spending on electronic resources, reputation with own graduates and community at large and alumni support through number of gifts to the university (Johnston; Dwyer, undated:2-3). Two initiatives that rank universities at world level have recently come on-line. These are the initiative of The Institute of Higher Education at Shanghai Jiao tong University (SJU) that started in 2003 and the Times Higher Education Supplement (TESS) that came on-line in 2004 (Levin; Jeong et al 2006). Levin and Jeong (2006) provide a range of indicators that the Shanghai rankings are based on. These are: the total number of alumni of an institution winning Nobel Prizes and Fields Medals, the total number of the staff of an institution winning Nobel Prizes in physics, chemistry, medicine and economics and Fields Medals in mathematics, the number of highly cited researchers

in broad subject categories in life sciences, medicine, physical sciences, engineering and social sciences, the number of articles published in *Nature and Science* between 2000 and 2004; the total number of articles indexed in Science Citation Index – Expanded, Social Science Citation Index; and Arts & Humanities Citation Index in 2004 (Levin; Jeong et al 2006).

The rankings of the Times Higher Education Supplement (TESS) 2005 were based on the following indicators: the percentage of international faculty, the percentage of international students, faculty-student ratio, number of academic papers generated by each staff member, peer review score, which was arrived at by asking academics to nominate both the academic subjects and the geographical areas on which they felt able to comment and to name the top institutions in the areas and subjects on which they felt competent to make informed judgments, and recruiter review score through the opinion of major international employers of graduates (Levin; Jeong et al 2006).

From the exposition of reputation rankings above, it is patent that for an institution to command favorable rankings it has to enjoy high scholarly productivity and highly cited researchers in broad field categories, the bulk of the academic staff have to have PhDs, and top flight library services. Thus, irrespective of the ranking model, for any University to be in the tier of the top ranked, it has to be inclined more to research than teaching.

The utilitarian value of favorable rankings to universities cannot be over emphasized as it serves as a catalytic stimulus for attraction of research funding from different categories of stakeholders.

Makerere University faces the challenge of breaking into the tier of 10 top ranked universities in Africa.

(b) Research-teaching mix in favor of teaching

The research-teaching mix at Makerere is heavily tilted in favor of teaching. Undergraduate students are in the region of 28,000 while the number of graduate students standing at a paltry 6,000 implies that the university is over 80% teaching while research accounts for only 20% if the quantum of graduate training is applied as a proxy for research depth in universities. On universities in the developing world marginalizing research, Mamdani (2007) ascribes it to 'an impoverished vision of colonial vintage, that of a global division of knowledge whereby research is concentrated in a few technologically advanced countries-the knowledge – driven economies (Mamdani, 2007:xvii). Mamdani warns that developing countries should not just be consumers of knowledge spawned in the developing world. He argues that 'concrete conditions require an understanding of concrete processes, which there can be no independent thought – and indeed independence – without institutions to generate independent research' (Mamdani, 2007, xvii).

Spawning independent research in this global environment where knowledge is supposed to be the driver of national growth and development is a challenge that well established public universities like Makerere have to address.

(c) Limited academic space

According to a study commissioned by the Planning and Development Department (2006), the academic space deficit stands at 61,825 square meters. Academic space consists of classrooms and laboratories. This means that student overcrowding in lecture halls is a reality.

(d) Low staff-student ratio

According to the National Council for Higher Education (2006), the average staff student ratio at the University is 1:33 compared to 1:20 considered respectable by the National Council for Higher Education.

(e) Under subscription of professorial establishment

Only 35.8% of the professorial establishment is filled. This means that the University is reeling under severely limited academic leadership and scholarly productivity since the duo is associated with professorial ranks.

(f) Trends in funding

Table 4 overleaf depicts the funding pattern from the different revenue streams of the University for the period 2000/01 to 2005/06.

As shown in table 4 below, Government subvention increased from Ushs.23 billion in 2000/01 to Ushs.35 billion in 2005/06. This represents an increase of 51% in a period of 6 years. In the same period private funding, which is internally generated income, climbed from Ushs.14 billion to Ushs.53 billion. This represents an increase of over 270%.

The table also shows that the financial input of development partners has been quite significant in the said period. Donor funding principally from foreign corporations and governments has helped to reduce the funding gap. As shown in the table 4, without donor funding the university's deficit would have been consistently over 25% of the university's yearly budget bid.

Analysis of the trend in funding shows that if donor funding ebbed in the coming years, the deficit would widen. This is a rather precarious situation since donor funding is fragile.

Table 4: Trends in Makerere University funding 2000/01-2005/06

Year	Proposed Budget	Gov't Recurrent Funding	Private Funding	Donor Funding	Total Funding	% deficit/surplus	% deficit/surplus Minus donor funding
2000/01	61,423,143,234	23,228,971,654	14,014,545,258	7,308,450,000	44,551,966,912	(27.5)	(43)
2001/02	70,728,530,956	27,542,569,313	19,030,438,782	18,644,013,000	65,217,021,095	(7.8)	(34)
2002/03	73,529,739,120	27,526,750,819	29,438,099,323	60,013,999,800	116,978,849,942	59	(22.5)
2003/04	78,000,000,000	26,590,262,050	31,915,900,197	22,959,122,400	81,465,284,647	4.4	(25)
2004/05	103,000,000,000	36,653,142,917	37,411,816,460	12,693,974,400	86,758,933,777	(16)	(28.1)
2005/06	127,065,491,821	35,102,426,787	53,589,637,625	17,082,388,800	105,774,453,212	(17)	(30.2)

Source: Finance and Planning and Development Departments

J.K W Wabwire 23

4.0 STRATEGIC CHOICES

Having successfully executed, in section 3, a 4-level analysis of the environmental trends with their potential to impact on the Makerere University's strategic positioning, we now proceed in earnest to suggest a raft of options that the University could explore so as to secure her future 10 years down the line.

4.1 International positioning

As exposited in section 3.4.2 (a), a university worthy its salt has to show particular concern about its image or standing in the eyes of its stakeholders both nationally and internationally. A university relies on its image to mobilize the requisite human and financial capital, which constitute the critical support infrastructure in the delivery of her enterprise strategy.

As we map out the future of Makerere University, some of the strategic questions that we have to chart a response to are: What should be the ranking of Makerere University on the higher education landscape in Africa? Should the University remain at its current ranking (i.e., at position 20 and beyond) or should its ranking improve with the likely possibility that Makerere University breaks into the tier of top 10 African universities by the year 2017?

If the choice is that it should break into the tier of top 10 African universities, then this choice should be reflected in the revised vision statement. If Makerere University is to break into the top tier, then the following indicators will have to be closely monitored:

- a) International popularity as measured by the increasing size of international students reflected in the number of applications and enrolment.
- b) Increasing number of regional and international programs successfully launched by or at Makerere University and their visibility on the World Wide Web.
- c) Research output and its visibility on the World Wide Web.
- d) Increasing number of international research collaborations and outcomes and their visibility on the World Wide Web.
- e) Research reputation of its staff and its visibility on the World Wide Web.
- f) Increasing exploitation of intellectual property in the country and its visibility on the World Wide Web.
- g) Increasing number of highly cited researchers in broad field categories in science, engineering and humanities.
- h) Increasing percentage of staff with PhDs.

- i) Increasing number of professors and the visibility of their respective intellectual output on the World Wide Web.
- j) Improved quality of the university library through number of volumes in different subject categories.
- k) Appropriate staff-student ratios in both humanities and sciences.

4.2 Research-teaching mix

A clear choice has to be made regarding the research-teaching mix. Should the status quo (i.e., 20:80 in favour of teaching as exemplified by the current ratio of graduate to undergraduate students continue to obtain up to 2017? Or should the research-teaching mix change? And if yes, what should be the mix by 2017? In order to answer this question, supply of some background information is in order here.

Makerere University is the oldest university in the country and it is no longer the only player in the tertiary education industry. Other state funded providers of university education are on the scene. Owing to the foregoing, its percentage of students admitted as a proportion of eligible applicants in the country has been ebbing since academic 1999/2000. By 2006/07 it only admitted 30% of eligible undergraduate applicants in the country (see table 5 below).

Table 5: Percentage of eligible candidates admitted at Makerere University for undergraduate programs

Year	A- Level candidates	Eligible Applicants	No. Admitted	% of eligible candidates admitted
1999/2000 (1998)	28,638	16,674	14,316	85.9
2000/01(1999)	35,706	22,712	13,293	58.5
2001/02 (2000)	39,000	22,021	15,800	71.7
2002/03 (2001)	44,404	25,555	14,349	56
2003/04 (2002)	54,032	28,892	13,282	46
2004/05 (2003)	55,253	32,613	15,206	46.6
2005/06 (2004)	59,288	35,196	15,943	45.3
2006/07	70,549	44,089	13,560	30.8
2005				

Source: % computed from admission figures from the Academic Registrar's office

Furthermore, it is only Makerere University that is significantly engaged in research relative to other universities in the country, whether public or private. On the strength of this background information, we venture to suggest that Makerere University should aspire for the status of an inquiry-driven university by 2017. If this aspiration is taken on, it would mean that the research-teaching ratio will have to be progressively scaled up so that by 2017 the research-teaching ratio

would be in the region of 40:60 (i.e., the enrolment share would be 40% graduate students while 60% undergraduate students). This strategy would be synergistically congruent with the one advanced in 4.1 relating to improving significantly the positioning of Makerere University in Africa's league table.

By Makerere University coveting and aspiring for the status of a research-driven university by 2017, the following advantages would accrue to the nation:

- (i) Makerere University would not only engage in knowledge production of her own to power the growth of the national economy, it would also serve as a knowledge conduit from the top ranked international research universities for dissemination in the country. Makerere University would host major research and scholarly journals and other databases through a wide network of research collaboration with the top flight universities in the world. Makerere University library would then provide services to other universities in the country. According to Altbach (2004) this strategy has worked well in Arab countries where Egyptian universities serve as knowledge conduits for the rest of the Arab World.
- (ii) This strategy would serve to differentiate the country's academic system so that not all universities would be engaged in teaching as it is the case today. This would lead to positive division of labour in the country's academic system. Makerere would provide advanced training at PhD level for lecturers in other universities. All PhD programs without exception at Makerere would then have a module on university pedagogy like it is the case at the University of Navarra in Spain.

4.3 Research mix

If the suggested research-teaching mix is acceptable, the next strategic questions would be: What typology of research should be executed and whose research agenda should be pursued?

4.3.1 What typology of research?

This question relates to the mix of basic and applied research. We define *basic research* as an inquiry undertaken to satisfy academic curiosity and is of no immediate application while *applied research* can be defined as an investigation executed to solve society's problems and is of immediate application. Universities have to engage in both kinds of research if they are to remain true universities and relevant to society.

As Makerere plots her future, what should be the ratio of applied to basic research? 50:50 or 70:30 in favour of applied? Charting a response to this question would help in funding decisions regarding research.

would be a zero-sum one.

4.3.2 Science, technology and humanities mix?

humanities as far as funding research is concerned. What should be the ratio?

From the various development frameworks of Government such as the PEAP, PMA and the Millennium Science Initiative (MSI), science and technology should be privileged. But it should be pointed out that advancing national development does not rest on science and technology alone. Humanities-based subjects such as sociology, management, gender studies, to name but a few, have a role to play since development is multi-dimensional. It would, therefore, not be thoroughly sound

for the university to lock out humanities in her research priority setting. Such a strategic decision

There is need for the university to make unambiguous choice regarding the mix of science and

We would root for a win-win strategy where both humanities and science are recognized but given different weights. We suggest a ratio of 60:40 in favour of science. This decision is necessary to guide the allocation of untagged research funding sourced internally and from development partners.

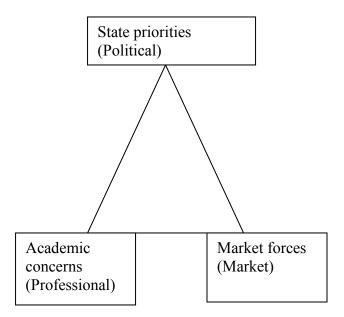
4.3.3 Whose research agenda?

This strategic question relates to a decision on who should set the research agenda of the University (i.e., whose research concerns should be addressed?)

Doing justice to this strategic question necessitates us making reference to an analytical framework posited by Clark (1983) but later modified by Burke (2005). Clark (1983) identified three principal forces that coordinate national education systems. These are state control, academic oligarchy, and the market (Clark, 1983 as cited in Burke, 2005).

Burke (2005) modified this coordination model of national higher education systems and instead turned it into an accountability triangle of higher education. The model is depicted below:

Fig 1 The Accountability Triangle



State priorities: These reflect public needs, desires and concerns for tertiary education as expressed by state officials

Academic concerns: These encompass issues and interests of the academic community especially the staff

Market forces: These reflect needs of customers and demands of students, parents, industry and other clients.

Burke (2005) propounds that for an accountability system for higher education to be considered effective, it should bend to the concerns and interests of the three coordinating forces, namely: the state priorities, academic concerns and the market forces without being overly subordinate to any of the coordinating forces since each force is important (Burke,2005 as cited in Wabwire, 2006).

For the purpose of guidance pertaining to future research priority setting at Makerere University, we propose a research accountability triangle model designed along the lines of the accountability triangle model exposited above.

We contend that when it comes to research priority setting, the three coordinating forces, namely: the state priorities, academic concerns and the market forces are still valid.

We posit that for a university to be effective in research, the research undertaken has to respond to public policy (state priorities), industry and civil society needs (market) and the need to carry out independent research to generate knowledge to satisfy academic curiosity (academic). That is how universities can balance research accountability.

The suggested research accountability triangle model is depicted below:

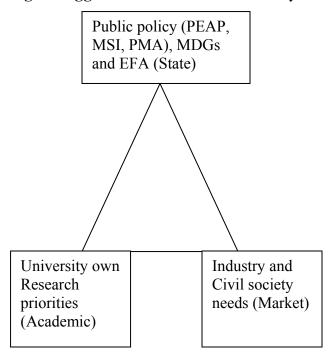


Fig 1 Suggested Research Accountability Triangle

Applying this model to Makerere University's research priority setting would obligate the university to come up with a research priority agenda that reflects the needs of the public policy (Uganda's Poverty Eradication Action Plan (PEAP); Plan for Modernization of Agriculture (PMA); Millennium Science Initiative (MSI), industry and civil society and the university's own research priorities. The university would then mobilize research funding from the state, industry and the University's own internal sources to execute her research agenda. The level of funding from each coordinating force would be contingent upon the relative weight of each force in the University's strategic research agenda. This approach would obviate Makerere University responding to research opportunities opportunistically rather than strategically. It precludes a situation where the University's research agenda is exclusively driven from without.

4.3.4 Strengthening Organizational capacity for research execution

If the University takes on board the aspiration of being an inquiry-driven institution by 2017, then it would be necessary to rethink the current organizational set up for delivery of the research mandate. Currently, research is coordinated by the School of Graduate Studies. The School is a monostructured establishment, implying that research is coordinated by a mere desk. This means that

research lacks the organizational space requisite to put it nearly at par with teaching given the fact research is one of the principal mandates of the University notwithstanding. More ever coupling research coordination with graduate training gives the impression that research is just an appendage of graduate training. This unfortunately tends to obscure research and privileges teaching in the overall delivery picture of the University.

We suggest that the University should establish a fully-fledged Department or Directorate to coordinate the advancement of the research mandate to a higher level. The University of Dar-es-Salaam has already walked this route.

The proposed Directorate would be responsible for the direction and management of the bulk of the research management value chain. The research management value chain consists of market intelligence; grants and contracts negotiation and approval; promotion of research capacity; cobbling together inter-disciplinary teams; and identification and exploitation of intellectual property. The proposed Directorate or Department would work closely with the recently established Makerere University Private Sector Forum (MUPSF) and the proposed Advancement Office. MUPSF would handle aspects of the research management value chain related to market intelligence and identification and exploitation of intellectual property. The Advancement Office would handle aspects of fundraising and research-grant seeking in conjunction with the proposed Directorate.

4.4 Response to the projected increasing demand for university education at national level

As indicated in table 2 in section 3.3(b), the number of eligible applicants is conservatively projected to jump from over 39,000 in 2006 to over 104,000 in 2017 representing a leap of over 106% in ten years.

Notwithstanding the suggested strategic choice of gradually changing the research-teaching mix in favour of research, Makerere could continue to play a critical role in expanding access to undergraduate students. Reducing drastically the number of undergraduates is logical in light of turning the University into a predominantly graduate training outfit. However that strategic decision is likely not to carry favour with policy makers at national level given that the country's tertiary Gross Enrolment Ratio (GER) is a miniscule 4.1%.

The strategic question then is: How can Makerere respond to the projected increase in the demand for higher education spurred by the rolling out of Universal Post-Primary Education and Training (UPPT) loosely called (USE) in the face of space deficit of over 124,000 square metres?

The way out of this seeming conundrum is for Makerere University to provide undergraduate training through innovative ways by challenging the brick and mortar model of higher education at undergraduate level.

We suggest the following strategies:

a) Upgrade the Department of Distance Education into a Faculty with a network of Regional Centres

Makerere could up grade the current Department of Distance Education into a faculty or Institute and broaden its mandate to include open, distance and e-Learning as recommended by the External Evaluation carried out the International Extension College, Cambridge, UK (2005) and as reenforced in the Policy and Strategic Frameworks for Distance Education at Makerere University (2006). The nomenclature of the Department would then change to Faculty or Institute of Open Distance and e-Learning (ODeL) as it is the trend now worldwide. This Institute would spearhead distance learning using multimedia approaches. These approaches would include print-based and ICT-mediated learning. With this model, Makerere could target delivering the bulk of the humanities and some science programs at undergraduate level using this model. This strategy would enable Makerere to maintain admitting 30% of the eligible applicants as it is the case today without stretching the facilities on campus. The bulk of campus would be reserved for graduate programs. Going this route would call for building the capacity of the faculty in the development of both traditional print-based and on-line distance materials and pedagogy.

Distance learning is no longer a preserve for second chancers contrary to the perceptions of some people. Distance learning is gaining popularity with A-level applicants. Originally applications to distance learning programs were dominated by for Diploma holders or second chancers. Table 6 below shows the trend of applications from A-level for Bachelor of Commerce in the last three years at Makerere University.

Table 6: A-level applicants to B.Com External degree at Makerere University in the period 2004/05-2006/07

Year	2004	/05	2005	/06	2006/07		
	A-Level Applicants	Admitted	Applicants	Admitted	Applicants	Admitted	
Bachelor of Commerce	1898	913	3194	1153	2307	755	

Source: Statistics from Academic Registrar's Department

With an expanded mandate, an enhanced profile and strengthened Regional Centres, the new ODeL Entity would take pressure off the main campus facilities.

b) Franchising

Another strategic option that Makerere could consider is designing programs with a vocational bent and franchising them to local tertiary institutions for delivery. Makerere University provides training to the teaching staff of these institutions and puts in place mechanisms to assure quality. For example, Makerere University could franchise BA Secretarial Studies to YMCA or YWCA. Makerere would then train the teaching staff of YMCA at Masters degree level or ensures that the staffs who teach on these programs have a minimum qualification of a Masters degree and or advanced professional qualifications like ACCA and CIMA.

Makerere University, the franchisor, and the institutions participating in this arrangement (Franchisees) would agree on how to share both fees and tuition.

This would result into Makerere University having a net work of affiliated community colleges throughout the country providing high level training in vocational subjects at both diploma and degree levels. Other programs like Bachelor of Tourism and Bachelor of Science in Wood Technology could also be managed along these lines.

The proposed affiliated community colleges could later on graduate into constituent colleges of Makerere University.

Besides expanding access to tertiary education, this strategy would deepen the public private partnership, which is becoming the hallmark of Makerere University.

4.5 Internationalization

Given that Makerere is operating in a global environment and ranking of universities is partly based on the presence of international students and faculty, it would be of strategic essence for the University to open its gates a bit wider than it is the case today to international students. Currently, there are about 1800 foreign students out of a total student enrolment of about 34,000 students, representing about 5.3% of total student body. This falls short of 10% that had been envisaged in the strategic plan that is winding down in June 2007. The shortfall could be attributed to lack of conscious efforts on the part of the University to operationalize the set strategy in the strategic plan. Having a good share of international students helps to raise the visibility of the University. International students are also capable of paying tuition based on realistic cost.

The University could have a strategy that targets about 30% of the total university enrolment at both undergraduate and graduate levels to consist of international students.

The question then would be how to realize this objective without raising the heckles of the powers that be. The counter argument is likely to be that reserving 30% of places at Makerere University would deprive nationals of the opportunity to study at Makerere University.

The proposed strategy would be smoothly implemented if the following strategies are considered and taken on board by the University:

4.5.1 Multinationalization

The University could consider franchising some of its programs like MBA, information technology and humanities-based programs to tertiary institutions in African countries with extremely low GER like Malawi and Zambia. As pointed out elsewhere in this paper, the GER of Malawi is a mere 0.5%. A sub-country like Southern Sudan that is emerging from bitter civil war with its educational infrastructure under construction and reconstruction offers tremendous opportunities for Makerere University to exploit.

The University, in the long-term, could establish branch campuses in countries like Malawi and Sudan. Franchising in Southern could be problematic because, owing to the ravages of civil war, it is highly unlikely that there are tertiary institutions both private and public that can be nurtured by Makerere University. The feasible option for Makerere is to consider set up an ultra modern distance learning center in Arua to tap the Southern Sudan market.

4.5.2 Undertaking joint ventures with some institutions in China

The growing popularity of English as a language of scholarship and business and the soaring demand for higher education in China provide Makerere with an entry point into China through offering short- and long-term courses in English. The Faculty of Arts would spearhead the implementation of this strategy. This could be done under the auspices of the recently established Forum on Sino African Cooperation (FSAC). Other Faculties in the University would then capitalize on the experience of the Faculty of Arts to break into the Chinese higher education market.

4.5.3 Designing and running African cultural or anthropology studies programme in the United Kingdom

The United Kingdom is one of the countries in the developed world with the largest population of immigrants of African descent. As exposited in section 3.1(f) African immigrants in the UK constitute about 19% of the total immigrant population in the UK.

Given the fact that there are 4.8 million immigrants in the UK, it means that there are over 900,000 Africans in the Diaspora in the UK alone. Some of these Africans may not be enthusiastic about the

homogenizing effect of globalization on culture would wish their children to get schooled in African cultural ways. This holds out an opportunity for the Faculties of Social Sciences and Arts to exploit either solo or in concert with other universities like Dar-es-Salaam and Nairobi to exploit this opportunity subject to the findings of a market survey. In the short-term, the University should undertake a market survey among the immigrants of African descent about the feasibility of this proposed strategy.

4.5.4 Designing international programs

Makerere should step up designing and running regional and international programs at Masters level. The Faculty of Social Sciences could explore the feasibility of setting up a school of Government and Public Policy modelled along the lines of either Kennedy School of Government at Harvard University or Wodrow Wilson School of Public Affairs at Princeton University in the USA. The proposed School could be named after Nelson Mandela. The Nelson Mandela School of Government and Public Policy under the proposed College bringing together Faculty of Arts, Social Sciences, etc. is likely to be a hit since international fundraising for such a venture would not be so hard since Mzee Mandela enjoys icon status across the globe. The School would offer international programs targeting the whole of Africa and some parts of Asia and would also have an international faculty. Since the envisaged arena of the School would be the whole of Africa, this school would offer bilingual programmes in both English and French to cater for both Anglo- and Francophone Africa. The School would also fundraise for a scholarship fund also named after Mandela to provide Nelson Mandela Fellowships in good governance and public policy.

4.5.5 Setting up summer schools

Makerere should consider running summer schools in June, July and August in various areas. These summer schools would target students across the globe and should be extensively marketed on the basis of the learning outcomes. These schools would provide a strategic basis for integrating multiculturalism into the formal educational outcomes of Makerere University.

4.6 Competitive advantage

Every institution, whether it is a private enterprise or a university, has to differentiate itself from the competition. What makes Makerere University different from other universities in the region and Africa in ways that are appreciated by its customers or stakeholders? What makes a university stand out from the crowd of other universities is the instant recognition and appreciation of its graduates and qualifications relative to the rest of other universities. When it is easier for a graduate of a

certain university to find employment at both national and international levels relative to a graduate of another university, then it can be said that that University whose graduate is more competitive has competitive advantage. For example, a PhD in Law from the Yale School of Law at the University of Yale would be recognized by anybody irrespective of space and time. Equally an MBA from INSEAD in France or Harvard Business School or MBA Marketing from the Wharton Business School in the USA or an engineering degree from Delft University in Netherlands would need no belabouring about its quality. These institutions enjoy what in strategic management we call competitive advantage based on instant brand recognition. Owing to their competitive advantage, these institutions receive a huge number of applications worldwide.

Makerere has to work on its brand image. The brand image will be contributed to by the quality of her graduates. It is our considered view that perceptual mapping of Makerere University will be contributed to by the following two strategies:

4.6.1 Revision of curricular and pedagogic concept

As presented in section 3.1, rapid advances in information and communication technology have contributed to what is now called the 'knowledge economy'. With this economy, the labour market is very dynamic as occupational structures are nearly in a state of flux. It becomes difficult to pin down the skill-set necessary for tomorrow in any field. Some research studies in the UK, however, have pinned down the skill-set of generalist nature. This skill-set consists of problem-solving; analytic, critical and reflective ability; willingness to learn; and, communication skills. This skill-set was also recommended by the two tracer studies the University commissioned. These were the tracer studies relating to graduates in the Faculty of Medicine, Veterinary Medicine and Agriculture. The plan for higher education in Uganda envisions a graduate who is a competitive player in the global labour market and one who is re trainable and possess problem-solving skills. In order to produce a graduate who is competitive in the labour market, is it not time to re think the curricula across disciplines with a view to having a right mix of subject matter knowledge and the much-sought-after generalist skills? Is it not time to rethink the current pedagogic model which is structured around the lecturer with a view to structuring it around the learner so that students get stimulated to learn more on their own but with the lecturer more as a facilitator than the fountain of knowledge? Learner-centred approaches are likely to impart problem-solving skills and stimulate students to undertake more interrogation themselves than being merely at the receiving end.

4.6.2 International accreditation

If an institution's programme in country Y is accredited by leading accreditation agencies in country X then it means the qualifications gained in country Y are recognized in country X since they are comparable.

Makerere University should strive to award qualifications, in some programs, that are comparable to those countries that receive immigrants such as Australia, Canada, United Kingdom and USA. If the qualifications obtained from Makerere are comparable to similar qualification in these countries then graduates from Makerere would, keeping other factors like racism constant, be able to hold their own in the competitive international labour markets.

Makerere should strive in the next 10 years to accredit her programmes with major accrediting agencies in Australia, Canada and USA. For the case of UK, Makerere has to ensure that her quality assurance framework is in line with that of the Bologna process. Bologna process seeks to create single higher education space in the European Union. In the wake of Bologna, all universities in the region will have comparable qualifications. There would be a single European Union standard for higher education.

Going for international accreditation would be mutually consistent with the proposed raft of strategies proposed for internationalization. If this happened, Makerere would enjoy a competitive advantage over the rest of institutions in the region.

4.7 Income generation

Finances constitute one of the critical support infrastructures of the University's delivery capacity on her principal enterprise strategy.

Given that the prognosis of state funding in the years to come is rather grim and that donor fatigue is likely to set in, it is of strategic essence that Makerere takes income generation to a higher level. Nearly all the constituent units of the University should be obligated to come up with innovations regarding income generation within their disciplinary competencies. Makerere should also consider having a raft of business enterprises. The case of Dar –es-Salaam University is instructive here. University of Dar recently set up a shopping mall. It also runs a battery of petrol stations in the city along commercial lines.

We venture to suggest a few strategies in just a few units as an example:

4.7.1 Research and innovations based income generation

The Faculty of Agriculture could adapt the Egerton University Model – where production is detached from teaching and research. Production is run along commercial lines. The processed milk and ice cream sold in Eldoret is made at the Egerton University farm.

The Faculty of Agriculture could adapt the Jomo Kinyatta University of Agriculture and Technology *(JKUAT) model. At JKUAT the following is happening:

- 1. Using biotechnology that applies tissue culture and propagation to come up with resistant seeds varieties and which are then sold to farmers.
- 2. Researching into bio-diesel and the University is using bio-diesel to power their tractors.
- 3. Developed and selling juice extractors and solar power solutions.
- 4. Assembling their own computers at competitive cost and selling them to secondary schools.
- 5. Developed e-learning software contrived for education institutions. This software provides scope for teachers and students to exchange learning materials, post and submit assignments.
- * Information on JKUAT model was sourced from an article by Wachira Kanga'ru in the *Sunday*Nation of October,8 2006.

Makerere could adapt some of these income generation approaches at both Egerton and JKUAT. The Faculties of Agriculture, Veterinary Medicine, Computing and Information Technology, Technology and Veterinary Medicine and Directorate of Information Communication Technology Support (DICTS).

The University could transfer the innovation relating to liquid soap to industry and sanitary pads for commercialization or set up a holding company to spearhead commercialization of these innovations. Each of the innovation would then be managed as a strategic business unit until such a time the SBU graduates to a level of a company.

The Department of Anatomy could consider setting up a funeral home

This income generation approach would be quite commendable since the Faculties will be generating income within their disciplinary competencies.

Other possible enterprises include Makerere University Agricultural Research Institute (MUARIK) running poultry business on commercial lines. There is, therefore, need to detach production from training and research as it is the case with Egerton University, Kenya.

4.7.2 Consultancy

Makerere University is acknowledged by UNESCO as a leader in gender mainstreaming initiatives in the region. The University should leverage this competency and provide consultancy services to governments and civil society in Africa.

The University should revive Makerere University Consultancy Bureau. There are many consultancy opportunities out there that the revitalized bureau could exploit to the financial advantage of the University.

4.7.3 Setting up a credit and savings society

The University could consider setting up a savings and credit society. The society would mobilize savings from the University staffs and lend to them at a competitive rate. The rate would be based on the risk free rate and a marginal mark-up to generate surplus to society. The current lending rate of 22% by commercial banks in the financial market is quite prohibitive. The proposed savings and credit society would hugely improve the welfare of Makerere staffs as they would be able to borrow at a more competitive rate than the one obtaining in the financial market today. This society could blossom into a fully fledged bank after some time.

4.8 Establishment of an endowment fund

It is time Makerere thought of establishing an endowment fund. The fund would be the capital to generate interest for the University to nurse some of its recurrent and development exigencies. This should be spearheaded by the Resource Mobilization Unit.

5.0 CONCLUSION

It is our firm belief that if Makerere paves its road to 2017 with some of the suggested intentions in this paper, MaK Y2K17 should be a superbly intelligent knowledge enterprise flying and flying.

REFERENCES

Akingbola, E. (2005). University /private sector partnership: Way forward in Nigeria. In: Vanguard newspaper posted to the web: Thursday, September 01,2005.

http://www.vanguardngr.com/articles/2002/features/education/edu.301092005.html

Altbach ,G.P (2004). Globalization and the University: Myths and realities in an unequal world In. *Tertiary education and management* no.1, 2004

Burke, C.J. 2005. The many faces of accountability.

In. Burke (Ed.) 2005. Achieving accountability in higher education. Published by Jossey-Bass

Chimombo, P.A.J (undated). Country higher education profile. Malawi. http://www.bc.edu/bc_org/avp/soe/cihe/inhea/profiles/Malawi.htm

Court, D. (1999). Financing higher education at Makerere: The quite revolution. Human Development. Published by the World Bank

Crown. (2002). Migrants in the UK: their characteristics and labour market outcomes and impacts. RDS Occasional Paper No.82

Damme, V.D. Higher education in the age of globalization In: UNESCO (2002). Globalization and the market in higher education.

Diamond, N; Graham, H,G. (undated). How should we rate research universities? http://www.vanderbilt.edu/AnS/history/graham/change.htm

Kang'aru, W. (2006). Universities in search of extra cash In: Sunday Nation. October 8,2006.

Levin, H,M; Jeong, D,W; Dongshu Ou . 2006. What is a world class university? http://www.tc.columbia.edu/centers/coce/pdf_files/c12.pdf

Johnston, A,D; Dwyer, M (undated). Methodology: Ranking Canadian Universities .

http://www.macleans.ca/universities/article.jsp;jsessionid=GEKKIEKMLHPF?content=20030626
_161450_2092

JWT. (2006). The changing higher education landscape. A paper presented at CASE Europe workshop held in Nottingham, United Kingdom September 6-8, 2006

Mamdani, M. (2007). Scholars in the marketplace. The dilemmas of neo-liberal reform at Makerere University, 1989-2005 Published by Fountain Publishers, Kampala

Ministry of Education and Sports (MOES), (2003). The strategic plan for higher education 2003-2015.

Musisi , B,N; Muwanga, N.K. 2001. <u>Makerere University in transition 1993-2000</u>. http://www.foundation-partnership.org/pubs/makerere/index.php

Nabudde ,R. (undated). Return on investment :A two way perspective UK higher education National Council for Higher Education (NCHE,2006). The state of higher education and training in Uganda

UNESCO/IIEP, (2002). Medium term plan 2002-2007

Wabwire , W.J.K, (2006). The reformed accountability framework of public higher education in Uganda. System and institutional level analysis: Case of Makerere University. Un published M.A thesis UNESCO/IIEP

Wheelen , L.T; Hunger, D.L . (2004) Concepts in strategic management and business policy 9th edition

World Bank. 2004. Uganda Tertiary Education Sector Report. http://siteresources.worldbank.org/AFRICAEXT/Resources/no_50.pdf

EXHIBIT 1

Social Capital Gateway

Resources for the Study of Social Capital

Edited by Fabio Sabatini University of Rome La Sapienza and University of Cassino

Home Reading List Digital Libraries Web Sites Researchers Search Italiano

<u>Home Page</u> > <u>Social Sciences Departments</u> > <u>Rankings</u> > African Universities

Top African Universities on the web

This ranking is edited by InternetLab (Observatorio de Ciencia y Tecnologia en Internet), a research body of the Spanish Research Council. Starting from the assumption that the Web has become one of the main sources to obtain information on academic and scientific activities, these rankings are based on several "webometrics" indicators: size, visibility, popularity and number of rich files. Click here to learn more on ranking methodology.

.....

^^^

The InternetLab Ranking of 30 Top African Universities

Ran	k University	Country	World Rank
1	University of Cape Town	South Africa	398
2	Universiteit Stellenbosch	South Africa	566
3	<u>Universiteit van Pretoria</u> - <u>University of Pretoria</u>	South Africa	718
4	University of the Witwatersrand	South Africa	720
5	Rhodes University	South Africa	738
6	University of South Africa	South Africa	1,449
7	University of the Western Cape	South Africa	1,553
8	American University in Cairo	Egypt	1,826
9	Noordwes Universiteit - North West University	South Africa	1,857
10	University of KwaZulu-Natal	South Africa	2,214
11	University of Johannesburg	South Africa	2,323
12	University of the Free State	South Africa	2,369
13	Université de La Reunion	France	2,387
14	Nelson Mandela Metropolitan University	South Africa	2,542
15	University of Dar Es Salam	Tanzania	2,819
16	<u>University of Zimbabwe</u>	Zimbabwe	3,072
17	Al Akhawayn University in Ifrane	Morocco	3,174
18	Cape Technikon	South Africa	3,414
19	<u>University of Mauritius</u>	Mauritius	3,682
20	University of Zululand	South Africa	3,724

Source: InternetLab (Observatorio de Ciencia y Tecnologia en Internet)