Limitations and Opportunities of Module Two University Programs: Case Study of Technical University of Mombasa

Ndenyele Wilson Omalenge

Abstract: The recent massive expansion of higher education in Kenya has had mixed results as outlined in this paper. There has been increased enrolment of both regular and module two (self-sponsored) students in various degree programs in Public Universities such as Technical University of Mombasa. However, reports indicate that there are many challenges on quality of graduates especially on those who are admitted under module two. For instance, most of students who are attending module two in the evening have a limited time of interacting with lectures. This paper examined limitations and opportunities of module two university programs at the Technical University of Mombasa. This study was based on secondary literature and a qualitative exercise which consisted of FGDs and interviews. This includes literature review of secondary data sources on Higher education in Kenya and elsewhere. The paper concluded that higher education is critical for the development of Kenya. However, there is urgent need to ensure that expansion of higher education should be well-structured and monitored especially on quality standards.

Key words: limitations, opportunities, higher education, module two

Introduction
Over the past decades many countries have emphasized widening accesses to Higher Education (HE), bringing rapid growth in the number of universities and programme offerings on offer. This has led to massification of Universities (Scott, 1995). For instance, a report by university of Oxford entitled international trends in Higher Education (2016-2017) shows that China opens an equivalent educational institutions of a university every week (Oxford, 2015).

For a long period of time, Higher Education (HE) has been of crucial for social and economic development in many countries. HE serves various purposes namely; first as equipping individuals with advanced knowledge and skills required for positions in development, professions and business,

1 Ndenyele Wilson Omalenge is teaching in the department of Social Sciences at Technical University of Mombasa, Kenya. Email: wndenyele@tum.ac.ke or ondenyele@gmail.com
second production of new knowledge through research and serve as a conduit for the transfer, adaptation and dissemination of knowledge generated elsewhere in the world, third support government and business with advice and consultancy services and finally play important social roles by forging the national identity of the country and offering for pluralistic debate (World Bank, 1994). In Kenyan context HE has been regarded as the apex of academic pursuit and backbone from which all new knowledge radiates and is expected to play a leading critical role in national growth and development (Koech, 1999 p. 173).

**Higher education in Kenya-The crisis**

Literature on education in journals, books etc. indicate that the national education sector in Kenya is in “crisis”. The whole problem can perhaps be attributed to a phenomenon coined by Scott called “massification”. The term ‘mass higher education’ was traditionally employed to describe the growth of enrolment beyond the level of academic reproduction and training for a small number of occupations requiring this education for demanding professions and privileged social positions. Scott (1995) used the term massification to describe the development of mass higher education during the latter part of the twentieth century. Evidently the growth increase in university enrollment without corresponding increase in budgetary allocation and investment in facilities has pushed the universities to seek a strategy of increasing revenues through the introduction of module two/part-time programs (Owour, 2012). This study therefore helps to examine the limits and opportunities of this program.

**Significance of this paper**

This paper examines the limits as well as opportunities of higher education system especially the module two/parallel programs and to formulate suggestions on how institution of higher learning in Kenya could ensure that expansion programs is well-structured and does not compromise the quality standards. This article is significant to education sector, especially higher education in Kenya and elsewhere for its important role is imparting skills and knowledge on issues facing our societies through research and development. Also, this article would be of value and interest to various stakeholders; in Kenya this article will provide information to the Ministry of Education (MoE) in designing, advocating and implementing policies of higher education and to various stakeholders such as in the academia, policy.
makers, and researchers. Moreover, and students will find this article useful in carrying out more research on higher education.

**Research Question for the Study**
This study was guided specifically by the question: Given the expansion of TUM what are the limits and opportunities for module two programs?

**Literature Review**

**Growth of Public Universities in Kenya**
The growth of higher education in Kenya dates back to 1922 when the then Makerere College in Uganda was established as a technical college which was then expanded to meet the needs of East African countries Kenya, Uganda and Tanzania (Tanganyika and Zanzibar), as well as Malawi and Zambia (Kivati, 2004). Over the post period of Kenya’s independence, there has been a big increase in the expansion of the university –level education and training in both physical facilities and enrolment (Keoch, 1999). Public Universities in Kenya are established through the institutional acts of parliament (CUE, 2013).

The growth of public universities in Kenya can be grouped in three phases as follows; the first phase was 1956-1984 and was an era of planned and controlled expansion. During this period the government pursued the policy of *africanising* the civil service by investing training of high skilled manpower. The main role of education at this phase was producing educated elites to take over in the civil including producing skilled following Kenya’s independence and filling posts of various sectors such as commerce and industry as well as other professions. Thus, higher education was critical for this process. University of Nairobi dominated higher education in this era (GOK, 1976).

Second phase was between 1985 and 1990. In this period, there was an unplanned growth of public education in Kenya that showed the establishment of two universities and constituent colleges. Enrolment of students rose to excessive numbers than projected in expansion plans in the early 1980s (World Bank, 1994).

The second phase of university expansion took place during a critical and challenging period in the evolution of the university system in Kenya. In early 1986, for example, the universities were closed following a student
strike and were not reopened until 1987. Consequently there were no university admissions in the intervening period. When the universities reopened in 1987, they were confronted by unprecedented admission problems. There were two cohorts of KCSE candidates to be admitted. Mounting public pressure over the long period of closure forced the university administration to “bite off more than they could chew” in the now famous strategy of “double-intake”. Two groups of university applicants, the 1986 and the 1987 cohorts were admitted together in 1987 bringing a virtual explosion in admission numbers; from 3,500 students in 1986 to 8,500 students in 1987. In 1990, another “double-intake” occurred following the admission of candidates from both the old 7-4-3-2 system of education and the new 8-4-4 system. Altogether the universities admitted 21,450 students bringing total enrolment in the public universities to 41,000 students comprising of 39,000 undergraduates and 2,000 postgraduates. Although the strategy of “double-intake” was initially considered to be a temporary solution to a problem in hand, it remains to date a problem that universities have had to live with (World Bank, 1991).

The public universities did not seem to be adequately prepared to handle such a large number of students within the existing infrastructure. Construction of additional physical facilities that had begun at the time of the “double-intake” in 1987 was still going on in some universities while it had stalled in others due to financial difficulties. It was imperative; therefore, that government had to provide additional physical facilities to enable the universities to cope with the large number of students already on their doorsteps (Boit & Kipkoech, 2012). The victims of the accommodation and teaching space crisis in the public universities were the middle-level colleges. The government phased out some of the middle-level personnel training institutions and turned over their facilities to the universities. This decision by the government legitimized the view of the Working Party on Education and Manpower for the Next Decade and Beyond (1988), under the chairmanship of Mr. Kamunge, when they observed:

In addition, it is the view of the Working Party that future expansion of university education can be done through the utilization of training and research institutions being allowed to develop as university institutions. Some of them have the facilities, equipment and personnel capable of offering high quality university education, training and research.”(GOK, 1988, p. 70)-cited in (Boit & Kipkoech, 2012)
Moi University took over the former Moi Science Teachers Training College, Siriba Diploma Teachers College and Government Training Institute, Maseno while Egerton University acquired the former Laikipia Teachers Training College. Kenyatta University temporarily made use of facilities at Kasarani International Sports Complex for student accommodation and lectures. The University of Nairobi took over physical facilities belonging to a number of government institutions within the city of Nairobi amongst them the Government Secretarial College at Parklands, the Kenya Institute of Administration at Lower Kabete and the Institute of Adult Education at Kikuyu.

Even with these additional facilities the universities were unable to accommodate all the students at once. There was also the complexity of teaching two groups of students with different syllabuses and completion dates. One group was on a three-year programme - the “A” level group; while the other was on a four-year period programme - the 8-4-4 group. The “A” level groups were particularly large and could not fit into any existing lecture rooms. At Moi University, for example, the Bachelor of Education programme had, in the 1990/1991 academic year, over 1,700 first year undergraduate students.

Boit further observes that teaching was staggered over three semesters instead of the usual two (a semester is a period of study consisting of sixteen weeks). Consequently, semesters for the two groups of students, the “A level” and the “8-4-4”, were run concurrently. The end of one semester was often the beginning of another sometimes with as much as a weekend break in between. Staggering of semesters delayed completion dates of programmes for as much as a year. Consequently, admission of first year students was also similarly delayed and the effects are still felt to date (Boit & Kipkoech, 2012). It also introduced a number of policy measures to stabilize, rationalize and control university development. One of the policy initiatives was the introduction, in 1991, of cost-sharing as a measure of cost-recovery in all public universities. This was in the wake of structural Adjustments Programs (SAPs) by the Bretton Institutes. The universities were also, for the first time, required to formulate ten year development plans to guide their physical, academic and staff development programmes. In addition, they had to justify and rationalize
their establishments, academic programmes and budgets (World Bank, 1994).

The third phase saw the establishment universities including Pwani University College (KU); Kisii University (EU), Mombasa Polytechnic University College and Kimathi University College of Technology (JKUAT) and among others. Educational Services providers are mandated to offer academic programmes ranging from degree to certificates in various disciplines (Boit & Kipkoech, 2012).

It is seen above the Kenyan higher education is relatively young and yet it has experienced turbulence. The causes of this turbulence affair have been many including mainly government rules and legislation to cope up with the economic turmoil, international economic trends and legislation and political trends in the country (Wangege-Ouma, 2007).

**Technical University of Mombasa: Historical glance**

Technical University of Mombasa (TUM) has passed through five transitional levels to become what it is now. The various phases it has undergone so far reflect the GOK’s concerted efforts in promoting technical, industrial, vocational and entrepreneurship education and training in line with the dynamic technological and industrial growth in Kenya and in Africa.

The origin of TUM can be traced back to the late 1940’s as a result of the consultations pioneered by Sir Philip Mitchell in 1948 between the Aga Khan, the Sultan of Zanzibar, the Secretary of State for the colonies, Sir Bernard Reilly and H. M. Treasury.

Out of these consultations, Mombasa Institute of Muslim Education (MIOME) was founded from capital raised by means of gifts of Kshs.100,000 from Sultan of Zanzibar and Kshs.50,000 by the Bohra Community of East Africa at the insistence of Doctor Sayedna Taher Saifuddin. Sheikh-Sir Mbarak Al-Hinawy who served as the Liwali (Governor) for the Coast of East Africa and Mombasa from 1941-1959 also had major contributions in MIOME’s development. As the Governor, he was consulted by the Government about various aspects of the proposed school, including its charter. In his capacity he represented the Sultan of Zanzibar and closely worked with the British colonial government. Sheikh Khamis was a generous
and enlightened philanthropist who sought to assist local causes. In 1948 he was the one who donated 34 acres of land where the institute was built and in Tudor area where the Prof. Ali Alamin Mazrui Campus stands. It was Sir Mbarak Al Hinawy who secured this prime land in port Tudor from his close friend Sheikh Khamis. Without this land MIOME would not have become a reality. When MIOME was opened in 1951, the Sultan of Zanzibar Sheikh Khalifa bin Harab and Sheikh-Sir Mbarak Al-Hinawy were the key guests in the occasion. Sheikh-Sir Mbarak Ali-Hinawy was the founding member of MIOME’s Board of Governors.

At its inception, MIOME was charged with the prime objective of providing adequate technical education on Muslim students of East Africa. In May 1951, MIOME enrolled its first batch of students to undergo a technical education programme which placed special emphasis on Electrical and Mechanical Engineering, Seamanship and Navigation, and Woodwork. MIOME exemplified the cooperation between leaders of different Muslim communities in East Africa including Sultan of Zanzibar, The Aga Khan and the leaders from Bohra Community.

At independence, the Board of Governors accepted that if the institute was to play a full role in the development of the education system of the independent Kenya, then its doors needed to be open to any qualifying students of all creeds.

In 1966 MIOME became Mombasa Technical Institute (MTI) and started to admit all Kenyans regardless of religion or race. In order to comply with the newly set educational policies of the independent Kenya, the curriculum of the institute was restructured and as result new more courses were introduced which included Civil Engineering, Electrical Engineering, Mechanical Engineering, Business Studies, Mathematics and Applied Sciences.

In the year 1976, MTI transformed to become the Mombasa Polytechnic, becoming the 2nd National Polytechnic in Kenya.

The Mombasa Polytechnic continued to develop more market driven programs, anchored on the five established Departments of Business Studies, Electrical and Electronics Engineering, Building and Civil Engineering, Mechanical Engineering and Applied Sciences.
In a Government strategy to increase access to University education across the Country, the dream to convert the Polytechnic to a University College was realized on 23rd August 2007, through a Legal Notice No. 160, when The Mombasa Polytechnic University College (MPUC) was established.

The University College status resulted in many positive changes implemented with great support by the Government of Kenya, including recruitment and development of staff, expansion of infrastructure, provision of facilities and introduction of new academic programmes under the mentorship of Jomo Kenyatta University of Agriculture and Technology. All these came at a time when the Country had started warming up to the Kenya vision 2030.

In 2013 Mombasa polytechnic University College (MPUC) became Technical University of Mombasa after being fully-fledged with the necessary provisions. The University had two well established Faculties and two Schools namely Faculty of Applied and Health Science and Faculty of Engineering and Technology and School of Humanities and Social Sciences and School of Business Studies.

The University has programs running all the way from Masters to certificate level. The student statistics currently stands at 10,680, composed of 3,062 females and 7,618 males, spread across all the programs. The University also recognizes the importance of human capital in driving the vision of the institution. A number of human resource management policies have been developed to guard against loss in human capital while also attracting the best capital in the region. To this effect, the University College boasts of 240 teaching staff, 112 staff on contracts and 432 administrative staff, giving a total of 784.

This is projected to grow to 782 teaching staff and 700 administrative staff by the year 2017. Extending the knowledge and skills of its employees is one of the University’s key commitments. Ensuing from this quest, TUM has modeled itself as a “learning organization,” that continually aims at improving the provision of learning opportunities to its employees. To this end, the University averagely spends kshs 27.5 million annually on staff development. Currently 148 members of staff are on sponsorship, taking various programs both locally and internationally. Since elevation into a University, TUM has recorded tremendous all round growth, making her on
one of the fastest growing University in Kenya. To sustain the growth and reposition as a world class university of Engineering, Science and Technology, TUM has continued to develop policy instruments, infrastructure and human resources that are dynamic and responsive to the country’s needs. Also the University has signed collaborative agreements with leading international institutions of higher learning to partner in research, training and technology transfer. In line with government policy to increase access to university education, the University has opened two strategic satellite Campuses in Kwale and Lamu County. These Campuses have made it convenient for deserving students to access TUM degree, diploma and certificate programs without necessarily coming to the main Campus.

The transition to the Technical University of Mombasa is therefore timely as the country moves forward in addressing the social pillars of the Kenya vision 2030 (ww.tum.ac.ke).

**Study design**

This study was carried out at Technical University of Mombasa (TUM). TUM is located at a coastal coastal strip of Kenya, on Mombasa Island along Tudor Creek. It is 500 km South East of Nairobi, the capital of Republic of Kenya.

TUM’s main campus was selected for this study not because other campus could not produce same result, but because that TUM is the only public university that has been in forefront of setting up satellite campus in the coastal region namely; Kwale Campus and Lamu campuses. It has also been expanding degree programs in new fields such as marine engineering, architectural and building environment among others.

The study used both secondary and primary method approach as its methodology to gather data for this study. The secondary approach included literature review of government reports from MoE, Commission of University Education (CUE), TUM’s documents and other relevant scholarly articles on higher education from Kenya and elsewhere as well as a background analysis. Primary data was captured through individual in-depth interviews by lecturers, students, university administrators and government officials. The outcome of this research is not entirely representative because of the nature of the approach and scope of the article. However, it offers
snapshot on the limits and opportunities in institutions of higher education in Kenya. Therefore, perhaps there is need for more detailed studies on large scale when resources are available. This study was conducted over a period of January and May 2018.

Results

Limits

There was clearly shortage of teaching staff and facilities at TUM. The challenge of inadequate facilities led to lecturers having to teach all year around without break. Apart from the regular teaching, there was module two (part-time) programmes running concurrently during the evenings and Saturdays and that required teaching staff. This has resulted in lecturers having huge teaching load to meet. One lecturer explained as follows:

> My normal teaching load is 20 hours a week but because of the part-time lessons I teach for 36 hours a week. I have no time to reflect on my syllabus and my life rounds around teaching and marking examinations (personal interview January, 2018).

An interview with some students revealed that they were not happy with the teaching:

> We have no proper teaching because some lecturers just make technical appearances in classes and after that we hardly see them, even if we have questions we want to consult from them. In some instance we are taught by lecturers from other universities. There is no doubt our main aim is to acquire degrees (student FGD, March 2018).

Tutorials have been replaced largely by lectures and it is blamed on lack of time; “At the beginning of the semester we are given course outlines that specify that we need to have tutorials in all the units. I am about to complete my course but we have not attended any tutorial” (student FGD May 2018).

The other theme that came up was that students’ attending part-time session were weak in studies: “I have been teaching part-time classes and these students can hardly construct sentences when answering examination questions. We need to reevaluate the part-time student admission”. (Personal Interview, February 2018).

Opportunities

Despite the above limitations, part-time or module two programs have brought about a number of opportunities to TUM.
Finances of the institution have been boosted. One administrator explained as follow;

The money from part-time students has increased capitation of our budget and we hope that it will get better if we have more students joining the module two programs. We are assured of the capitation because we have admission on rolling basis (personal interview April 2018).

The other aspect that came out was increase in earnings for the lecturers: “Because of teaching part-time students, I earn extra money that is equivalent to three months of my monthly salary” (personal interview March 2018).

The students indicated that module two has helped them join and acquire university education: “I doubt if I could have seen the doors of the university, if there was no part-time lessons at TUM (personal interview, January 2018)”.

**Conclusion**
This study aimed at examining the limits and opportunities of module two (part-time) programmes at TUM which is one of the stakeholders within the system of higher learning in Kenya.

It is evident that TUM has achieved some laudable milestones in the past years including transition from constituent college to full-fledged university. Another milestone is the expansion and opening as well as mounting programmes including part-time module. It is worth noting that the result from this study reinforces the conclusions arrived at by Ouma-Wangege (2007). The rapid increase in student enrolment without corresponding expansion of facilities and recruitment of staff calls for the question of whole policy of model two programs.

**Recommendations**
Given the significant potential TUM has in promoting higher education in the wider coastal region of Kenya, the study recommends that:
1. There is a need to hire more full time lecturers. This will ensure that teaching load of lecturers will be reduced and lecturers will be engaged in more productive academic activities such as tutorials, research and publications
2. TUM should reevaluate the criteria for selection of students being admitted under module two programs.
References
Kivati, G (2012). Towards a globally competitive quality education for sustainable development