

Massification or Quality of Graduates? A Model for Higher Education and Development in Uganda

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Massification of higher education is inevitable in the development process of Uganda where the country's Gross Enrollment Ratio (GER) is at 6.8%. Massification in Uganda was introduced with an aim of higher education becoming accessible to all. This paper analyzes the multifaceted debates regarding higher education and development in Uganda. These debates include; (a) massification of higher education leads to development, and (b) training quality graduates leads to development. Against the two debates the government of Uganda has failed to take an appropriate position on whether it is for massification or producing quality of graduates. This literature review answers three broad questions; (i) Does massification of higher education lead to development in Uganda? (ii) Does training of a few quality graduates lead to development in Uganda? And, (iii) what is the best model for higher education in Uganda? With the increasing numbers of students enrolled in higher education institutions higher education has been faced with enormous challenges such as inadequate funding and staffing, deteriorating standards, low quality graduates, high student-staff ratio, poor physical facilities, and insufficient equipment. This paper makes suggestions on how massification in higher education can create a critical mass of human resources that can lead to economic development in Uganda.

Keywords: Massification, Graduates, Development, Higher Education, Uganda

INTRODUCTION

The birth of massification and establishment modern universities stretches from end of World War II in Europe and America when the different religious groups were struggling to capture numbers and control society (Srikanthan, ND; Wilson, 1996; Guri-Rosenblit & Sebkova, 2004; Trow 1974; Guri-Rosenblit, Sebkova & Teichler 2007). In many African countries the transformation of higher education is traced after independence when countries wanted to lift the social and economic development of their people and nations (Kariwo, Gounko & Nungu, 2014). In various studies it has been predicted that as people get higher education they will displace non-graduates which will raise their earnings and status in society (Marginson, 2017; Teichler, 2009; Trow, 1974; Schofer & Meyer, 2005). Around the 1960's many powerful universities in Africa were established but were elite oriented to train people of the high social class to rule and manage society. After the 2nd world war there arose a great demand to widen access to higher education which was implemented by many countries in Europe (Guri-Rosenblit, Sebkova & Teichler, 2007; Chou & Li-Tien, 2012; Trow, 2000). The European countries' great investment in higher education changed the trend from elitism to massification that ended the severe economic problems and social inequalities in the region (World Bank, 2006; Varghese, 2013; UNESCO, 2010; Hornsby & Osman, 2014).

Massification has been undertaken by many nations including Uganda with a notion that if you educate a person you have developed a nation (Min, 2004). This can be aligned to the view that there is no nation greater than the education of its people. The government of Uganda has actively increased higher education opportunities for students who qualify to be enrolled in higher education institutions. In Uganda massification of higher education has been facilitated mostly through private institutions and greatly funded by households which sponsor their relatives into the universities. The massification of higher education has been expanded by the increased enrolments and setting up a number of higher education institutions which are both public and private (NCHE, 2010; 2012; 2014). The coming of massification into play has seen the increased demand for university education than technical education (NCHE, 2012). Increased enrolment of students in higher education institutions is related to financial assistance such as tuition fees, government sponsorship, student loan scheme, and family funding among others (Gumpfort, Iannozzi, Shaman & Zemsky, 1997). In various studies it has predicted that as people get higher education they displace non-graduates and perform better (Marginson, 2017; Teichler, 2009; Trow, 1974; Schofer & Meyer, 2005)

In the past two decades, higher education in Uganda has changed from being predominantly public to private. Even higher education institutions that have the face of being public have more private students enrolled than government sponsored students. In Uganda higher education institutions refer to institutions that offer study programmes above

the secondary school level which lead to the award of certificates, diplomas and degrees (NCHE, 2010; 2012). Up to the 1990's there were more students sponsored by the government in higher education institutions but the trend has greatly changed in the last 15 years (NCHE, 2014). There are more private universities and more privately sponsored students enrolled on programmes in the universities than ever before in Uganda (NCHE, 2012). Given that the government is the central agent to meet educational needs, higher education is one of the key aspects at the forefront it has to meet for its people. With the interference of the economic, political and social needs the government of Uganda resorted to massification of higher education with an aim that all citizens have equal access to higher education. To solve the issue of imbalance in the country the government has used higher education to have fair income distribution, stability of the economy and development of the nation. It has been noted that despite the growing enrolments of students in higher education there are minimal measures to safe guard the quality of education offered in higher education institutions (Altbach, Reisberg & De Wit, 2017).

Massification of higher education is an inevitable process in today's globalized economy that has been used to solve the problem of discrimination in knowledge generation and dissemination, and higher education becoming accessible to all (Chou & Lie-Tien, 2012; Selyutin, Kalashnikova, Danilova & Frolova, 2017). Massification is a term that is used to highlight expansion enrolment in higher education (Songkiao & Yeong, 2016; UNESCO, 2004; Trow, 1974; 2000; Ntim, 2016; Owuor, 2012). According to studies massification has been looked at as a mechanism to convey higher education for all and not for a few elites across the different cultural, social, geographical and economic groups in the various societies (Songkiao & Yeong, 2016; Varghese, 2013; Hornsby & Osman, 2014). Massification of higher education has been hindered under two circumstances; (i) massification is quite expensive to sustain because it enrolls large numbers of students (Trow, 1974, 2000). (ii) Massification leads to diversity of backgrounds, talents and motives of job expectations among enrolled students (Guri-Rosenblit, Sebkoiva & Teichler, 2007).

Since 1962, Uganda had only one university – Makerere University which was established in 1922. The university was a training ground for civil servants, professionals and a few urban elites in the country and the region. By 1922 the university did not even enroll 1% of the relevant age group. The second university in Uganda was the Islamic University in Uganda which was established in 1988 by the Organization of Islamic Cooperation (OIC). After 1988 the government opened for expansion of higher education through massification which liberalized the higher education sector in the country. Over the past two decades many public and private higher education institutions have been established in Uganda and that has relatively increased the number of students enrolled in higher education institutions. (National Council for Higher education, 2010, 2012). Currently in Uganda there is a total of 212 higher education institutions; 40 universities, 5 private university colleges, 9 other degree awarding intuitions, and 136 other tertiary institutions. There are over 2049 programmes offered in all higher education institutions, with 1807 in universities, 45 in university colleges, 142 in Other Tertiary Institutions and 55 Other Degree Awarding Institutions (NCHE, 2014). These enroll approximately 260,000 students of the same age category on annual basis (see Table 1).

Table 1: Enrolment in Higher Education Institutions in Uganda

Year	1995	2000	2001	2002	2003	2004	2005	2006	2010	2012	2013	2014	2016
Enrolment	27,000	60,000	65,000	80,000	85,836	108,295	124,313	137,190	183,985	198,066	220,201	247,473	260,000
GER	–	–	–	–	–	–	–	–	5.4%	6.2%	6.2%	6.8%	6.9%
Sub-Saharan Average GER	–	–	–	–	–	–	–	–	6%	6.1%	6%	6.1%	6.1%

Source: NCHE (2010; 2012; 2014). Key: **GER** = Gross Enrolment Ratio. Note: World Average GER is 24%, and 40% preferred for economic growth

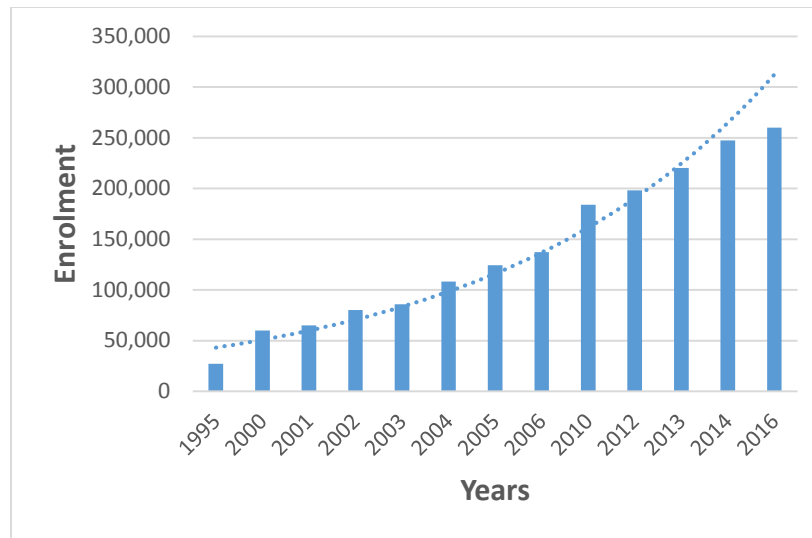


Figure 1: Trend of Enrolment in Higher Education Institutions in Uganda

Though many higher education institutions have been established in Uganda they are not able to enroll 10% of the students of the relevant age group and also provide quality education needed for economic development (NCHE, 2012). Though the enrolment in higher education seems to be increasing in higher education institutions with an average growth rate of 44.4% per annum, the Gross Enrolment Ratio (GER) is still low at 6.8% which is below the world average of 24% and the preferred of 40% needed for economic growth take off (NCHE, 2012). GER is the number of students enrolled in higher education institutions as a percentage of the population of official school age level (NCHE, 2010, 2014). The low GER highlights that in Uganda there is need to establish more higher education institutions and also enroll more students. NCHE (2010; 2012) noted that most students enrolled in higher education institutions come from well to do families which does not solve the problem equity as it was the basis of massification of higher education in many countries all over the world.

Research Questions

This paper was entreated the following research questions;

- (i) Does massification of higher education lead to development in Uganda?
- (ii) Does training of a few quality graduates lead to development in Uganda? and,
- (iii) What is the best model for higher education that can lead to development?

MODELS OF MASSIFICATION IN HIGHER EDUCATION

Model 1

Trow's model of massification has been summarized into 3 levels; (i) elite, (ii) mass and (iii) universal levels of massification of higher education (Brennan, 2004; Trow, 1974; 2000). Elite level of massification of higher education is the shaping the mind and character of the ruling class and preparation for elite roles. Mass level of massification of higher education is the transmission of skills and preparation for a broader range of technical and economic roles for economic development. Universal level of massification of higher education is the adaptation of the whole population to rapid social and technological change of society (Trow, 2005). The three levels of massification show how the access to higher education shifts from a privilege (elite) to a right (mass) and to an obligation (universal) for everyone (Marginson, 2017). The classification is dependent on the number of students or Gross Enrolment Ratio (GER) of the relevant age category enrolled for elite, mass and universal higher education with the GER below 15%, GER between 15% and 50%, and above 50%, respectively (Hui, 2009; UNESCO, 2004; Songkhaeo & Yeong, 2016; Huang, 2011; Owuor, 2012; Trow, 1974; Shan & Guo, 2014). GER is the percentage of an age category enrolling into higher education in a given country. Trow (1974) highlighted that moving from one level to another of higher education does not totally destroy the previous level, that is, at universal higher education level you can find forms of mass higher education (Trow 1974; Marginson, 2017).

Model 2

Diversification and differentiation

According to Altbach, Reisberg and De Wit (2017) higher education should be diversified and also differentiated. Diversification in higher education is the creating of avenues for enrolling more students of the same category (Unangst, 2017). According to Teichler (1996) diversification has both horizontal and vertical diversifications. Vertical diversification differentiates higher education by quality, reputation and prospective status of graduates while horizontal diversification refers to the specific profile of knowledge, style of teaching and learning, and problem-solving thrust. Horizontal diversification may also relate to mission, governance, or internal organizational culture (Marginson, 2017). This also leads to initiations of new ways of teaching such as distance education, online education and new technologies to teach students away from the university or college premises. Differentiation is a notion that infers to distinctions made between higher education institutions based on their purpose. Differentiation in higher education has also both vertical and horizontal differentiation within and among higher education institutions. Horizontal differentiation is driven by issues of access whereas vertical differentiation is driven by the forces of the labour market. The horizontal differentiation is hinged on choice and access to higher education institutions whereas vertical differentiation is pivoted on skills and competences required in the job market (Altbach, Reisberg & De Wit, 2017).

GLOBALIZATION, MASSIFICATION AND DEVELOPMENT

Globalization is part of the trend in higher education that cannot be overlooked by nations that want to compete in the global markets, have high production, flexibly use technology and to attract foreign investment (Munene, ND). This is because quality higher education takes institutions and nations to another level in terms of development (De Melo-Costa & Zha, 2014). Massification is not only for expansion of enrolment in higher education but it is also democratization of access to higher education (UNESCO, 1999). This denotes that higher education is not only for the elites but for every one in a given nation. Through this massification has a greater arm in the development of a critical mass that later can lead to economic development. With more students enrolling into higher education, more people graduate from higher education institutions thus creating a pool of human capital or labour force of a given nation.

There are many studies that have highlighted the relationship between development and higher education (Oketch, McCowan & Schendel, 2014; NCHE, 2014). Today, the ability produce, select, adapt, commercialize and use knowledge in society is critical for social, economic and improved standards of living for the people in any society (Hui, 2009). In knowledge economies knowledge is taken to be the most important assets for economic development. Forces of globalization have been seen at the forefront of expanding higher education in Uganda to increase the number of graduates from higher education institutions. This has helped to enhance the country's human resource needs for regional and global competitiveness. If many people in a nation are educated, then, use of technology in increasing production can easily be attained at its full potentials (Zalewski, 2009; Hussain, Afza, Naveed, Asif & Rao, 2011). It can be noted that higher education is characterized with courses such as engineering and technology which has made higher education indispensable in generating graduates that are geared towards development.

To address globalization massification has been used as a tool to the growth of nations and also to address the higher education attainment differences. Massification was started in higher education institutions in Africa to eliminate the challenges of elitism, and also to help the underprivileged groups like women, lower social status groups and ethnic minorities to attain higher education (Varghese, 2013; Hornsby & Osman, 2014; Munene, ND). Massive higher education is directed towards increasing skilled human labour and generated scientific and technological inventions that can lead nations to development (De Melo-Costa & Zha, 2014). According to Munene, in Uganda there was a surge in enrolment of students in universities between late 1990s and 2004, with over 428% increment in enrolment. This is one of the periods in which the country attained high economic growth. As a call to massification grew, this has also called for the establishment of private higher education institutions in the country. With the increase of private higher education institutions there has also been privatization of public higher education institutions such as universities through the mix of privately-sponsored fee-paying students, partnerships and linkages (Munene, ND). At Makerere University by 2004, over 70% of the students' body was privately sponsored (Munene, ND). This mix has been characterized by the increased admitting students but with declining government funding to public higher education. To a small extent, partnerships among universities and colleges have boosted students' enrolments in the country. Both private and public higher education institutions have patterned to have extra enrolments as they offer joint awards to students who have studied in the affiliated colleges and schools.

In Uganda there are over 600,000 students who qualify to enroll in higher education institutions though the available institutions' capacity might be much lesser than that in terms of numbers of students to be enrolled and resources used

to conduct effective teaching and learning. With the expansion in higher education being for development in Uganda, higher education has not been given priority in terms of funding (Kruss, McGrath, Petersen & Gastrowa, 2015). The emergent trends of massification of higher education across the globe has seen increased enrolment in institutions of higher learning sometimes which does not match with the facilities and resources of the institutions and nations. It has been noted that the little support to higher education by African countries has led to the decline in the quality of higher education in the region (Ifeoma, 2013). Higher education is related to human capital development that has a direct relationship with economic growth and development (Tilak, 2003; Castells, 1994). The higher education factor to development can be observed in the following aspects; increased technical skills in the various fields, transformation of society using knowledge, change in people's attitudes, and transformation of society most especially through science, technology and industrialization. The greater expansion of higher education can be evident in research and generation of new knowledge, and its dissemination into society for use. Higher education would also be associated with strong societies and economies as well as utilizing the benefits of the global economies (Tilak, 2003; TFHES, 2000).

The role of massification of higher education to nations is to address the issues of equity, global competitiveness, relevance and quality of higher education. But it has been noted in societies that expanding higher education is just opening doors for attaining higher education on dimensions of region, gender and personal economic empowerment (Prakash, 2007). Higher education institutions to be perfect they need to have professors who deliver knowledge and also spearhead the training of people to manage global knowledge economy (Marope, Wells, & Hazelkorn, 2013). In most countries Uganda inclusive professors are very few and are not paid adequately (Altbach, 2012). University professors have failed to settle in universities as they keep on 'moonlighting' from one university to another to see how they can enhance their living (Daily Monitor, 2012). Such undirected mobility of professor has caused a significant pain to the academia as they do not have steady career and cannot do meaningful research to generate knowledge (Altbach, 2012).

OPPORTUNITIES IN MASSIFICATION OF HIGHER EDUCATION

From various studies it is highlighted that higher education is related to economic development (Pillay, 2011; Ca, 2006; Walker, 2015). Roberts and Ajai-Ajagbe (2013) mentioned that massification of higher education has an utmost benefit that requires every citizen to acquire it. Higher education has economic, social and political benefits, helps in developing human capital and professional development, facilitates knowledge generation through research and innovation, brings about equitable opportunity and access provisions, support other levels of education, promotes linkage to the world of work, and promote international cooperation. For economic benefits higher education facilitates employment, improves mobility for labour, increases productivity, increases consumption of skills in knowledge based economies, drives employment and development, and increases salaries and savings. Social benefits of higher education include improving people's quality of life, status, decision making, and leadership skills. Socially, higher education creates greater trust in social institutions, democratic participation, gender, ethnicity, religion and social class, and social cohesion (Roberts & Ajai-Ajagbe, 2013). The political benefits of higher education comprise of building civil society, enlightens citizens, creates equal opportunities for citizens, instills skills and values in people, improves people's reasoning, tolerance and respect and also helps in building civil society (Roberts & Ajai-Ajagbe, 2013).

For human capital and professional development, higher education is instrumental in creating people of all walks of life; teachers, doctors, pilots, accounts, researchers, among others. It is hard to talk about all professions without talking about higher education. Generation of knowledge and innovations through research is instrumental in institutions of higher education. Research and innovation generated in higher education institutions have been instrumental in changing the world through technology, human health research, invented products and agriculture inputs, among others (Roberts & Ajai-Ajagbe, 2013). With equitable opportunities and access, higher education opens door for the underprivileged to participate in social, economic and political development and reducing inequality in society as well (Fornari & Pompili, 2010). With massification of higher education in Africa the underprivileged like women have easy access to higher education. Also, higher education is in support for other levels of education, that is, it trains staff who run and maintain other levels of education such primary and secondary schools. It has been noted that higher education is a linkage to the world of work and also promotes international cooperation among institutions and nations (Roberts & Ajai-Ajagbe, 2013).

CHALLENGES OF MASSIFICATION OF HIGHER EDUCATION

Since the genesis of massification of higher education in the world, east Africa and Uganda in particular there are enormous challenges that the philosophy has faced which include; inability to meet increasing demands for access and

equity, increased pressure on higher education institutes to generate more resources, and creating both competition and corporation in higher education (Welch, 2011). Other challenges include; governance, leadership and management, quality and relevance of programmes, staffing of institutions, and poor research and innovation capacities (Roberts & Ajai-Ajagbe, 2013, NCHE, 2012, 2014). Massification is characterized with large classes which in turn are reflected in the quality of teaching and learning of the learners, and socioeconomic development (Hornsby & Osman, 2014). Institutions enroll many students on programmes but with less facilities and resources. Due to massification there has arisen a shortage of academic staff in higher education institutions creating an academic crisis. There is a shortage professors and associate professors in higher education institutions in Uganda as highly qualified academic staff move to other parts of the world looking for “greener pastures”. None of the higher education institutions in Uganda has adequate numbers of professors in all departments (NCHE, 2012). Due to large numbers of classes most universities employ part-time staff because faculties and departments do not have enough staff to run the programmes (Munene, ND). Lecturers take on big teaching loads to large classes which leaves them with no room to conduct research and community outreach programmes.

Due to the soaring numbers of students this has created leadership, management and governance challenges in higher education institutions that have adopted massification (NCHE, 2012). With the increased enrolment to higher education institutions and with thin human and financial resources has greatly affected quality management and administration of higher education institutions. In Uganda today, strikes by staff in public higher education institutions are the order of the day due to poor remunerations for the services they offer (NCHE, 2012). The poor leadership, management and governance of higher education institutions can be related to duplication of programmes in higher education institutions, high dropout rates, over utilization of facilities, high student – staff ratio, staff inefficiencies, and capacity limitations. Due to massification of higher education, poor in strategic planning, financial management, human resource management, and partnership building and performance management have been observed (Roberts & Ajai-Ajagbe, 2013). Massification disrupts the socio-economic system of a country. Massification of higher education has led to a situation of having highly educated but highly unemployed people. Many people have graduated from universities but they do not have jobs. Despite the increasing numbers of students enrolling and getting degrees from higher education institutions there has been an education mismatch with the skills graduates have and the requirements of the job market.

Regularly employers have complained about not having the required skills in the job market (World Economic Forum, 2014). With massification the job market has been flooded with graduate from some specific fields while some qualifications are viewed as invaluable in the job market. The expansion of higher education requires high financing which the government does not have to sustain the many colleges and universities. This has constrained the government allocation of educational resources and affected the education quality offered by the different higher education institutions (Chou & Li-Tien, 2012; Heung, 2009). Some higher education institutions in Uganda are facing the challenge declining quality in teaching, research and community outreach (NCHE, 2014). Many universities are lacking adequate teaching resources, have insufficient equipment and instructional materials, poor teaching facilities, no or lack of equipped library, and lack of access to global knowledge (NCHE, 2010). This has led to NCHE closing universities or some programmes in universities. There is also a challenge of obsolete curricula, curricula that do not emphasize technical skills, lack or no well facilitated regional, national and institutional quality assurance and enhancement systems (Roberts & Ajai-Ajagbe, 2013). Massification has risen the pressure on higher education institutions to find new sources of funding to meet the needs of the growing numbers of students in higher education institutions. All higher education institutions in the country lack adequate funding to have adequate facilities for the growing numbers of students (NCHE, 2010, 2012). For public universities in Uganda, the government has reduced funding but has increased enrolments and does not want relinquish the control of higher education institutions as well. This contradictory approach in managing higher education institutions has led to financial crises in higher education institutions (Altbach, 2016). Facilities in both public and private higher education institutions are in a total disarray to support adequate teaching and research for the large enrolments (NCHE, 2014).

Massification was started in the interest to create an environment for all people to access higher education in the country. But this has not been realized at a certain level due to the cost of higher education in terms of tuitions fees and other costs which the poor people cannot afford. This affects the essence of equity in that majority of the people in Uganda are poor and only a few can afford the higher education costs (NCHE, 2012). Due to massification of higher education there are uneven allocation of resources, difference in tuition fees between public and private universities, many universities and colleges started do not measure to the required quality, low enrolments in some higher education institutions due to competition, and higher education remaining dominantly for elites from high socioeconomic

backgrounds (Chou & Li-Tien, 2012; Varghese, 2013, 2015; Hornsby & Osman, 2014). There is no policy on how many children should benefit from government sponsorship and students who qualify from different families (Brandenburg & Zhu, 2007; Chou & Li-Tien, 2012; Heung, 2009). Other challenges noted include; knowledge its self, values, changes in society, vision and mission of institutions, and governance (Robertson, 2010; Barnett, 2009). It is noted that also massification of higher education brought challenges such as; entrepreneurship than the quality element in universities, relevance of the programmes and their link to the industry, and institutions not being able to train critical thinkers (Robertson, 2010). There has also been a challenge by major stakeholders in higher education for not taking higher education as a critical issue in solving societal problems which include governance issues, global issues and sustainability of development programmes (NCHE, 2012). Due to massification of higher education there has been a challenge of being accountable to the education system and change in intellectual and public production of knowledge. There is a stretch to satisfy the graduates, competing for university ranking, competitiveness, knowledge economy and entrepreneurship indexes, university investment rating, among other (Robertson, 2010).

Despite the government initiative to massify higher education there has been a mismatch between student enrolment and the number of academic staff, quality infrastructure, resources that undermine the quality of teaching, poor equipment, research and community engagement in universities (Ntim, 2016; Tilak, 2003). In Uganda the growth of students is by 34.1% while that of academic staff is at 20% (NCHE, 2010). All the above can be reflected in the quality of graduates that might later to be reflected in the national development.

Suggestion

Improving higher education that has been engulfed in the challenges of massification there should be sound policies to guide the massification process. There should be government policies that guide higher education to address social demands rather than social demand being a function of policy or funding (Marginson, 2017). This would help to have higher education designed depending on social or market needs rather than the available resources or policies that might not match with the current market needs. There should be adequate funding to cater for the large numbers of students enrolled in higher education institutions. The challenge of higher education funding should be adequately addressed by government and other stakeholders or else it will affect the higher education standards in the country. In the world, the countries that have implemented massification of higher education have heavily funded higher education, introduced privatization of higher education, given scholarships, introduced private and public partnership and students pay tuition fees to study in higher education institutions (Songkaeo & Yeong, 2016). Higher education institutions should have proper long term plan and criteria to take on massive enrolments as well as mechanisms to sustain the large enrolments throughout their course of study. With funding government should fully fund higher education in public higher education institutions and also support private higher education institutions in their initiative to fulfill the government cause (Mohamedbhai, 2008). Families or households should not be left out in the planning for higher education in the country. Households' incomes directly affect the enrolment of students in higher education institutions because they sponsor students in the institutions. The Gross Domestic Product (GDP) and incomes of people in a nation can directly influence the Gross Enrolment Ratio (GER) in higher education institutions.

It is the role of the government to provide education for its citizen in Uganda but the government does not have the capacity due to limited national resources. The government cannot set up higher education institutions to educate all its citizens. With the inability for government to serve its people it should support private higher education institutions to support it in its role. The government should support private higher education institutions in terms tax exemption, fund research and payment of staff salaries, among others. Where private and public higher education institutions cannot satisfy the demand for higher education in Uganda the government should prepare a good ground to attract foreign higher education institutions. Many international renowned universities can move to different parts of the world including Uganda if the conditions in those countries warrant them. Indispensable quality assurance mechanisms should be set to sustain the new approach of massification in higher education institutions in Uganda. In higher education institutions where massification has been embraced classes should be split to have a reasonable number of students in lecture rooms. Though expanded enrolment has enormous advantages to society it should not compromise quality of graduates trained with the effect of large classes. Large classes hinder effective delivery by instructors thereby affecting the learning of the students. Classes should be split into manageable cohorts that can be handled adequately by lecturers/ instructors. This would help on the aspect of increased lecturer-student interaction in the lecture room, and also to be able to find sufficient lecture rooms for face-to-face lectures. Under massification higher education institutions should modularize programmes by splitting their programmes into small units that are consumable by students such as semesters that can take on large numbers but in smaller groups that teachers can

handle appropriately. The same group of students can be admitted to higher education institutions in different cohorts along the same year or period of time.

There should be innovations used to teach large classes whether on campus or off campus (Hornsby & Osman, 2014). Higher education institutions should take on technology to effectively handle the challenges of massification. With massive enrolments higher education institutions should offer off campus programmes such online and distance education programmes. This would take higher education to the students' door steps and also reduce overcrowding in university or college lecture rooms. Massive Open Online Courses (MOOCs) and more local mobile technology can be used as tools to cope with massification and large class teaching in developing country (Varghese, 2013, 2015; Hornsby & Osman, 2014). Technology should be improvised in admitting students, managing students' information, academic components and all students' affairs. This would reduce on challenges of large numbers of students overcrowding at the higher education institutions to access university or college services. There should be maximum limits for students enrolled in higher education institutions and on particular programmes. National Council for Higher Education should undertake an analysis on institutional capacity in enrolling students depending on infrastructures; facilities and resources institutions have in order to admit students on given programmes.

Massification should provide for gender balanced admission to higher education. The female enrolment in higher education was increased during the time of massification of higher education in the country. The government introduction of a 1.5 additional points for admission of female students into public higher education institutions has played a great role in the increment in admission of the girl child in higher education institution. The 1.5 additional point provisions for the girl child has changed the terrain of admission for female students into public universities, and also their enrolment in the prestigious programmes such as law, technology, engineering, medicine, and pharmacy among others. Every time universities think of massification they think of expanding student enrolment but do not think of expanding the number of academic staff to teach the students. The few qualified academic staff in higher education institutions means that the existing staff have to shoulder increased teaching load due the large enrolments (NCHE, 2010). If small classes are used to teach large numbers of students, they require splitting into smaller groups which increases the teaching load for the lecturers. On top of the big teaching load lecturers have other responsibilities such supervising practical lessons, undertake tutorials, set examinations, mark large numbers of scripts, and also have administrative responsibilities. Massification of higher education would require expanded recruitment of permanent academic staff to teach the large enrolled numbers of students on different programmes to maintain quality of teaching and learning if the face-to-face mode of education (NCHE, 2012).

Considering Uganda's population growth, the population is growing at a very fast rate. The rapid increase in population requires adequate preparation to take on those students when they reach a time of joining higher education institutions. More universities should be established to cater for the raising numbers of students joining higher education institutions. The government should also mandate private bodies such as ISO 9001 to assist the overwhelmed national bodies to accredit and control quality in higher education institutions in the country. They would be tasked to enforce policies in relation to student enrolment, infrastructure of institutions, project national human resource required for the higher education institutions to train, and accredit institutions and programmes. As massification has one of its goals to have equity in access of higher education, that is, even the underprivileged to attain higher education, government should set up mechanisms that lead most of its scholarships and study loans going to those who cannot afford tuition fees. This would help massification to attain its goal as the underprivileged will easily attain higher education. With massification, there should be running of similar programmes but in a parallel manner. There can be several cohorts in which programmes can be run in order to cater for the large numbers of student enrolled for example having students studying during the day, weekend, evening, distance education, online, among others. The running of parallel programmes gives wider space to accommodate large numbers of students that cannot be enrolled in the mainstream of the university programmes. This has been utilized in Uganda with most of the universities running these cohorts.

The government should prepare for post-massification as developed countries have done. According to Huang (2011) preparation for post-massification should include; social and economic rationalization which should be reflected in the budget, greater arm of the private sector in both public and private higher education, higher education institutions should manage their own affairs, to let market forces drive higher education in terms of scope, scale and price, and institute both public and private agencies to manage higher education. The process of post massification would include increased public concern, reduced government support, and reduced cost on higher education, competition and market pressures, increased vocationalization and elongation in time of attaining qualifications.

CONCLUSION AND RECOMMENDATIONS

In Uganda it can be noted that higher education is in a period of pandemonium being expanded with different purposes and beyond what the government can manage. The government of Uganda with its political will, time and allocation of funds needs to lay appropriate strategies that will take its philosophy of massification at another level. Increased massification is likely to create global knowledge economies that will later transverse the nation to development. Massification of higher education in Uganda was with a vision of training personnel for employment in the different departments, ministries and local governments. It can be noted that massification of higher education is not only for increased student enrolment but also to narrow the gap between underprivileged and those in the high social class (Chou & Li-Tien, 2012). With massification of higher education it should be in the interest of government that the country's Gross Enrolment Ratio (GER) and higher educational attainment (HEA) be related. With massification there should be concern of quality were many higher education institutions have been established and at the same time enrolled large numbers of students. Higher education institutions have been poorly equipped and also duplicated courses to cater for the large number of students. There are many students in lecture rooms and they seem not to have an adequate environment for having quality education. This has led to deterioration in the quality of higher education to produce graduate that do not measure to the skills required in the job market. This is likely to influence the work they do and also the economic development of the nation. With massification and the desire to have world class education, the government should set up stringent measures and policies to catch up with higher education institutions that offer education that does match with the desired quality. Also, the government has empowered statutory bodies such as the Law Council, Medical and Dental Practitioners Council, Nursing Council to help handle some of the challenges of massification in their relevant disciplines as also part of the accrediting bodies.

REFERENCES

- Altbach, P. (2012). Higher Education in the Age of Massification. *The Brown journal of World Affairs*, 19(1), 183 - 194.
- Altbach, P. (2016). Massification, Globalization and the Global Knowledge Economy: Policy challenges and opportunities for universities in Southeast Asia (The Policy Brief No. 1), *Global Perspectives on Higher Education*, 1 - 7.
- Altbach, P. G., Reisberg, L., & De Wit, H. (2017). Responding to Massification: Differentiation in Postsecondary Education Worldwide. Hamburg Transnational University Leaders Council, Hamburg.
- Barnett, R. (2009). Knowledge Interests and Knowledge Policies: Rethinking the University in the Twenty First Century, in R. Barnett, J. C. Guedon, J. Masschelein, M. Simons, S. Robertson, & N. Standaert, *Rethinking the University after Bologna*, Antwerpen: UCSIA.
- Brandenburg, U., & Zhu, J. (2007). Higher Education in China in the light of Massification and Demographic Change: Lessons to be learned for Germany.
- Brennan, J. (2004). The Social Role of the Contemporary University: Contradictions, Boundaries and Change," *Ten Years On: Changing Education in a Changing World*, Center for Higher Education Research and Information, Milton Keynes, The Open University.
- Ca, T. (2006). Universities as Drivers of the Urban Economies in Asia: The Case of Vietnam. World Bank Policy Research Working Paper 3949, Washington.
- Castells, M. (1994). The University System: Engine of Development in the New World Economy, in Salmi and Verspoor (eds.), pp. 14-40.
- Chou, C. P., & Li-Tien, W. (2012). Who Benefits from the Massification of Higher Education in Taiwan? *Chinese Education and Society*, 45(6), 8-20. DOI: 10.2753/CED1061-1932450501
- Daily Monitor (2012). Public Universities losing aura, students. <http://www.monitor.co.ug/News/Education/Public-universities-losing-aura--students/688336-1454776-tb5k0r/index.html>
- De Melo-Costa, D., & Zha, Q. (2014). The Massification Process in Chinese Higher Education. *A Gestão do Conhecimento e os Novos Modelos de Universidade*, 3, 4 - 5.
- Fornari, R., & Pompili, G. (2010). Pursuing Quality in Mass Higher Education: The Dilemma of Equity and Excellence in Italy. *Italian Journal of Sociology of Education*, 2, 16 - 46.
- Gumport, J. P., Iannozzi, M., Shaman, S., & Zemsky, R. (1997). *Trends in United States Higher Education from Massification to Post Massification*. National Center for Postsecondary Improvement, Stanford University, Stanford.
- Guri-Rosenblit, S., & Sebkova, H. (2004). *Diversification of Higher Education Systems: Patterns, Trends and Impacts*, UNESCO Forum Occasional Forum Series, Paper No. 6 - "Diversification of Higher Education and the Changing Role of Knowledge and Research", 40-69.

- Guri-Rosenblit, S., Sebkova, H., & Teichler, U. (2007). Massification and Diversity of Higher Education Systems: Interplay of Complex Dimensions. In: *Higher Education Policy*, 20, 373-389.
- Heung, L. K. (2009). Massification of Higher Education and Quality Assurance Reforms in Hong Kong SAR. International Centre for Higher Education Research Kassel, University of Kassel.
- Hornsby, D. J., & Osman, R. (2014). Massification in Higher Education: Large Classes and Student Learning. *Higher Education*. DOI 10.1007/s10734-014-9733-1
- Huang, F. (2011). Higher education from massification to universal access: A perspective from Japan. *Higher Education*, DOI 10.1007/s10734-011-9438-7
- Hui, X. D. (2009). Curriculum Reform in the Context of Massification in China: A Case Study of BIPT, Foreign Language Department. Unpublished Master's Thesis, University of Oslo.
- Hussain, F. M., Afza, A., Naveed, A., Asif, M., & Rao, M. B. (2011). Impact of Innovation, Technology and Economic Growth on Entrepreneurship. *American International Journal of Contemporary Research*, 1(1), 45 – 51.
- Ifeoma, A. R. (2013). Challenges of Quality in Higher Education in Nigeria in the 21st Century. *International Journal of Educational Planning and Administration*, 3 (2), 159-172.
- Kariwo, M., Gounko, T., & Nungu, M. (2014). A Comparative Analysis of Higher Education Systems: Issues, Challenges and Dilemmas. Sense publishers, Rotterdam - The Netherlands.
- Kruss, G., McGrath, S., Petersen, I., & Gastrowa, M. (2015). Higher education and economic development: The importance of building technological capabilities. *International Journal of Educational Development*, 43, 22 - 31. <http://dx.doi.org/10.1016/j.ijedudev.2015.04.011>
- Marginson, S. (2017). Elite, Mass, and High-Participation Higher Education. *Encyclopedia of International Higher Education Systems and Institutions*, 1 – 8. DOI 10.1007/978-94-017-9553-1_50-1
- Marope, P. T. M., Wells, P. J. & Hazelkorn, E. (2013). Rankings and Accountability in Higher Education: Uses and Misuses. <http://unesdoc.unesco.org/images/0022/002207/220789e.pdf>
- Min, W. (2004). The Legacy of the Past and the Context of the Future. In *Asian Universities: Historical Perspectives and Contemporary Challenges* (Edn). Philip Altbach and Toru Umakoshi, Johns Hopkins University Press. Baltimore.
- Mohamedbhai, G. (2008). The Effects of Massification on Higher Education in Africa
- Munene, I. I. (ND). Higher Education in Africa: Institutional Response to Globalization
- National Council for Higher Education [NCHE] (2010). The state of Higher Education and Training in Uganda: A Report on Higher Education delivery and Institutions. NCHE, Cavers Crescent, Kyambogo.
- National Council for Higher Education [NCHE] (2012). The state of Higher Education and Training in Uganda: A Report on Higher Education delivery and Institutions. NCHE, Cavers Crescent, Kyambogo.
- National Council for Higher Education [NCHE] (2014). The state of Higher Education and Training in Uganda: A Report on Higher Education delivery and Institutions. NCHE, Cavers Crescent, Kyambogo.
- Ntim, S. (2016). Massification in Ghanaian Higher Education: Implications for Pedagogical Quality, Equity Control and Assessment. *International Research in Higher Education*, 1(1), 160 – 169. <http://dx.doi.org/10.5430/irhe.v1n1p160>
- Oketch, M., McCowan, T., & Schendel, R. (2014). The Impact of Tertiary Education on Development. Systematic Literature Review for DFID, Institute of Education, London.
- Owuor, N. A. (2012). Higher Education in Kenya: The Rising Tension between Quantity and Quality in the Post-Massification Period. *Higher Education Studies*, 2(4), 126 – 136.
- Pillay, P. (2011). Higher Education and Economic Development: Literature Review. Centre for Higher Education Transformation, Cape Town.
- Roberts, L., & Ajai-Ajagbe, P. (2013). Higher education and the Millennium Development Goals: where are we coming from, and where are we going? The Association of Common Wealth Universities, United Kingdom.
- Robertson, S. L. (2010). *Challenges Facing Universities in a Globalizing World*, published by the Centre for Globalization, Education and Societies, University of Bristol, Bristol BS8 1JA, UK at: <http://susanleerobertson.com/publications/>
- Schofer, E., & Meyer, J. (2005). The worldwide expansion of higher education in the twentieth century. *American Sociological Review*, 70, 898 - 920.
- Selyutin, A. A., Kalashnikova, T. V., Danilova, N. E., & Frolova, N. V. (2017). Massification of the Higher Education as a Way to Individual Subjective Wellbeing. *International Scientific Symposium on Lifelong Wellbeing in the World*, 258 – 263. <http://dx.doi.org/10.15405/epsbs.2017.01.35>

- Shan, H., & Guo, S. (2014). Massification of Chinese Higher Education: Opportunities and Challenges in a Globalizing Context. In M. Kariwo., T. Gounko, & M. Nungu (ND) A Comparative Analysis of Higher Education Systems: Issues, Challenges and Dilemmas. Sense publishers, Rotterdam - The Netherlands.
- Songkhaeo, T., & Yeong, L. H. (2016). *Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context: THF Literature Review*, pp. 2 – 25.
- Srikanthan, G. (ND). Developing a Model for Quality in Higher Education. Bundoora, Victoria, Australia.
- Task Force on Higher Education and Society [TFHES] (2000). *Higher Education in Developing Countries: Peril and Promise*. Washington DC: World Bank.
- Teichler, U. (1996)
- Teichler, U. (2009). *Higher education and the world of work: Conceptual frameworks, comparative perspectives, empirical findings*. Rotterdam: Sense Publishers.
- Tilak, J. B. G. (2003). Higher Education and Development in Asia. *Journal of Educational Planning and Administration*, 17(2), 151-173.
- Trow, M. (2000), Essays on the Transformation of Higher Education in Advanced Industrial Societies (in Japanese). Tokyo: Tamagawa University Press.
- Trow, M. (1974). Problems in the Transition from Elite to Mass Higher Education, in: OECD (ed.): *Policies for Higher Education. OECD General Report - Paris*, 51-101.
- Trow, M. (1976). Elite Higher Education: An Endangered Species? *Minerva* 14(3), 355-76.
- Trow, M. (2000). From *Mass Higher Education to Universal Access: The American Advantage*. *Minerva*, 37, 1-26.
- Trow, M. A. (2005). Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies since World War II. *International Handbook of Higher Education*, p. 1 – 66. <http://escholarship.org/uc/item/96p3s213>
- Unangst, L. (2017). Diversification and Differentiation in Postsecondary Education: What the Research Shows in P. G. Altbach, L. Reisberg, & H. De Wit, (2017) Responding to Massification: Differentiation in Postsecondary Education Worldwide. Hamburg Transnational University Leaders Council, Hamburg.
- UNESCO (2004). *UNESCO Forum Occasional Paper Series*. Paris. Retrieved from <http://unesdoc.unesco.org/images/0014/001467/146736e.pdf>
- UNESCO (2010). *Trends in tertiary education: Sub-Saharan Africa*, UIS Facts Sheet, No. 10.
- Varghese, N. V. (2013). Governance reforms in higher education: A study of selected countries in Africa. UNESCO; International Institute for Educational Planning. IIEP/SEM334/Theme paper. http://www.iiep.unesco.org/fileadmin/user_upload/News_And_Events/pdf/2013/Governance_reforms_in_HE_paper_PF.pdf
- Varghese, N. V. (2015). Challenges of Massification of Higher Education in India. National University of Educational Planning and Administration, New Dehli – India.
- Walker, M. (2015). Higher education and the public good. In: McGrath, S., & Gu, Q. (Eds.), *Routledge Handbook on International Education and Development*. Routledge, London.
- Welch, A. (2011). *Higher Education in Southeast Asia: Blurring Borders, Changing Balance*. New York: Routledge.
- Wilson, B. (1996). Quality in Universities: Sir Robert Menzies Oration. *Journal of Higher Education Policy and Management*, 18 (2), 1 – 15.
- World Bank (2006). *World Development Report*. Washington, DC: World Bank.
- World Economic Forum (2014). Matching Skills and Labour Market Needs Building Social Partnerships for Better Skills and Better Jobs: Global Agenda Council on Employment. Davos-Klosters, Switzerland 22-25 January. http://www3.weforum.org/docs/GAC/2014/WEF_GAC_Employment_MatchingSkillsLabourMarket_Report_2014.pdf
- Zalewski, R. I. (2009). Impact of Technological Innovations on Economic Growth of Nations. *Systemic, Cybernetics and Informatics*, 7 (6), 35 – 40.