The Role of Kenya's Formal Higher Education in Sustainable Development Within the Context of Globalization

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Abstract

In a developing nation like Kenya, an effective formal higher education system is essential for national development. The demand for university education in Kenya has increased in the past few decades. It is generally acknowledged that globalization has created tremendous impact on higher education in the twenty-first century. The paper seeks to determine whether the current education system in Kenya's formal higher education institutions is preparing students to address global sustainability challenges. To a large extent, most higher learning institutions in Kenya have remained local in their practice and operations and this sets a problematic precedence in the era of globalization. This paper analyses the impact of globalization on formal education system in Kenya, with a focus on higher education. It analyses the changes globalization has brought to the system and its influence in preparing people for sustainability challenges. The effect of globalization pressures on education, the socio-economic and inequalities that constitute justice and human rights are also examined. The paper concludes by reassessing the impact of globalization on education reform in Kenya.

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1 Introduction

1.1 Purpose of the Paper

The paper set out to institute an up to date representation of higher education's system is preparing students to deal with globalization challenges and to formulate suggestions as to how the institution of higher education can maximise its involvement to sustainable development in Kenya. This is significant to the education sector, in particular higher education, due to its important role in imparting knowledge around sustainability issues through research and development. It is hoped that this paper will contribute to social, environmental and economic development for policy makers, teachers and students.

1.2 Background

In 2008, the government of the Republic of Kenya unveiled a comprehensive and ambitious development plan aimed at transforming the country into a middle-income economy by 2030 dubbed Kenya Vision 2030 (GoK 2007). On the other hand, a growing body of literature suggests higher education is a critical driver of economic growth and competitiveness (e.g. Bloom et al. 2006; Johnson 2002; Lin 2009; World Bank 2002). The World Bank has relied heavily on rates of return to education as the main rationale for educational investment (Rena 2007; Psacharopoulos 1994; World Bank 1995). A Taskforce on Higher Education and Society comprising of the World Bank and UNESCO developed a report on Higher Education in Developing Countries: Peril and Promise. The report highlighted that "The quality of knowledge generated within higher education institutions and its availability to the wider economy is becoming increasingly critical to national competitiveness" (TFHE 2000). This demonstrates the key role of higher learning institutions in training of creative, inventive and innovative individuals to produce products that enhance a nation's global competitiveness.

The Ministry of Higher Education, Science and Technology (MoEST) is responsible for improving the quality, relevance, equity and access to higher education and technical training. It is also mandated to enhance the capacity of the national Science Technology and Innovation (STI) system towards demand driven STI, quality higher education and technical education services (MoEST 2009). The vision of MoEST is to provide "quality education for development," while its mission is "to provide, promote and co-ordinate lifelong education, training and research for Kenya's sustainable development." Quality in Higher Education has become a primary agenda of countries worldwide. According to Cheng and Tam (1997), p. 23 education quality is "the character of the elements of input, process, and output of the education system that provides services that completely satisfy

both internal and external stakeholders by meeting their implicit and explicit expectation". There is, however a paradigm shift in higher education, from 'national' to 'global education,' from 'state controlled' to an 'open market economy,' from 'general education' to an 'educational system driven by market forces,' from 'one time education for a few' to 'lifelong education for all,' from 'teachers centred' to 'learner centred' education (Venkatasubramanian 2002).

This paper is divided into four broad sections. The first section examines the history and reforms on education system and with a focus of higher education in Kenya. The second section explores the context of globalization influence on education system, followed by a critical analysis of the impact of globalization on Kenya's formal higher education. The analysis in this section involves drawing upon illustrative cases from research where considerable writing on the subject has been undertaken. The analysis focuses on massification, accountability, privatization and marketization along with their implications for equality of opportunity, equity, quality and efficiency in higher education. This paper seeks to answer the question whether the current education system prepares learners to address global sustainability challenges. The paper concludes with an overview of the influence of globalization on Kenyan universities.

2 Reforming the Formal Kenyan Higher Education

2.1 The History and Reforms in Education Systems in Kenya

Education is the process through which skills and knowledge are conveyed with a purpose of integrating an individual into society, or changing the values and norms of a society (Wosyanju 2009). The structure of an education system comprises the levels characterizing that system, and the length of time a learner is expected to spend or the content of the curriculum expected to be covered at each level, in fulfilment of clearly articulated objectives (Koech 1999). Kenya is currently under the 8-4-4 (8 years in primary education, four year of Secondary education and 4 years of Higher learning education) system. Curriculum is the sum total of the learning opportunities presented to a learner by the environment, especially planned, organized and constructed for that purpose (Education Act, Cap. 211). As per the act, curriculum is further defined as a plan for providing learning opportunities and experiences to our learners to achieve educational goals and specific objectives for the Kenyan society. The Kenya Vision 2030 is the national long-term development blue-print that aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment. The Vision comprises of three key pillars: economic; social; and political aspects. The working definition of globalization in this paper is derived from Cheng (2000), who refers to globalization as the transfer,

adaptation, and development of values, knowledge, technology, and behavioural norms across countries and societies in different parts of the world.

Progress in the reforming of education system has so far been made in realization of Vision 2030 goals as it is based on leveraging creative learners capable of raising Kenya's international competitiveness. A task force was launched on 2nd February 2011 by the Ministry of Education to review and align the education and training sector to the Constitution of Kenya 2010 and Kenya Vision 2030, and to position education and training accordingly at the county, national, regional and global levels. The task force criticized the current 8-4-4 education system and recommended implementation of a new 2-6-6-3 structure of education with 2 years of Pre-primary, 6 years of Primary (3 years lower and 3 years upper), 6 years Secondary (3 years junior and 3 years senior), and a minimum 3 years University of higher education. According to the task force, the new system would focus on child development, skills and competencies to be learnt from early childhood to University level (MoE 2012a, b). It argues that the competencies and skills will enable the learners to meet the human resource aspirations of Kenya Vision 2030 by offering a choice of subjects and career pathways. The proposed structure of education is described to be all- inclusive, flexible and coordinated compared to the current system and is meant to provide opportunities for lifelong learning and achieving goals of Education for All (MoE 2012a, b).

2.2 Rise and Expansion of Higher Education in Kenya

Higher education in Kenya can be traced back to 1922 when the then Makerere College in Uganda was established as a small technical college which was then expanded to meet the needs of the three East African countries i.e. Kenya, Uganda, and Tanganyika and Zanzibar, as well as Zambia and Malawi. In the 1940s and early 50s, only Makerere college was providing university education in East Africa. This lasted until 1956 when the Royal Technical College was established in Nairobi. In 1963, the Royal Technical College became the University College, Nairobi, following the establishment of the University of East Africa with three constituent colleges in Nairobi, Dar es Salaam and Kampala (Makerere). The University of Nairobi was thus established as the first university in Kenya. The intervening decades were characterized by continuous growth in demand (MoE 2012a, b; Oanda and Jowi 2012; Odhiambo 2011; Sifuna 2010). Kenya currently has twenty two public universities with several constituent colleges and campuses, and seventeen chartered private universities also with a number of constituent colleges. In addition, Kenya has several technical, industrial, vocational, and entrepreneurship training institutions, hereafter referred to as non-university institutions (MoE 2012a, b). All Kenyan public universities have experienced rapid growth and expansion aligned with the governmental goals to improve equity, the economy, and the educated populace (Hughes and Mwiria 1990).

2.3   Context of Globalization Influence on Kenya's Higher Education System

The pressure originating from a changing global higher educational landscape has had an impact on the delivery of educational services due to economic, technological, political, cultural, and scientific trends placing new demands on Kenya's education system. As a result, the education system in Kenya has increased its investment in higher learning institutions in research and development (R&D) activities with potential to foster growth in a globalized knowledge economy. An OECD publication argues that: 'Higher Education drives and is driven by globalization (OECD 2009). It continues to explain that higher education trains skilled workers and contributes to the research base and capacity for innovation that determine competitiveness in the knowledge-based global economy while facilitating international collaboration and cross-cultural exchange. The cross-border flow of ideas, students, faculty and financing, coupled with developments in information and communication technology, are changing the environment where higher education institutions function' (OECD 2009).

The Government of the Republic of Kenya acknowledges that higher education influences economic competiveness and plays a social role in the context of globalization. It is now well recognized that the growth of the global economy has increased opportunities for those countries with good levels of education and vice versa (Carnoy 1999; Tilak 2001). This has induced environmental and cultural outcomes and graduates are viewed as the driving force in promoting economic progress and social welfare.

3   Methodology

The method employed in this study incorporated a background analysis and a review of literature from current research and publically available information. Due to the scope of the paper and the nature of the approach used, the results are not entirely representative, but they offer a rough idea on the status of globalization influence to the higher education sector. More detailed and quantified studies could be carried out, coupled with surveys and in-depth analysis, when resources are available at a later stage.

4   Results

4.1   Impacts of Globalization on the Higher Education System

Currently, the processes of globalization has serious consequences for transforming teaching and learning as manifested in massification, accountability, privatization

Table 1 Synthesis of the impacts of globalization

Impact	Indicator	Influence on higher education sector
Massification in higher education institutions	Expansion in higher education	Reduced quality of education for the graduates
	Inequality in educational opportunity	Minority not taken into consideration
	Inadequate human resources	Challenges of reforms and change Implementation
Student mobility	Increased number of students studying abroad	Brain-drain in Kenya
University ranking (Kenyan universities in the world)	Increased competitiveness (among Kenyan universities, and with the other universities in the world)	Focusing on present needs market (to enhance the profile/competitiveness of the specific university)
Marketization of education	Unionization University entrepreneurship	Interrupted learning Minority are not considered Focus on current market needs
Accreditation for quality assurance	Increased diversity and complexity in higher education	Competitive higher education institutions
Accountability	Incorporation of strategic planning by higher education institutions	Preparing holistic education systems with monitored outcomes/outputs
Information, and communication technology	Mixed education delivery systems in higher education	Reduced transmissive teacher centered approach

and marketization of universities, all which have had considerable impact on equality of opportunities, equity, quality and efficiency of Kenya's higher education. The impacts are summarized in Table 1 and will be developed in the next points.

4.1.1 Massification in Higher Education Institutions

The term 'massification in higher education' is used to describe massive increase in student numbers in the higher education institutions and the growth of enrolment beyond the level of academic reproduction and training (Altbach 1982). Scott (1995) used the term massification in the context of higher education systems to describe the rapid increase in student enrolment in the latter part of the twentieth century. Trow (2000) described massification using the terms elite, mass and universal higher education, with elite representing a national enrolment ratio of up to 15 %, mass representing a ratio of up to 50 %, and universal a ratio inexcess of 50 %.

Rapid Expansion in Higher Education As a signatory of international education declarations and conventions such as Education for All (EFA), the EFA Dakar Framework of Action (2000), the Millennium Development Goals (2000), and the

Sustainable Development Goals (2015), the Government of Kenya is obliged to provide education for all citizens, eliminate all forms of discrimination, and improves access to education in alleviating poverty. These obligations have had an impact on the education system such as increased enrolment in basic education, leading to increased enrolment in the higher education institutions. The global forces resulting from international agreement passed has led to a large number of graduates as a means of meeting the labour market demands to enhance Kenya's global competitiveness. The consequence of these development have impacted the quality of education as there is no system for tracking the return on investment on the graduates at completion.

Inequality in Educational Opportunity University massification due to globalization has had a negative impact on equality of opportunities in higher learning institutions. According to the Education For All (EFA) Global Monitoring Report by UNESCO (2005), education inequality between the 'haves' and 'have-nots' in Kenya is overwhelming (UNESCO 2005). While actual enrolments have increased, class- based disparities in access to university education have also become apparent. The grouping of government-sponsored and privately—sponsored students has led to a division of the student body in classes. Self-sponsored enrolments rely on ability to cover the costs since educational loans are not readily available to such students in Kenya. For the small percentage of students who persist through the primary and secondary school systems, they face challenges in the higher education admissions' process and financial barriers that create more obstacles in education access. In 2007, for example, of the 82,000 students who were deemed officially qualified for university admission on the basis of their KCSE results (out of the 276,000 students who took the examination), only 10,000 were selected for government sponsorship, 10,000 entered university on a self—paying basis and 5000 entered the private sector, leaving 57,000 qualified students unable to enter higher education (Munene and Otieno 2008). The system then becomes one where, it is not just the best and brightest who attend university, but often the richest or those with financial means (Yakaboski and Nolan 2011). These patterns are detrimental for a country that wants to participate in the global market and to shift reliance from donors and funding agencies to an internal economy.

Human Resource Management The faculty in private universities is mostly part-time, while in public universities, departments with massive enrolment and partnership colleges have had to rely on part time instructors as well (Mageto 2001). These faculty differentiation conditions have resulted from massification impacting on the quality of education provided by the part time lecturers as they are given substandard treatment. The large numbers being realized out of the education system at the graduate level are potential candidates for the education profession (Barnes and O'Hara 1999) with difficulty to obtain full-time appointments due to the high supply that supersedes the demand hence resulting to part time lecturing. Educationists have argued that the rise in student enrolment was implemented without specific staff recruitment and expansion or upgrades of learning resources at

the universities, thus adversely affecting the quality of education in public universities (Gudo 2014).

4.1.2   Increased Student Mobility

One of the aspects of globalization is student mobility, where the Kenyan Ministry of Education, Science and Technology in collaboration with international universities, award scholarships to Kenyan students to study abroad contributing to the mobility. Student mobility is an instrument for personal development enhancing competencies that contribute to the economy and society (Jos et al. 2012). Established partnerships with academic institutions in other countries offers opportunities for different academic programs, research projects develop, and collaborations in a variety of ways. This offers Kenyan students and scholars opportunities in a globalized higher education environment. However, reports show that less than 30 % of Kenyans return and there are over a million Kenyans living and working overseas (Siringi and Kimani 2005). The implication of this to the Kenyan economy is that the Kenyan government has invested significant human resources into the students studying abroad yet so few of them will return to invest back into the Kenyan economy unless they are encouraged and rewarded. Without significant investment in skilled job development that comes with appropriate and increased level of salary, then there will be limited economic attraction for students to return.

4.1.3   Ranking of Kenyan University Among Global Recognized Universities

As stated in Standard Newspaper, 2 August 2014, p. 15, The Times Higher Education World University released its 2012–2013 universities and college's rankings and Kenyan universities are prominently featuring based on teaching, research, knowledge transfer and international outlook. The list featured University of Nairobi as the top ranked in Kenya and 17th in Africa. As a factor of the pressure from the rankings, greatly tied to globalization, rankings become an impact to the higher education sector with potential ripple effects including competitiveness. As much as the ranking encourages informed policy making and use data for decision-making purposes documenting student and institutional success (IHEP 2009), it has an impact on the education system as there is a strong risk that in trying to improve their position in the rankings, universities are tempted to enhance their performance only in those areas that can be measured by ranking indicators (Rauhvargers 2011).

4.1.4   Marketization of Education

Historically, it is important to note that after independence, Kenya's higher education was free as the government desired to train a truly Kenyan workforce to replace the departing British administrators and the government wanted to improve access (Wangenge-Ouma 2007). The free higher education program lasted until 1974 when the government introduced a student loan "scheme" or program created

to help cover non-tuition costs. This program was unsuccessful partially because the government had not developed a repayment process so the default rate was 81 % by 1987 (Otieno 2004).

Higher education institutions in Kenya are forced to diversify their sources of revenue to and optimize their revenue portfolio through market-oriented academic programmes and various commercialization activities (Kiamba 2004). Clark (1998) notes that the emergence of 'entrepreneurial activity' is a clear characteristic of global transformation in higher learning institutions. The shrinking allocation to public universities has led to insufficient facilities and stalled infrastructural projects in many universities in the country (Wangenge-Ouma 2007).

The private institutions are not any better since they depend on the tuition fees they generate from their students for their revenue; and such heavy dependence on tuition coupled with lack of alternative income sources have made these institutions expensive and thus unaffordable for most Kenyans, in effect, limiting their services to those of high socio-economic status. The higher learning institutions therefore charge fees strictly in accordance with market forces on the basis of full cost recovery (Ngome 2003).

This has great impact on the nature on the social role of the education system. This was further emphasized in the Master Plan on Education and Training 1997–2010 (GoK 1981). The document stated that:

> Universities will be encouraged to develop non-public sources of their revenues, including income-generating activities (such as returns from research and consultancies with industry and employers, services to the community, agro-based production, manufacturing for the market, including making equipment for use in schools, hiring out university facilities); grants and donations from NGOs and well-wishers; and funding from alumni (p.110).

Since the late 1990s the University of Nairobi, along with other public universities, have embarked on a program of entrepreneurial activity. For instance the University of Nairobi has incorporated a holding company, University of Nairobi Enterprises and Services Limited (UNES), as well as invested in consultancy services, conference facilities, restaurants, lodging facilities and bookstores as primary revenue generating sources. Since academics have to align their work to the market, there has been a heightened urge for academic to either unionize where unions are absent or reinvigorate existing ones. In Kenya, the need to grant more power to the academic resulted in the registration of the University's Academic Staff Union (UASU) in 2003 after a 24-year proscription by the state. In 2004 UASU organized a nationwide strike involving all academics in public universities over terms and conditions of service including salaries (Sall 2004). These incidents of institutional instability have a detrimental effect on internal efficiency in university operations.

4.1.5 Accreditation for Quality Assurance

During the World Education Forum held in Dakar in 2000, Kenya among other countries committed themselves to improving the quality of all aspects of education as it is one of the goals in achievement of EFA. This had a positive impact on the education system in Kenya since it strives to be globally competitive and to cope

with the changing context, diversity and complexity in higher education system, there is need to assure and ensure the quality of higher education nationally. This has been achieved through establishment of Directorate of Technical Accreditation and Quality Assurance mandated with ensuring and maintaining education standards in Kenya (Commission for Higher Education 2012).

4.1.6 Accountability

In order to ensure Kenyan Universities are globally competitive, new bureaucratic structures have increased importance of accountability to monitor adherence to performance indicators in universities. In Kenya, for instance, under the State Corporations (performance contracting), the Government requires all state corporations (including universities) to sign performance contracts with the government and submit quarterly performance reports. In response, Kenyatta University established the Center for Quality Assurance to monitor the quantity and quality of work output by academics. Moreover, by 2004, virtually all African universities had adopted strategic planning as a vital tool in navigating an increasingly competitive environment and ensuring accountability.

Kenyatta University in Kenya further embarked on its first strategic planning 2005–2014 aimed at transforming the university into a world-class institution, globally connected through partnership and information technology, research-oriented and training labour-ready graduates who are creative and independent thinkers among others (Kenyatta University, Strategic Plan, 2005–2010). The accountability is aimed at increasing effectiveness and service delivery of the education system of Kenya.

4.1.7 Information and Communication Technology (ICT)

Information and communication technologies have created a universal environment of instantaneous contact and of simplified scientific communication (Altbach et al. 2009). In Kenya, training opportunities such as mixed mode of delivery (face-to-face and Distance Education) have also been provided using information and communication technology. The emergence of distance learning as the effective supplementary system to the traditional universities and colleges is also an important trend in the expansion of the higher education system. Currently, such learning approaches are in use in major universities in Kenya.

4.2 Is the Current Education System Preparing People to Address Sustainability Challenges?

"*Sustainability*" in this context implies that the critical activities of a higher education institution are ecologically sound, socially just and economically viable, and that they will continue to be so for future generations. Sustainability and Sustainable development will be used interchangeably.

Kenya faces a number of sustainability challenges ranging from economic, societal, environment and these challenges are interlinked. The societal issues

encompass poor governance, corruption, gender inequality, HIV/AIDS, erosion of cultural values, drug abuse, and human rights abuse among others. The economic challenges include poverty, wide gap between the rich and poor, poverty, inadequate investment in infrastructure, unemployment, corruption, lack of accountability among others. The environmental challenges include loss of biodiversity, poaching, climate change and variability, loss of forest cover, and land degradation. The goal of Kenya Vision 2030 is to have a nation living in a clean and secure and sustainable environment. As discussed, the education system in Kenya has been impacted greatly in its quest to be globally competitive. As a result, several gaps have emerged in the current education system.

4.2.1 Education Structure

The current education structure, which is the 8-4-4 structure, does not cover early childhood education (Cheserek and Mugalavai 2010). Early childhood education is the starting point for lifelong learning and the years are crucial for child development and learning. As commented by Sterling (1996), educating children whilst still young is vital, since it encourages the children to develop a questioning attitude to received wisdom. This will prepare them for sustainability challenges and globalization impacts even as they advance in higher education.

4.2.2 Preparing Students to Deal with Globalization Trends and Inculcating Transferable Skills

The education system in higher learning institution presents students with ready-made problems (Chacha 2004). This does not prepare them to deal with the changing dynamics of the external forces brought forth by globalization. To prepare student for sustainability challenges, the education system should focus on problem-based learning to prepare students for life-long learning. Steinemann (2003) comments on the context for problem-based learning with emphasis on learning by doing. He reiterates that this gives students a motivating context for learning as they take ownership of a problem and the problem solving process (Steinemann 2003). This is further emphasized in Allan (2006) where he stresses the importance of thoughtful reflection by learners to ensure that each learning outcome is clearly described and operationalized (Allan 2006) and that conceptual links between higher education and the labour market, in terms of the knowledge, skills, and competencies, are clear. As graduates go to the world of work, they should have the capacity to make decision based on complexity associated with uncertain global realities. Atkinson (2000), also further notes that sustainability, will not come from "ready-made solutions.' The education system should allow all learners to transit from one level to the other until they are 18 years of age. In addition, a suitable structure should be flexible and provides limitless opportunities for lifelong learning for all.

4.2.3 Minority not Taken into Consideration

Admission policies in higher learning institutions do not have a criterion for attracting students from disadvantaged families, gender and communities which are

underrepresented. Every individual goes through the same competitive degree programme selection and this impacts access and equity in selection especially for subjects such as engineering, law and science. Gender stereotypes and cultural norms still exist in Kenya which affects selection of certain degree programmes by women. While actual enrolments have increased, class-based disparities in access to university education have also become apparent (Munene and Otieno 2008). Research indicates that educating women influences many sociocultural and socioeconomic indicators including health care, infant mortality, and reducing population grown.

4.2.4   Challenges of Reforms and Change Implementation

There is failed systematic follow up and implementation of recommendations from review committee leading to skepticism of the government's will for reforms by Kenyans. In addition, there is inadequate capacity and resources for implementation and lack of political will to take unpopular but necessary decisions. There have been several review and recommendations made by the taskforce formed by the government but it is still not willing to implement hence reforms in the education system are at a standstill.

4.2.5   Transmissive Teacher Centered Approach

The current educational system in higher learning institutions, in its present state, is not suitable to teach sustainability, as it is a very transmissive, teacher-centered approach with an emphasis on cognitive learning and memorization (Sterling 2002). The process of curriculum design and development at the university level is left to individual universities (MoE 2012a, b). In Kenya there has been the problem of tending to emphasize on certification at the expense of education and skills acquisition with more school-leavers and non-university graduates in labour force hurry for university education, training and learning to boost their chances in the labour market (Ojiambo 2009; Fortunate 2013).

Many of the activities appear to be administratively designed and implemented, rather than being participative and inclusive of the students—thereby minimizing meaningful, real learning opportunities. The state has little or no control over the teaching, research and learning activities going on in the Universities. The multiplication of these institutions through establishment of subsidiary campuses has meant a demand for more human power. There is therefore a shortage of academic staff and the implication is that most lecturers are master's degree holders with no research and teaching experience. Hence there is a necessity for the kind of learning that goes into the depth of things and brings about a paradigmatic shift—a shift from a transmissive to a transformative learning model (Burns 2011; Cress 2004).

4.2.6   Focus on Present Market Needs

The current education system is focused in meeting current market needs with higher education systems becoming like corporates (Cheserek and Mugalavai 2010). Scott and Gough (2006) comments "too close a focus on society's present expectations for the future—based on presently available knowledge—may have

the effect of limiting that future, through a failure to encourage students to test or challenge those expectations" (p. 93). The emphasis of economic gains at the expense of environmental and social understanding hinders the current system from preparing students to deal with sustainability challenges. There has been increased faculty differentiation based on disciplinary specialization. Those in highly marketable disciplines mentioned above, have been viewed as more desirable than their counterparts in traditional academic programs. In tandem with the perceived market value of various disciplines, Kenya's Nairobi and Moi Universities have instituted a differentiated salary structure in which part-time instructors in highly marketable disciplines are paid at a higher scale than their counterparts in disciplines viewed as lacking in market potential. Differential pay based on discipline is one of the leading contributors to institutional tensions thereby lowering the overall efficiency of a university's operations.

5 Conclusion

The paper concludes that the multiple and diverse responsibilities of higher education are ultimately key to the well-being of Kenya, but this expanded role adds considerable complexity and many new challenges. The transformative process of globalization in which the national competiveness in the global arena has become significant to the extent that it informs national policy agendas. At the same time, globalization has had an impact on formal higher education system in Kenya. As such, Kenya is set to profit from the opportunities and gains opened up by positive globalization impacts on the beneficiaries.

However challenges such has unequal distribution of education achievement to most part of population will hinder them from gaining less or even lose out in the process of globalization as well as prepare its citizens to deal with sustainability challenges. The Kenyan people are well aware that the achievement of Kenya Vision 2030 depends heavily on science, technology and innovation, however, the current education system leaves little room for development of technical education, innovativeness and identification of individual talents. Unstoppable globalization will oblige institutions to rethink traditional degree programmes and past pedagogies, so as to prepare increasingly diverse student cohorts for a borderless economy. This can be equilibrated by setting policies so to guarantee sustainability of globalization to ensure that everyone acquire lifelong learning education that will enable them be capable to adopt new technologies and deal with the rapidly changing conditions that globalization brings about.

Even so, higher education is under difficulty to meet up with growing expectations, be it in regard to student statistics, preparation for educations, workforce requirements, or economic development. As evident the resources for sustaining these institutions are likely to decline. With all these challenges there is need to foster education for sustainability by focusing on new models that focuses on students experience, innovation that will guarantee that higher education keeps on

meeting society's needs. With a focus of a sustainable future, education in higher learning institutions should aim at imparting sustainability values and norms through give emphasis to collaborative efforts as well as encouraging practices that promote sustainability. In order to deal with the complexities of globalization, values and normative aspects of sustainability are entrenched in key competencies that promote education for sustainability—systems thinking proposes that we observe ourselves as a part of the environment, not detached from or ruling over nature; engagement of stakeholders and group collaboration that encourages considerate addition and representation of varied opinions; foresighted visioning that put emphasis on equity among generations, therefore placing a significance on the future generation needs and, finally, action-orientation which depicts the need to weigh up our assumptions, and calls us to reflect on our actions and adjust our choices based on changes in education system brought by globalization. The shift to educating for sustainability might be slow but it should be followed consistently. Educators can embark on imbedding competencies and pedagogies of sustainability gradually, while making headway and acclimatizing to a novel way of Higher learning education in light of shifting circumstances brought about by globalization.

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