Impact of Higher Learning Institutions in Provision of Quality Socio-Economic Development in Tanzania

Kitojo Wetengere

Abstract
The objective of this study was to investigate the impact of Higher Learning Institutions (HLIs) in provision of quality socio-economic development in Tanzania. In the new knowledge economy, the main roles of HLIs are: to provide high level manpower needs of the society, provide new knowledge and diffusing it into the national economy, provide services to the community and provide employment to the community. In reality, however, not much of the above mentioned roles has been done. If higher education is to become the drivers of high productivity, competition and socio-economic development, the following factors need to be taken on board: First, there is a need to re-think and to re-define the purpose of establishing the higher education to match with the local needs. Second, there is a need to prepare students for the future by building capacity for curiosity, creativity, critical thinking, problem solving and imagination. Finally, the curriculum of the higher education must be liberated from the tyranny of the course book and content. Teaching and learning must be thematic, driven by experimentation, discovery and problem-solving based approaches.

Key Words: Higher learning institutions, quality, outputs/outcomes, inputs-output model, socio-economic development, Tanzania

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1. Introduction
Tanzania is one of the poorest countries in the world (Morisset, 2013; CIA, 2013). In 2012, its average per capita income stood at US$ 570, placing it in the 176th position out of 191 countries in the world (Morisset, 2013). In her plan to alleviate poverty, Tanzania has prepared a vision which aspires to achieve a Middle Income Country level with an average per capita income of $3,000 by year 2025 (URT, 2011). In his foreword to the “Tanzania’s Development Vision 2025”, the third President of Tanzania, Hon. Benjamin Mkapa said:

“we are standing at the beginning of the 21st Century, a Century that will be characterised by competition. It is clear, therefore, that it will be a Century dominated by those with advanced technological capacity, high productivity, modern and efficient transport and communication infrastructure and, above all highly skilled manpower imbued with initiative. If we are to be active participants in the global developments of the twenty-first century we must, as a Nation, find ways of improving and strengthening ourselves in all these areas” (URT, 1995; Clark, 2002; Davis, 2011).

The essence of the Vision is that by 2025 Tanzania should have gone through an unprecedented economic transformation and development to achieve a middle income status, with a per capita income of USD 3,000 (in nominal terms); characterized by high levels of industrialization, competitiveness, quality livelihood, rule of law; and having in place an educated and pro-learning society (URT, 2011). Among other things, the 2025 vision accords high priority to education as instrumental in bringing about socio-economic transformation in the lives of Tanzanians (URT, 2009). According to the Vision:

‘education should be treated as a strategic agent for mind-set transformation and for the creation of a well educated nation, sufficiently equipped with the knowledge needed to completely solve the development challenges’.

The development vision 2025 on the education sector prescribes the need for revolutionized teaching, purposeful learning, good governance and management of education. The development of human capital and behavioural changes demanded in the vision can only be achieved through having in place and implementing a quality education (Werrema, 2012). Quality education can be defined as achieving our goals and aims in an efficient and effective way, assuming that the goals and aims reflects the requirements of all stakeholders (the government, the employers, the society and the students/parents) in an adequate way (IUCEA/DAAD, 2010). According to Werrema (2012), quality education has something to do with usefulness and relevance of the education delivered. Usefulness, means ability to satisfy the stated needs. In other words, does the education system in Tanzania satisfy the needs of Tanzanians? Relevance, means a set of skills that meets the growing demands of advancement of science and technology in the highly paced and modernized world (ibid.). In other words, is the education system relevant to the Tanzanian situation/environment?

Having realised that human capital which is educated and imbued (instilled) with behavioural changes are central to socio-economic development; the Ministry of Education and Vocational Training (MEVT) developed its vision which states:
“To have a Tanzanian who is well educated, knowledgeable, skilled, and culturally mature to handle national and international challenges in various political and social-economic fields by 2025” (URT, 2010).

Based on the above, it is a fact that education is an instrument for promoting economic growth (Bloom et al., 2006). Unfortunately, in the past most education programmes focused on primary and secondary education claiming to have better rate of return and playing a key role in poverty reduction (Bloom et al., 2006; Msollwa, undated). In Tanzania this was evidenced by allocating between 55-70 percent of the education sector budget to primary education compared to less than 28 percent allocated to Higher Education (BEST, 2013). A study conducted by the World Bank in Guatemala reveals that primary schooling was most important for productivity growth, followed by secondary schooling (Loening, 2005). The study further reveals that increased skill level has been the main driving force behind productivity growth, and that education explains more than 50 percent of output growth during the past five decades (ibid.). A differentiation by level of education suggests that the growth of secondary schooling was the predominant factor, closely followed by primary education and HLIs ranks last (ibid.). A World Bank study show that every extra year of primary education increase person’s productivity by 10 to 30 percent and four years of basic education resulted in 8 percent increase in farm production (UNICEF, undated). Women with some formal education were more likely to seek medical care during pregnancy, ensure their children are immunized, be better informed about their children’s nutritional requirements, and adopt improved sanitation practices (World Bank, 2011). As a result, their children have higher survival rates and tend to be healthier and better nourished (ibid.). Similarly, the study show that a girl with a 5th grade education is likelier to marry at a later age, have fewer children, decrease her chances of being infected with HIV/AIDS, find employment later in life, seek medical care, vote in her community and gain access to credit (ibid.).

It is in view of the above that most development partners regarded Higher Learning Institutions (HLIs) as white elephants (institutional enclaves) without direct participation in the development process of the African Communities (Msollwa, undated). Consequently, the developing countries with scarce resources regarded HLIs as wasting resources and not fulfilling the important purposes (Mishra, 2007). Bloom et al. (2006) was of the view that HLIs were expensive and inefficient public service that largely benefited the wealthy and privileged. This was probably because the impact of HLIs on socio-economic development was minimal or non-existence. Milton, F. and Milton, R. (1980) argue that there was no evidence that “HLIs yield ‘social benefits’ over and above the benefits that accrue to the students themselves” and hypothesized that HLIs may promote “social unrest and political instability.” It is only recently that HLIs have been regarded as a backbone of development of any society (Mishra, 2007). While stressing the importance of quality primary and secondary education, they acknowledge the important role HLIs can play in enhancing socio-economic development in Africa (ibid.). In the new thinking, the higher education is acknowledged as the engine of development in the new knowledge economy whereby the new modes of economic growth are dependant on knowledge and information technology (ibid.). Now HLIs are understood to make a necessary contribution, in
concert with other factors, to the success of national efforts to boost productivity, competitiveness and economic growth (Bloom et al., 2006).

Despite recognizing the contribution of the HLIs in socio-economic development, little has been documented regarding its impact on livelihood of the poor and economic growth in general (see also Gu and Wong, 2012). This paper is meant to fill that gap.

1.1. The Main Objective of the Study
The main objective of the study was to investigate the impact of HLIs in provision of quality socio-economic development in Tanzania.

1.1.1. The specific objective of the study are to:
(i) Investigate the role of HLIs to provide high level manpower needs of the society through its teaching;
(ii) Examine the role of HLIs to provide new knowledge through research;
(iii) Investigate the role of HLIs to serve the society through community service; and
(iv) Examine the role of HLIs to provide employment for the community.

1.2. Methodology
The methodology adopted by this study was desk review. In this desk review relevant existing documents were reviewed. These documents included evaluation reports, and programs of the Ministry of Education and Vocation Training (MEVT) and the Basic Education Statistics in Tanzania (BEST), NACTE reports, The Tanzania Development vision 2025 and reports from various HLIs. The documents mentioned above were obtained from various sources namely: the MEVT office, the NACTE office and the internet. In addition, the previous studies/research reports were reviewed.

2. Higher Learning Insitutitions in Tanzania
In a period of fifty three (53) years after independence, the education system in Tanzania has evolved from only one institution of higher education (a University College) in 1961 to more than 420 tertiary training institutions by July, 2014. The massification of these tertiary institutions catering basically for Ministries and Parastatals is a manifestation of increasing demands for personnel with higher education background from both the public and private sectors (Msolla, undated). Following the establishment of the Ministry of Science, Technology and Higher Education (MSTHE) in November, 1990; there has been further developments in the higher education sector. For instance, by 1990 there were only two public Universities; the University of Dar es Salaam with Muhimbili University College of Health Sciences as its constituent College and the Sokoine University of Agriculture in Morogoro (ibid.). Furthermore, there was only one Technical School - the Dar es Salaam Technical College (ibid.). The total number of students in all the institutions was less than 5,000 and there was no private higher learning institution (ibid.).

35 Information obtained from Tanzania Commission for Universities (TCU) website and National Council for Technical Education (NACTE) literature.
However, by December, 2006 the situation had changed a lot. The number of Public Universities and University Colleges were 11 and the number of Private Universities and University colleges 19. Total number of students in both Public and Private Universities was 52,831 and students in other Tertiary Institutions was 11,735. By July, 2014, there were in total 61 universities, colleges and centres recognised by the Tanzania Commission for Universities (TCU) (Table 1). Out of these institutions, there were 28 universities (of which 11 were public and 17 private institutions); 19 colleges (of which 4 were public and 15 private institutions) and 14 centers (of which 3 were public and 11 private institutions) (Table 1). From these statistics, it has been revealed that 70% of these institutions were private owned institutions.

Table 1: Types and ownership of higher learning institutions recognized by TCU

<table>
<thead>
<tr>
<th>Types of Higher Learning Institution</th>
<th>Ownership</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>Universities</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Colleges</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Centres</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Total Number</td>
<td>18 (30%)</td>
<td>43 (70%)</td>
</tr>
</tbody>
</table>

Source: TCU (http://www.tcu.go.tz/images/pdf/Recognised_Universities_Colleges_Centres.pdf)

Similarly, by July, 2014 there were 359 non-university Higher Learning Institutions (HLIs) recognised by the National Council for Technical Education (NACTE). Of these institutions, 232 had acquired full registration while 127 had provisional registration (Table 2).

Table 2: Number of Technical Institutions registered by NACTE as at June, 2014

<table>
<thead>
<tr>
<th>Subject Board</th>
<th>Number of Institutions per Board</th>
<th>Number of Institutions for Different Registration Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Full</td>
</tr>
<tr>
<td>Business, Tourism and Planning</td>
<td>130</td>
<td>66</td>
</tr>
<tr>
<td>Health and Allied Sciences</td>
<td>123</td>
<td>91</td>
</tr>
<tr>
<td>Science and Allied Technologies</td>
<td>76</td>
<td>62</td>
</tr>
<tr>
<td>Teaching and Learning Facilities</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td>Total Number</td>
<td>359</td>
<td>232</td>
</tr>
</tbody>
</table>

Source: NACTE (2014)

In total therefore, by July, 2014, there were 420 HLIs in Tanzania; of which 61 were universities (including colleges and centres) recognized by the TCU and 359 tertiary institutions recognized by the NACTE. The total number of students according to the World Bank amounted to 166,014

3. Education Sector as an Industry

The available literature indicates that the terms education industry and education sector are sometimes used interchangeably (NBS, 2013)\textsuperscript{36}. This is likely because education operates in a

\textsuperscript{36} http://www.economywatch.com/world-industries/education-industry.html
production process like any other industry and therefore requires Input-Output Model to analyse its performance and contribution to the development of the economy. This view is in line with Gerner (1971) who argues that education may be viewed, at least in part, as a deliberate process of production. Input-output analysis is an economic term that refers to the study of the effects that different sectors have on the economy as a whole, for a particular nation or region. In this regard, the input-output model is employed to analyse the effects that different inputs in the education sector and HLIs in particular has on development of the economy (Figure 1). The analysis requires not only the inputs invested in it, the processes required to transform the inputs into products and the products themselves (figure 1) but also with the relationships among these aspects of the system and the relationship of each to the achievement of the stated goals (Stufflebeam and Shinkfield, 1985). The model postulates that the quality and quantity of inputs and the quality of the process determines the quality of the output/outcome of an education industry. For instance, the quantity and quality of lecturers, students, learning materials and lecture rooms, curriculum and teaching methodology and how they interact in the learning process determine the quality of outputs/outcomes.

3.1. Quantity and Quality of Inputs in the HLIs

Input can be defined as anything that is embeded in a system for some type of use (Jacobson, undated). What we input has a purpose - but until it is processed and generated in some form of output, it does not do us much good (ibid.). The quantity and quality of inputs in the education industry can be categorized into the following sub-groups:

(i) The Financial Aspect: The amount of money allocated to finance inputs in the education industry is the determinant of the quantity and quality of the inputs available for teaching and learning. Often this has been a hindrance to acquire the needed inputs in the industry.

(ii) The Students:

(a) Students Background: These include variables like understanding what students know and what they do not know about the subject matter, the language spoken, expectations and willingness and interest to learn;
(b) Students Admission Criteria: The criteria for selecting students and the availability and adequacy of intake policy; and
(c) Students Advise and Support: Feedback on their performance, coaching or orientation of first year students and the availability of guidance and counselling services. Other variables include student’s attendance and family support in form of moral or financial (Nannyonjo, 2007).


37 Unless otherwise stated, a big part of this section was cited from IUCEA/DAAD (2010).
(iv) **The Academic Staff:**

(a) **Quantity and Quality of Academic Staff:** The quantity, qualifications and in-service training of the academic staff, (Nannyonjo, 2007), recruitment and promotion based on academic merits, time management and incentives systems designed to support the quality of teaching and learning, well regulated accountability of staff member, well planned and implemented termination, retirement and social benefits and existence of efficient appraisal.

(b) **Staff Development Activities:** Having a clear vision on the needs for the staff development and the staff development are adequate to the needs.

(v) **The Organization of the Programme:**

(a) **Curriculum Design and Evaluation:** Development of the curriculum to meet the needs and the requirements of all the stakeholders (i.e. the government, labour market, students/parents, academic world and the society), the curriculum is regularly evaluated, revision of the curriculum takes place at reasonable time periods and quality assurance of the curriculum is adequate;

(b) **The Curriculum:** The coherence i.e. it intergrate all subjects and courses, the breadth and depth, clearly shows the basic, intermediate, specialist courses and the final project (thesis or field report) activities;

(c) **Teaching/learning Starategies:** The staff have a clear teaching/learning strategies, teaching/learning strategies enable students to acquire and manipulate knowledge and the curriculum stimulates active learning and facilitate learning to learn and life-long learning;

(d) **Students Assessment:** The assessment reflects the expected learning outcomes and the content of the programme, assessment uses a variety of methods, the criteria for assessment are explicit and well-known, the standards applied in the assessment are explicit and consistent and the assessment methods and the assessment itself are always subject to quality assurance and scrutiny;

(e) **Students Evaluation:** Courses and curriculum are subject to structured students evaluation, students feedback is used for improvement and the department provides the students with feedback on what is done with the outcomes; and

(f) **Feedback from the Stakeholders:** There is adequate structural feedback from the labour market (employers) and there is structural feedback from the alumni.

### 3.2. Quality Processes

Processing is the *act of converting the inputs into something usable* (Jacobson, *undated*). The competences (knowledge, skills, understandung and attitudes) possed by students after studies is the result of inputs being processed by some program so we can have usable output. The nature of inputs at each level, in turn, constrains the choice of educational processes that may be used to transform the inputs into the desired products (UNICEF, *undated*). For instance, lecturers’

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38 Curriculum refers to teaching and learning experience taking place in learning institution and includes the aims and objectives of learning, what is taught, provided in terms of learning outcomes for realization of target qualification requirements, teaching and learning strategies for realization of outcomes, and form of assessment and evaluation (NACTE, 2005).
competences (pedagogical knowledge and skills), instruction methods and their attitudes towards students do have impact on students learning. Similarly, investment in the number of lecturers ultimately determines the ratio of lectures to students in the lecture room while the training of lecturers affects what methodologies are used in instruction (ibid.). The teaching strategies and the type of questions and assignments given have impacts on students creativity, curiosity, problems solving and critical thinking. Even factors like lecture room size in relation to number of students and the sitting arrangements can have effect on students learning. Thus, the processes (the organizations and interactions of the inputs) actually used affects the quality and quantity of the ‘product’ (Figure 1).

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Processes</th>
<th>Outputs/outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality and quantity of purchased and non-purchased inputs</td>
<td>Lecture room methods for organizing instruction or learning</td>
<td>Short and long-term results of lecture room processes</td>
</tr>
</tbody>
</table>

Source: Modified from Kemmerer (1994)

Figure 1: Education production relationship

3.3. Quality Outputs/Outcomes
It has been evidenced that poor learning achievements among students is often a result of many interrelated factors on the input side that signify a deficiency in educational systems (UNICEF, undated). Poor learning achievement or outcomes is most frequently due to a combination of factors that include inadequate learning environments, inappropriate teaching methods and frequently unmotivated lecturers and the situation of the students themselves (ibid.). Quality outcomes are what students know and what they can do as well as their attitudes and expectations they have for themselves and their societies (ibid.). Schreyer (2009) and Fraumeni et al. (2008) define the output of the education sector as the effect of education processes on the level of competences (the amount of knowledge, skills, understanding and attitudes) students have attained or possessed after completion of studies. This is also referred to as investment in human capital (OECD, 2010). At this juncture, it is vital to differentiate outputs from outcomes/impacts. Outputs relate to "what we do," Outcomes/impacts refer to "what difference is there" (Table 3).
Table 3: Differences between Outputs and Outcomes/Impacts

<table>
<thead>
<tr>
<th>Activities</th>
<th>Participation</th>
<th>OUTPUTS</th>
<th>Short Term Outcomes/Impacts</th>
<th>Medium Term Outcomes/Impacts</th>
<th>Long Term Outcomes/Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What we do</strong></td>
<td><strong>Who we reach</strong></td>
<td><strong>What the short term results are</strong></td>
<td><strong>What the Medium term results are</strong></td>
<td><strong>What the ultimate impacts are</strong></td>
<td></td>
</tr>
<tr>
<td>Conduct workshop meetings; Deliver services; Develop products like curriculum resources; Train; Provide; Counseling; Assess; Facilitate; Partner; and Work with media</td>
<td>Participants; Clients; Agencies; and Decision-makers.</td>
<td>Learning</td>
<td>Action</td>
<td>Conditions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Awareness; Knowledge; Attitudes; Skills; Opinion; Aspirations; and Motivation.</td>
<td>Behaviour; Practice; Decision-making; Policies; and Social action.</td>
<td>Social; Economic; Civic; and Environmental.</td>
<td></td>
</tr>
</tbody>
</table>

Source: [http://www.uwex.edu/ces/lmcourse/Module_1_pages/M1_Section2/HTML/m1s2p3a.htm](http://www.uwex.edu/ces/lmcourse/Module_1_pages/M1_Section2/HTML/m1s2p3a.htm)

In the past, governments of many developing countries used to justify their performance in the education industry in terms of inputs; that is, in terms of the amount of new money that have been provided, or the number of new lecturers that have been employed, or the range of new computers that have been installed (Dowling, 2008; Gu and Wong, 2012). The programme implementers were anxious to tell their clients, funders and community partners what it is that they do, the services they provide, how they are unique, who they serve. They did a good job of describing and counting activities and the number of people who come. However, this was at the neglect of if students were actually learning and retaining what they were taught. It has been observed that ‘today, educators need to show how they have transformed current and new dollars into student achievement results. Output measures, particularly those related to student achievement, are the new bottom line in education (ibid.). Now, however, we need to ask: “What difference does it make?” This is a question about OUTCOMES or IMPACTS. Table 3 show the expected short, medium and long term impacts acquired from a quality education programme. Thus, the output of the education system is nowadays looked as academic achievements, changes in attitudes and behaviours, productivity on-the-job, good citizenship and the conditions. Other achievements of quality education are related to community participation and learner confidence, enhanced life-skills and the capability to make responsible choices and resolve conflict.

4. The Role of Higher Learning Institutions

According to the Tanzania Development Vision (TDV) 2025 ‘education should be treated as a strategic agent for mind-set transformation and for the creation of a well educated nation, sufficiently equipped with the knowledge needed to completely solve the development challenges’. This is in line with the MEVT vision which is to “have a Tanzanian who is well educated, knowledgeable, skilled, and culturally mature to handle national and international challenges in various political and social-economical fields by 2025”. The key words in the TDV 2025 education vision are: to transform the mind-set of Tanzanians and to enable them to
solve development challenges. During independence Tanzania was faced by three enemies namely: poverty, ignorance and diseases (TADIP/KAS, 2010).

Although to-date Tanzania is still faced by those enemies, there are more challenges prevalent today than those. For instance, according to the 2011/12 Household Budget Survey (HBS), 48 percent of the population was dependent and 25 percent were female-headed households who are widowed, divorced or separated, only 18 percent of the population were connected to the electricity grid, 66.3 percent of households depended on firewood as their main sources of energy for cooking and 36 percent of the household had to travel more than a kilometre to reach nearest drinking water in the dry season (NBS, 2014). Furthermore, 20 percent of the adult population had no education and literacy rate was 77 percent, 22 percent in the rural areas reported to be ill or injured in the previous four weeks and 25 percent of those did not seek medical care because it was too expensive (ibid.). Overall the practice of irrigation (6.6 percent) and organic (12 percent) and inorganic fertilizer (9 percent) was low, 28 percent of the population did not meet their daily basic needs and 36 percent of businesses main sources of start-up capital were obtained from own saving (ibid.). Moreover, corruption is another enemy today.

According to the TDV 2025, it is the responsibility of HLIs to transform the mind-set of graduands and impart knowledge and skills needed to solve the above mentioned development challenges. In this way the HLIs become significant players in promoting socio-economic development (Pracsys, 2009). More specific, the HLIs should provide high level manpower needs of the society through its teaching, provide new knowledge and diffusing it into the national economy through research, provide services to the community and provide employment to the community. On one hand, Figure 2 shows how activities of HLIs through improving productivity, imparting entrepreneurship skills, specialization and job creation leads to economic growth and poverty alleviation. On the other hand, it shows how HLIs through Research and Development, imparting knowledge on good governance, safety and social development contribute to economic growth and poverty alleviation. This section examines in detail the potential economic and social impacts a HLI can have on a community:

![Figure 2: The Role of Higher Learning Institutions](source: Bloom et al. (2006))
4.1. To Provide High Level Manpower Needs of the Society Through its Teaching

HLIs are important in preparing workers with the skills (human capital) needed to adapt to the changing job requirements. Human capital has a highly significant and positive impact on long-run growth (Loening, 2005). The transition from manufacturing to the technology-based new economy dramatically raised the skill level needed to get a job (NIU, 2005). There is therefore a demand for more post secondary education due to “upskilling” - as employer demands for higher skills (ibid.). In addition, the HLIs are needed to address the impending shortage of trained workers and high skilled professionals needed due to growth of the economy and to replace the workforce that will be at or over the retirement age (Sampson, 2003). In Tanzania, the overall development objective is to produce the quantity and quality of workforce with the necessary knowledge and skills to address the challenges of underdevelopment (Msollwa, undated). In the year 2012 for instance, there were unmet demand of 126,073 vacancies from various sectors (NBS, 2013). The sectors which had most vacancies include; education (54,828), public administration, defence and social security (36,531), human health and social work activities (19,053), professional, science and technical activites (4,358), accommodation and food service activities (2,670), agriculture, forestry and fishing (2,597) and mining electricity and gas (1,067). Of the total unmet demand, 54,738 (43 percent) vacancies were to be filled by graduands from the HLIs (ibid.).

Employability of HLIs Graduands

On one hand, the benefits accruing to the graduands of HLIs include higher salaries and a greater ability to save and invest (Bloom et al., 2006). These benefits may result in better health and improved quality of life, thus setting off a virtuous spiral in which life expectancy improvements enable individuals to work more productively over a longer time further boosting lifetime earnings (ibid.; Figure 2). On the other hand, by producing well-trained teachers, it can enhance the quality of primary and secondary education systems and give secondary graduates greater opportunities for economic advancement (Bloom et al., 2006). By training physicians and other health workers, it can improve a society’s health, raising productivity at work. Similarly, by nurturing governance and leadership skills, it can provide countries with the talented individuals needed to establish a policy environment favorable to growth (ibid.; Figure 2). Setting up robust and fair legal and political institutions and making them a part of a country's fabric, and developing a culture of job and business creation, for example, call for advanced knowledge and decision-making skills. Addressing environmental problems and improving security against internal and external threats also place a premium on the skills that advanced education is best placed to deliver (ibid.). The question we need to ask is: Are graduands from our HLIs employable? More important, as we enter into East African common market, are graduands from our HLIs competitive in the job market? Unfortunately, a study conducted by the Inter-University Council of East Africa (IUCEA) show that 56 percent of graduands from HLIs in East Africa lack the basic and technical skills needed in the job market (Awiti, 2014). Similarly, private sector employers and chief executives said that HLIs do not meet their needs and those of the larger society (ibid.). It is likely due to the above that the Minister for Education and Vocational Training, Dr. Shukuru Kawambwa said that strategies has to put in place to ensure
that the newly launched education policy produce competence-based and skill-oriented graduates at all levels\(^{39}\).

The fact that graduands from the HLIs lack the basic and technical skills needed in the job market and do not meet the needs of the stakeholders (Awiti, 2014), is evidence of itself that there are deficiencies on the input side as well as the processes of the education industry (UNICEF, undated). To understand the deficiencies in the education industry, we need to ask a question: how much of the national budget is allocated to the education sector and the HLIs in particular? Table 4 shows that between 2010/11 and 2014/15 only 17 - 19% of the national budget was allocated to the education sector. This is below 26% of the annual budget recommended for education sector by the United Nations (UN). Of the budget allocated to the education sector, only 24 - 27% was allocated to the HLIs. Compare this with the estimated 20 - 30% of the annual budget that is lost through corrupt means.

Table 4: Total National budget, budget allocated to the education sector and higher education for the 2010/11 - 2014/15 Financial Year (in million Tshs.)

<table>
<thead>
<tr>
<th>Education Sector/Year</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Budget</td>
<td>11,609,557</td>
<td>13,525,895</td>
<td>15,119,644</td>
<td>18,248,983</td>
<td>19,853,000</td>
</tr>
<tr>
<td>Total Budget Allocated to Education Sector</td>
<td>2,045,400</td>
<td>2,283,000</td>
<td>2,890,149</td>
<td>3,171,631</td>
<td>3,465,100</td>
</tr>
<tr>
<td>Budget of Education Sector as % of Total Budget</td>
<td>17.6</td>
<td>16.9</td>
<td>19.1</td>
<td>17.4</td>
<td>17.5</td>
</tr>
<tr>
<td>Total Budget Allocated to the HLIs</td>
<td>542,774</td>
<td>621,603</td>
<td>719,848</td>
<td>865,735</td>
<td>841,112</td>
</tr>
<tr>
<td>Budget of HLIs as % of Total Budget of Education Sector</td>
<td>26.5</td>
<td>27.2</td>
<td>24.9</td>
<td>27.3</td>
<td>24.3</td>
</tr>
</tbody>
</table>

Source: BEST (2013)

It is a fact that the amount of money allocated to the education industry determines the quantity and quality improvements of the inputs purchased (Warren, 2012). Quality improvements include supporting employment of the quantity and quality of lecturers, the teaching and learning infrastructure and the development and deliverance of the Competence Based Curriculum (CBC)\(^{40}\) are vital in imparting the required marketplace skills. More important also is that the money allocated to the industry will determine the processes (the way the inputs are organized) to be undertaken. For instance, the application of hands-on learning techniques like exposing students to field work placement, internship, volunteerism and study visits/tours and hiring of part-time professional practioners in teaching. However important these activities are in


\(^{40}\) CBC is a type of curriculum designed to impart knowledge, skills and aptitude or understanding which demonstrates a clear ability to successfully carry out some occupational activity (NACTE, 2005). Or acquisition of knowledge, skills and abilities at a level of expertise sufficient to be able to perform in an appropriate work setting (IUCEA/DAAD, 2010).
imparting the highly needed practical skills in the marketplace to the students, they are time consuming and costly. Furthermore, although most HLIs have been commended for increasing students enrollment, this increase has not kept pace with increase of qualified academic staff and teaching and learning infrastructure. This has had negative effects on quality of teaching and learning and consequently on the outputs/outcomes.

**Possession of Entrepreneurship Skills**

While more than 800,000 Tanzanians enter the labor market every year (World Bank, 2014), only a fraction of them secures employment in the formal sector. Most of them will fall into a group of job seekers. These job seekers include school and college graduates and people who have migrated from rural areas to urban areas. If our HLIs were producing entrepreneurs who are able to create self-employment and jobs for others, the unemployment rate would not exist at that level. Unfortunately, most part of our education was meant to prepare people to become loyal employees (Werrema, 2012). This is an area which many HLIs in Tanzania have not performed well. This is evidenced by a big number of graduands who are seeking job rather than finding a way to create self employment. In the mid of year 2014 for instance, 10,500 graduands appeared for an interview for only 70 vacancies at the Immigration Department. If our HLIs were training graduands to create job rather than seeking job, they would not turn in such a big number! Perhaps that is one of the reasons why HLIs have not been considered as the main agents of development (Mishra, 2007).

Many HLIs continue to prepare graduates for **white color jobs** rather than preparing them to use their knowledge and skills to exploit the abundant resources that the country is endowed with. Awiti (2014) argues that HLIs graduates can pass examinations but they cannot think for themselves. HLIs graduands regard self-employment as a second class type of job. Graduands from Agricultural HLIs for instance, would be expected to create agricultural projects (farming crops, fish and animal husbandry) which will contribute to food security, curb malnutrition, job creation and growth of the economy. What we see in the real situation is that most graduands from this field look for employment rather than creating self employment and employment for others. Authors personal experience has revealed that those who opt for self employment, do so because they have not found suitable vacancies for employment.

To most HLIs graduands, self employment is a temporary business, once an employment vacancy emerges, they tend opt for employment or both. The same would be expected from the social scientists graduands, that is, they would be expected to launch organizations which would foster human rights and good governance, prevent and resolve conflicts and empower people to harness their resources. Similarly, medical doctors graduands would be expected to launch activities which would improve health of the local community, which in turn would improve work productivity. Although there are no statistics available, there is good number of graduands from HLIs who have established projects/businesses like bars and shops which do not match their professional. As is the case, most graduands from HLIs in Tanzania do not want to dirt their hands, so, they do not make good entrepreners. This did not come as a surprise as HLIs graduands were trained to be good employees - not employers (Werrema, 2012).
It is therefore, obvious that they can not just become the best at being self-employed (ibid.). In contrast, DE Bloom et al. (2006) indicates that individuals with higher education levels were more likely to engage in entrepreneurial activity and more educated entrepreneurs created larger numbers of jobs than less-educated entrepreneurs. This is in line with Awiti’s (2014) who argue that there is need to educate our own scientists to create a unique Green Revolution. Furthermore, we need engineers, biologists, ecologists, sociologists, anthropologists and economists to deal with climate change. We need politicians, journalists and civil servants who can navigate the complex divrsity of our region (ibid.). Our HLIs must produce captains of business, leaders of government and stewards of civil society, who will lead the country’s renaissance and find solution to its most urgent challenges: bad governance, poverty, hunger, malnutrition, civil strife, climate change and environment degradation (ibid.). Failure to that, the existence of HLIs is unjustifiable and worse enough may be considered as a failure if not a waster of scarce public resources!

The main problem regarding lack of entrepreneurship skills among HLIs graduands lies with the home school, the inputs and the processes of the education industry. At home, most parents do not train their children to be competitive in the labour market. Most work, if not all, at home is done by “house boys” and “house girls” while their educated children spend most of their time chatting with their mobile phones and watching televisions. This means, the first school has created lazy, watchers of things and uncreative workforce. Similarly, the curriculum and teaching strategies in most HLIs have not prepared students for the future by building capacity for curiosity - the eager to investigate or learn more about something or eager to acquire knowledge of something; creativity - the ability to make or form something new; critical thinking - the objective analysis and evaluation of an issue in order to form a judgement; problem solving - the process of working through details of a problem in order to reach a solution and imagination - the ability to form mental images of things that are not present to the senses or not considered to be real (Awiti, 2014). These competences are inevitable if the HLIs are to prepare graduands to be the masters rather than the slaves of their environment. To be able to do so, the curriculum must change. This is in line with what the Minister for Education and Vocational Training, Dr. Shukuru Kawambwa said that the curriculum must change to match the new education policy in order to transform the sector and change the mind-set of the experts.

The current processes of training and learning have spoonfed students instead of making them curious and creative, the processes have taught students to think the way of their lecturers or forefathers instead of building critical thinking and students are taught to complain or to point fingers to other for their failures instead of building capacity to identify and solve problems. In this way how can HLIs graduands take advantages of the emreging opportunities in the economy? Consequently, the graduands continue to be job seekers rather than job creators. Similarly, the education processes have failed to transform the mind-set of graduands from low to high self-esteem perception, from dependant to independant, from being beggers to givers, from being job seekers to job creators, from being problem evaders to solvers, from being acceptors of others idea to critical thinkers or think tankers and from uncreative to creative. Again, this concur with what the Minister for Education and Vocational Training, Dr. Shukuru Kawambwa said that the education sector has to breed graduates regardless of the education levels who are problems solvers than complainers as it is the situation at present. It is due to the
above that very few graduands from HLIs develop and practice entrepreneurship skills in real life.

4.2. To Provide New Knowledge Through Research

Technological development is crucial for the economy (and therefore workforce) to thrive (Rockefeller Institute, 2010). In order to successfully harness HLIs as an economic resource, the transition must be made from research to innovation (ibid.). The connection is not automatic. Research is necessary to transform knowledge into new ideas, but innovation is necessary to transform new ideas into practice - and the marketplace (ibid.). Research which is a process of inquiry that seeks new information or verifies existing facts in order to solve problems within society, is equally an important tool and investment for socio-economic development of any country (Figure 2). The Science and Technology in use today is an outcome of long-term investment in Research and Development (R&D). While both basic and applied research is important; for a developing country like Tanzania, more resources ought to be directed to applied research since it does provide the required solutions within a short period of time (Msollwa, unadated). All the same, some allocation of resources to basic research is prudent as medium and long-term development strategy (Msollwa, unadated).

It is a fact that HLIs are responsible for creation of new knowledge through research. To this end, there is no question that many HLIs have been doing this. Actually, most HLIs has emphasized on research and private consulting and little attention on teaching, advising and mentoring students (Awiti, 2014). A success of many HLIs have been measured by the number of consultancies, researches and publications done. Important questions in this context include: Is problem identification reflecting the problems and needs of the majority poor? Is the problem identified reflect the priorities of the poor? How were the poor involved in the identification of the problem? However good the above was done, there is lack of serious efforts to disseminate the new knowledge to the final users. Of course, it is only when this knowledge has reached the needy, is when it will have socio-economic impact on their livelihood. It is one thing to come up with a publishable research paper and it is another to disseminate it to the final users. What is the use of spending a lot of money in creating new knowledge if it does not reach the people it was intended to serve?

At this juncture we need to ask three questions: How much knowledge is in the shelves of HLIs which has not reached the final consumer? What is the use of this knowledge? Is this not a waste of resources? More important also is that we would expect the HLIs to produce a friendly and affordable technology that would lessen the burden of work for women, improve productivity and improve income through marketing of agriculture produce. How come that after many years of existence of HLIs, our farmers are still using hand hoe? How come that they are still practising rainfed and subsistence agriculture? Furthermore, how come that after many years of research and training experts on conflict prevention, management and resolution, there are still rampant conflicts between farmers and pastoralists, and local citizens (‘wazawa’) and investors. In other words, how has research from HLIs benefited the poor, the ignorant and the sick or how has it helped to resolve conflicts? Research findings from the HLIs must be felt by the poor, the ignorant and the sick population. HLIs through high quality teaching and research, must be able
to create well paying jobs by expanding research while linking academic programmes to entrepreneurship and business development (Awiti, 2014).

4.3. To Serve the Society Through Community Service
The impact of HLIs extends beyond the staff and students to the broader community in general. Many HLIs offer a wide range of cultural and recreational programs, engage in programs to enhance primary and secondary education, contribute to the provision of health and community services, provide services to local government and provide assistance to community groups. The HLIs contribute to civil society through providing liberal adult education, evening classes, access to facilities such as libraries, theatres, and museums, and through public lectures (Chatterton and Goddard, 2000). HLIs do not only provide instruction and training, but they also provide arts, entertainment, sports, and recreation programs that attract and retain a quality workforce. Professional-quality events are available to the public free or at reasonable costs (ibid.).

HLIs conducts economic and social research, including community audits, community forums, and leadership briefings, used to identify assets; gaps in the economic, social, and cultural infrastructure; critical skill shortages; growth opportunities; and trends in the economic climate of the region. In addition, the HLIs offers specialized help for small-to-medium sized businesses for planning, resource acquisition, and marketing like entrepreneurship training and assistance. Moreover, numerous students conduct their internships and practicums in the community. In this way, they provide various social and economic services. Sometimes members of the HLIs act as consultants for local governments or for community organizations. Research within HLIs, has traditionally emphasised the production of ‘basic’ knowledge for the (inter)-national academic community and neglected the application of established knowledge for the local/regional community (Chatterton and Goddard, 2000). In other cases research activities are aimed at community problems or provide instruction to members of the community. In still other cases (graduate) students are doing internships in the community organizations or community-oriented research assignments (e.g. master’s thesis) as part of their academic training.

4.4. To Provide Employment for the Community
The role of HLI as a major employer of a diverse pool of workers cannot be ignored (NIU, 2005). As a basic, revenue-generating industry, HLI directly, and indirectly through related multipliers, impacts the economy in various ways. First, HLIs employs staff who earn income and spend the income elsewhere. The direct impact of employment, income and expenditure generated by the HLI is also further augmented by the “multiplier effect” as some money spent locally by the HLI is spent again by those who receive it (ibid.). Second, the presence of HLI attracts other socio-economic activities which becomes sources of income generating to those who are employed directly and indirectly (hostel owners, food providers, hair saloons, shops and service providers like hospitals and schools). HLIs also induce local expenditure as they attract students and visitors who in turn spend money within the region.

5. The Way forward
In a dynamic and complex world, education and knowledge are increasingly becoming the foundation for - and drivers of - economic, social and institutional growth (Awiti, 2014: Bloom.
et al., 2006). The HLIs thus influence the economic competitiveness of individual nations and regions (ibid.). Bearing that in mind, we need to re-think and to re-define the purpose of establishing the HLIs. The HLIs ought to prepare students for the future by building capacity for curiosity, creativity, critical thinking, problem solving and imagination (Awiti, 2014). The HLIs ought to produce scientifically and culturally literate people who can assess evidence and communicate with clarity (ibid.). The HLIs must recognize the need to develop skills and attitudes to meet the extant and emerging problems.

To meet that end, the curriculum of the HLIs must be liberated from the tyranny of the course book and content. Teaching and learning must be thermatic, driven by experimentation, discovery and problem-solving based approaches (Awiti, 2014). HLIs through high quality teaching and research, can create well paying jobs by expanding research while linking academic programmes to entrepreneurship and business development (ibid.). More important, the influence of HLIs must be felt beyond the lecture theatre. The influence of the HLIs must be felt in home, business, streets, parliaments, farms and parks (ibid.). Great investors, business and civil leaders must emerge from our HLIs, ready with open minds to lead. HLIs must aim at preparing young people for lifetime and for an unknown future. It is about preparation for citizenship in a global society (ibid.). At the end, assessment has to be made to find out if students have achieved their learning goals. This is a challenge which is ahead of all HLIs. Finally there is need to find-out a reliable and sustainable way of disseminating the products of research to the final consumers. Some of the ways include: disseminating information through well planned community outreach programmes, organizing forums where the main stakeholders would be invited to share findings of new knowledge, set aside some time in a year, say four times a year, where new knowledge would be presented and respective stakeholders would be invited at a given HLI, disseminating information via various media houses and demonstrating new knowledge or the products of new knowledge through exhibitions (like sabasaba and nanenane) and demonstration farms (“shule darasa”).

6. Conclusion and Recommendations
The objective of this study was to investigate the role of HLIs in provision of quality socio-economic services in Tanzania. The study has shown that the Tanzania Development vision 2025 treats education industry as a strategic agent for mind-set transformation and for the creation of a well educated nation, sufficiently equipped with the knowledge needed to completely solve the development challenges. In the past, most education programmes focused on primary and secondary education claiming to have better rate of return and playing a vital role in poverty reduction. In the new thinking, however, the higher education is acknowledged as the engine of development in the new knowledge economy whereby the new modes of economic growth are dependant on knowledge and information technology. The impact of HLIs in socio-economic development can be analyzed by the help of Input-output Model. The model analyzes not only the inputs invested in it, the processess required to transform the inputs into products and the products themselves but also the relationships among these aspects of the system and the relationship of each to the achievement of the stated goals. The role of HLIs is to provide high level manpower needs of the society through its teaching, provide new knowledge and diffusing it into the national economy through research, provide services to the community and provide
employment to the community. In reality, however, not much has been done by the HLIs regarding the above roles.

If HLIs are to become the drivers of high productivity, competition and socio-economic development, the following factors need to be taken on board: First, there is a need to re-think and to re-define the purpose of establishing HLIs. In the new thinking the HLIs should be treated as agent for mind-set transformation and enable graduands to solve the challenges of development. Second, there is a need to prepare students for the future by building capacity for curiosity, creativity, critical thinking, problem solving and imagination. HLIs must recognize the imperative for developing skills and attitudes to meet the extant and emerging problems. Finally, to meet the above end, the curriculum of HLIs must be liberated from the tyranny of the course book and content. Teaching and learning must be thermatic, driven by experimentation, discovery and problem-solving based approaches.
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