



The Challenges of Tertiary Education and Economic Development of African States

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Received: June 18, 2014, Accepted: July 14, 2014, Published: July 14, 2014.

ABSTRACT

The paper examines the various challenges that confront tertiary education institutions and economic development in Africa. It discusses the link between human capital development and tertiary education institutions and its impact on economic development in Africa. The paper argues that human capital development through tertiary education institutions is indispensable among African states for accelerated development in terms of poverty reduction, high productivity, life expectancy and increased literacy rate among others. The paper notes that the development of tertiary education institutions in Africa has been neglected by African states because of its capital intensiveness. The World Bank and other International Organizations that assist Africa in the development of education encouraged this neglect by laying emphasis on the development of primary and secondary education. The paper argues that the challenges of tertiary education institutions vis-à-vis economic development in African include the dependency type of relationship between African states and their former colonial masters and/or industrial countries, inadequate financing, lack of university autonomy, poor management of resources resulting from weak leadership, faculty shortage, among others. Finally, the paper recommends, among others that adequate funding of tertiary education institutions in Africa is sine qua non if African states have to pull itself out from under development.

Keyword: Tertiary Education, Institution, Economic Development, Human Capital and Funding

INTRODUCTION

Human capital has been found to play major role in the economic development of a nation. In the same vein, education has been found to be linked with human capital development. Both economics and education practitioners agree that the economic development of a nation is correlated with the quality and quantity of education available to the nation's citizens. African states are confronted with developmental problems which can only be resolved through human capital development. With the advent of modern technology, human capital development is becoming increasingly more important than the physical capital. Tertiary education, which has been defined as education offered in the universities as well as institutions that teach specific capacities of higher learning [8], is expected to equip its products with the relevant skills with which to cope with the changing technology-driven world economy. High quality human capital is developed in high quality education systems with tertiary education offering the advanced skills that dictate a premium in today's workplace [7]. A major challenge to African states is the development of the needed skills for economic development in Africa. It is against this background that Mkapa [7] noted that tertiary education in Africa is becoming increasingly obsolete. According to him "our universities must produce men and women willing to fight an intellectual battle for self-confidence and self-assertion as equal players in the emerging globalized world"

(p. 15). It is on the same strength that the former UN Secretary General, Kofi Annan had argued that:

The university must become a primary tool for Africa's development in the new century. Universities can help develop African expertise, they can enhance the analysis of African problems, strengthen domestic institutions, serve as a model environment for the practice of good governance, conflict resolution and respect for human rights, and enable African academics to play an active part in the global community of scholars [2]. From the above discussion, it is axiomatic that tertiary institutions have a major role to play in economic development of African states. This is because in the present day world economy, current skill, knowledge acquisition as well as resourcefulness have become important determinant in the economic development of a nation. In this respect, therefore, tertiary institutions cannot be relegated to the background.

Tertiary Education Institutions Development in African States:

On the attainment of independence in the 1960's, African states saw education as the best means for individual upward mobility. The new states perceived education as a catalyst that propels socio-economic development. Many, if not all adopted the theory of human capital development. This theory provides an explanation for the relationship between formal education and the

economy by accepting formal education as an investment in development. According to the theory, at the individual level, the greater the number of years of formal education, the more productive the person becomes as he acquires the knowledge that the process of education enables [1]. This theory, further posits that consequent upon the individual higher productivity resulting from more education, those who possess higher level training and, therefore, assumed to be more productive, receive higher income. At the societal or national level, the theory argued, that the higher the aggregate level of education of the population, the higher the general national economic output and growth. It is against this background that it was argued that since education is regarded as a process of increasing economic productivity and growth, it is, therefore, believed to be an instrument of development.

However, African states have not paid adequate attention to the development of tertiary institutions. This attitude was equally buttressed by the attitude of foreign donors and development agencies that placed great emphasis on primary and secondary education. The World Bank for instance, which is the major financier of development projects in Africa has the belief that primary and secondary education are more crucial in Africa than tertiary education in terms of poverty reduction. This belief, according to Bloom, Canning and Chan (2006) [2], emanated from two vital assumptions. First, the returns to investment in primary and secondary education were greater than those of tertiary education. Second, equity considerations are in favour of strong emphasis on widespread access to basic education. This later lopsided attention to basic education is reflected when one considers that from 1985 – 1989, 17 percent of the Bank's world-wide education-sector spending was on higher education. But from 1995 – 1999, the proportion of budget allocation to higher education declined to a mere 7 percent. This is because, after the Jomtien World Education Conference of 1990, the emphasis shifted to primary education. As expected, this shift and slash in budget allocation adversely affected the development of higher education in Africa. The result and effect was low enrolment into tertiary education in many African States.

Both educational development and attainment in Africa are said to be low by all standards and lag behind educational development and attainment in the rest of the world. Gyimah-Brempong [4] reported that in 2005, only 18.9 and 1.5 percent of the adult population had completed primary, secondary and tertiary education respectively. The average years of schooling at all levels stood at 4.7 while the average years of tertiary education stood at 0.08 years. Gyimah-Brempong, however, observed that although educational attainment in Africa is low, it has grown rapidly since 1960. For instance, between 1960 and 2005, the proportion of adult population that has completed tertiary education, average years of tertiary education increased by 464, 408, and 400 percent respectively in Africa. Accordingly to him, in exception of East Asia and the Pacific, the growth rate of Africa's educational attainment was the fastest in the world during the period under review. Gyimah-Brempong further observed that although educational attainment in Africa has grown relatively fast, the gap between educational attainment in Africa and other parts of the world has widened considerably. For instance, while the proportion of the adult population that possess tertiary education increased by 490 percent between 1960 and 2005, the

ratio of tertiary educated adults in world relative to the ratio in Africa increased from 3.5 times to 4.6 times during the same period.

Africa is one of the least developed continents as defined by many indicators – income, human development, health, gender equity and political stability. It is against this background that the World Bank [4], in its 2008 Report “Accelerating Catch-up: Tertiary Education for Growth in Africa” advocated increasing rapid increases in the quantity and quality of tertiary education in Africa as a mechanism for accelerating income growth and poverty reduction in an increasingly knowledge-based globalized economy. Arguing in the same line, Martinez et al and Kamara et al [4] emphasized increased tertiary education, especially the production of scientific, technical and entrepreneurial skills as a way to accelerate growth in Africa.

Tertiary Education and Economic Development in Africa

Economic development refers to increase in living standards, improvement in self-esteem needs and freedom from oppression as well as greater choice. Human Development Index (HDI) is regarded as the most accurate method of measuring development. This is because it takes into account the literacy rate and life expectancy of a country which impact on the nation's productivity and could result to economic growth [3]. Economic development equally leads to the creation of more opportunities in various sectors such as education, healthcare and employment. This translates to increase in per capita income of every citizen. There is, however, a distinction between economic growth and economic development. While economic growth refers to an increase in the nation's real output of goods and services, in other words, market productivity, economic development refers to the improvement of standard of living, savings and sustained progressive changes in socio-economic structure of a nation such as institutional and technological changes. Economic development could be said to be a sort of government policy intervention strategy geared towards increasing the economic, social welfare and ensuring political stability in the nation. The indicators that are usually applied to assess the economic development in a nation include declining poverty rates, increasing literacy rates, declining infant mortality and increase in life expectancy.

In Africa, we still have high rate of poverty, infant mortality and illiteracy, all of which translate to low economic development. Africa will only be pulled out of this low economic development through adequate development of tertiary institutions. Studies have shown that countries that have linked higher education to economic development have recorded tremendous success and development.

Writing on the crucial role that tertiary education plays in the development of a nation, World Bank (2000) [7] noted that developing countries need tertiary education to:

- i. provide increasing numbers of students, especially those from disadvantaged backgrounds with specialized skills, because specialists are increasingly in demand in all sectors of the world economy;
- ii produce a body of students with a general education that encourages flexibility and innovation, thus, allowing the continual renewal of economic and social structures relevant to a fast-changing world;
- iii. teach students not just what is currently known, but also

how to keep their knowledge up to date, so that they will be able to refresh their skills as the economic environment changes; and

iv. increase the amount and quality of in-country research, thus allowing the developing world to select, absorb and create new knowledge more efficiently and rapidly than it currently does. (p. 10)

We cannot but agree that “while the benefit of higher education continues to rise, the costs of being left behind are also growing. Higher education is no longer a luxury; it is essential to national, social and economic development” [7]. Adequate investment in tertiary education in African needs to be a priority among African states. This is because education is central to Africa’s development. It on this strength that [6], writing on World Bank report on tertiary education in Africa observed that an important challenge confronting African states is how to successfully build human capital through continued and sustained investment in education. According to them, in order to survive and compete effectively, in the globalized and electronic age, Africa will not only need literate, numerate and techno-literate citizens, but also highly qualified and trained people.

One can infer from the above discussion that Africa has not developed to the anticipated level partly because of its neglect to the development of tertiary education. Education, specifically tertiary education affects development outcomes in diverse ways. Apart from enhancing the economic growth of a nation, it increases the productivity of the existing labour force, improves health and by extension life expectancy.

The Challenges of Tertiary Education and Economic Development in African States

A major challenge to the economic development of African States is the dependency type of relationship between African States and their former colonial masters in one hand and/or industrial countries on the other hand. Dependency theory is predicated on the concept that resources flow from a ‘periphery’ of poor and underdeveloped states to a ‘core’ of wealthy states, enriching the later at the expense of the former. Scholars of dependency theory generally posit that poor states are impoverished and rich ones are enriched by the manner poor states are integrated into the world economic system.

The premises of dependency theory are that:

i. poor nations provide natural resources, cheap labour, a destination for obsolete technology, and markets for developed nations, without which the latter could not have the standard of living they enjoy.

ii. wealthy nations actively perpetuate a state of dependency by various means. This influence may be multifaceted involving economic, media control, politics, banking and finance, education, culture, sports and all aspects of human resource development (including recruitment and training of workers).

iii. wealthy nations actively counter attempts by dependent nations to resist their influences by means of economic sanctions and/or the use of military force [8].

Writing on dependency as it affects tertiary education in Africa, Mazrui [1], compared African universities to subsidiaries of multinational corporations, as they function like extensions of European metropolitan institutions where decisions are made, transferred to and reproduced in African countries. Many African states depend on international donors and World Bank for

assistance in the development of all levels of education. These donors in many cases take decisions that retard the development of education and by extension the economic development of Africa. For instance, the administration of African universities was adversely affected by the emergence of Structural Adjustment Policies (SAP) that was imposed on African countries in the 1980s by the World Bank and International Monetary Fund (IMF). Olukoshi and Zeleza [6] observed that these policies affected access to education in the following dimensions:

- i. Reduction in per capita public spending on education.
- ii. The policies aggravated household poverty through adverse impacts on employment and income.
- iii. The reforms introduced resulted in the marginalization of vulnerable communities.
- iv. Through cost-sharing, many parents were unable to send all their children to school. This gave rise to gender imbalance whereby girl-child became a readily victim.

Financing tertiary education is one of the challenges facing many African States. The costs of running institutions of higher learning are enormous. Many African states in a bid to respond to the high demands of citizens wishing to acquire higher education created an avenue for private individuals and/or organizations to establish tertiary institutions. Kariuki [5] observed that in some cases, private universities are organized and managed as purely business outfits without focusing on the strategic relevance of tertiary education in the context of sustainable development.

With the participation of private individuals and organizations in the provision of tertiary education, education became commercialized in many African countries. It is on this point that Olukoshi and Zeleza [6] observed that:

The entry of the private providers into higher education has increasingly supplemented the government’s heavy responsibility of providing education. The private sector’s role has consequently increased, and higher education itself has become increasingly commoditized-students are regarded as consumers and institutions as suppliers, and thousands of new providers have come into the business of selling the commodity (p.100).

There is no doubt that the participation of private providers of tertiary education has adversely affected the quality of tertiary education in Africa.

Most African States are reluctant to invest adequately in tertiary education. A major problem of funding tertiary education is that apart from being budget dependent, tertiary education competes with other demanding needs in the economy which the government feels are more important. The government in most cases concentrates in the development of political and social needs of the society forgetting that the economic development of the nation is dependent on the quality of its tertiary institutions.

Assie-Lumumba [1] observed that African States do not invest adequately in tertiary education because it is more expensive and capital intensive than primary and secondary education. In Table 1, below, the expenditure per student in tertiary education as a percent of Gross National Investment (GNI) per capital shows that tertiary education demands up to ten times more investment than secondary education. The expenditure per student in tertiary education as a percent of GNI per capital has considerably fallen from 1490.8 percent in 1965 to 820.8 percent in 1980, to just 107.2 percent in 1997. This shows government’s reluctance in

investing in tertiary education.

Year	Primary	Secondary	Higher Education
1965	18.4	130.8	1490.8
1970	15.6	90.5	901.2
1975	16.7	72.5	793.5
1980	16.0	51.8	820.8
1985	15.3	74.3	469.1
1990	14.3	51.1	352.8
1995	14.9	34.7	513.2
1997	20.2	35.2	107.2

Lack of university autonomy in African States constitutes a challenge to tertiary education. In many African States, highly centralized policy making on tertiary education restricts the autonomy of universities and politicizes them, thereby subverting the learning experience in response to political objectives. In the same vein, policy centralization makes it difficult for universities to be responsive to changes in knowledge, the labour market and economic development [2]. On the other hand, these authors noted that lack of centralization and system oversight gives room to arbitrariness in administration resulting to low quality education at a high cost with a minimal return on their investment. These authors went further to observe that in some African States, the governments appoint the principal officers of the university, lecturers, determine salaries and working conditions, in some states, university staff are members of the ruling party.

Closely related to this is poor management of resources available to tertiary education. Kariuki [5] reported that studies on tertiary education management in Africa show that effective use and management of limited resources is compromised through poor accountability. According to him, in other parts of the world, better management systems help universities to access increased funding for research. In addition, it ensures that research funds are utilized in ways that meet the needs and aspirations of the sponsors and that results are effectively disseminated both for the public and commercial use.

Yizengaw [4] in a Working Paper of National Association of Staff Universities and Land Grant Colleges, identified the challenges of higher education in Africa to include:

Faculty Shortage and Development

The shortage of skilled professionals in Africa is traced to tertiary education systems. According to him, African universities are confronted with serious shortage of teaching staff and research scholars. This situation is compounded by the shortage of senior staff at the level of Ph.D. Tertiary institutions in almost all African countries are largely unable to retain qualified faculty and research scholars. They are equally faced with the shortage of technical, administrative and management staff. This shortage is further amplified by brain drain, retirements, unattractive working conditions and attrition of HIV/AIDS.

Governance, Leadership and Management

Weak leadership, management and governance complicate the challenges faced by tertiary education institutions in Africa. Management inefficiencies drain scarce resources away from the fundamental objectives of increasing access, quality and relevance and thinly spread human and financial resources. In some states, underutilized facilities, duplicative programme offerings, low

student-staff ratios, high dropout and repetition rates, uneconomical procurement procedures and allocation of large share of the budget to non-educational expenditures are largely related to management, leadership inefficiencies and capacity limitations. Generally, institution leaders at all levels are poor in strategic planning, market research and advocacy, research management, financial planning and management, human resources management and partnership building and networking.

Problems of Quality and Relevance

Africa's tertiary education institutions grapple with a decline in quality of education, learning and research. Universities operate with overcrowded and deteriorating physical facilities, limited and obsolete library resources, insufficient equipment and instructional materials, outdated curricula, unqualified teaching staff, poorly prepared secondary school students and an absence of academic rigour and systematic evaluation of performance. Absence or lack of effective regional, national and institutional quality assurance and enhancement systems and agencies in African countries and universities further compound the problems of quality and relevance. Structured quality assurance processes in tertiary education at the national level are very recent phenomena in most Africa countries but the situation is changing rapidly. Technical capacity is the most crucial impediment in national quality assurance agencies and institutional systems.

Weak Research and Innovation Capacities

Tertiary education institutions in African lack adequate research capabilities, infrastructure and facilities and funding, which are required to make them active beneficiaries of global knowledge and/or to generate or adapt knowledge, innovation and problem solving skills. There is also the challenge of shortage of staff who can adapt and generate knowledge and innovate. There is little investment in research and innovation, especially in high priority areas, such as agriculture and natural resources, applied sciences, health sciences, engineering and technology, limiting their capacity to meaningfully contribute to Africa's development and integrate African States to the global knowledge networks. Expansion and development of postgraduate education in many African States are very slow except in South Africa. These situations seriously constraint the building up of those elements of national innovation systems that are very critical in increasing national productivity research capacity, university trained researchers and professional, graduates with advanced technical and managerial skills and dynamic technical and managerial skills and dynamic university-industry linkages.

Financial Austerity and Lack of Capacity for Diversification

Tertiary education institutions in sub-Saharan Africa are critically hampered by lack of adequate finance, as a result of poor economic conditions, competing public service priorities and weak assistance from the international community. Financial austerity has resulted to the inability of African States to retain quality faculty and staff, affecting staff-students ratio and poor learning and research facilities and resources. Tertiary institutions are increasingly forced to diversify revenues, but usually with very limited experience, expertise and capacity in managing these challenges of financial diversification and resource mobilization. The lack of adequate funding has constrained research capacities across Africa, thereby influencing their competitiveness in knowledge generation and adaptation as well as integration in the

global knowledge society.

Poor Physical Facilities

Tertiary education institutions in Africa have witnessed little or no infrastructure improvements for the last few decades. Learning infrastructure is widely deficient as a result of inadequate budget allocation and over dependency on public financing. Infrastructure such as internet access, library, textbooks, equipment, laboratories and classroom space are critical bottlenecks resulting in deterioration of quality of education and learning. The poor state of facilities equally affects the quality of research and its ability to contribute to societal development and progress.

Inability to Meet increasing Demands for Access and Equity

Tertiary institutions in Africa are increasingly unable to absorb the increasing demand of students for tertiary education. Increasing number of students graduating from secondary schools led to corresponding pressures in the demand for tertiary education. The current rate of increase in tertiary education enrolment is doubling in five years, a growth of 15 percent a year – the fastest in the world. Among the unresolved challenges are the need to expand tertiary education coverage in a sustainable and equitable way, as well as inequalities of access and outcomes, in relation to gender, ethnic groups and geographical coverage. Graduate level (M.Sc and Ph.D) students' enrolments are small. The great concern is also in the small enrolment figures in sciences, engineering and technology, and health fields which are critically needed for innovation, knowledge generation and adaptation and overall national competitiveness. Less than 30 percent of students in tertiary education institutions in Sub-Saharan Africa are enrolled in the fields of agriculture, health sciences, engineering and health technology and basic and applied sciences.

Tertiary Education and Economic Development in Africa

From the foregoing, we have been appraising the situation of tertiary education vis-à-vis economic development in Africa. From the discussion above, it is apparent that African States relegated tertiary education to the background. This has far reaching adverse effects on economic, political and social development of African States. Studies have shown that tertiary education is a catalyst that propels economic development in any nation. The accelerated development in both East Asia and India has been linked to effective tertiary education with adequate infrastructure and good governance. Effective tertiary education has multiplier effects on the nation's economy, social and political stability and human capital development.

Economically, tertiary education enhances employment opportunities which in turn facilitate higher salaries, savings, better living conditions. Above all, it brings about higher productivity, national development and a change from low skills to knowledge-based skills which enhance national economic development. With the advent of technology, tertiary education has become an indispensable factor in terms of competitiveness and prosperity in a knowledge-based global economy.

Tertiary education gives rise to social improvements in terms of social studies, quality of life, life expectancy and rationale decision-making. In terms of political stability, it creates an opportunity for effective leadership, cultural and ethnic tolerance and cohesion, reduced crime-rates, understanding and acceptance

of democratic values.

For human capital, there is no better area of human capital development than tertiary education institutions. Tertiary education institutions are indispensable in human capital development because they develop and equip individuals with the capacity and analytical skills with which they nurture and develop local economy. It is the educated individuals that guide and teach children, make vital decisions that impact on the lives of citizens. Without highly educated individuals, nations cannot compete effectively in an economy that is dictated by modern technology.

CONCLUSION

Education is generally regarded as a veritable instrument for economic development. Specifically, tertiary education is of paramount importance to Africa in order to pull itself out of poverty, crime, political instability and health related problems. In knowledge based economy, tertiary education propels and shapes national economy to respond to the demands of technology driven economy. In other words, products of tertiary institutions are more receptive to new technology, innovation and more capable to utilize and adapt concepts to the demands of changing economy and environment. We cannot but agree that:

(Tertiary) education is associated with better skills, higher productivity and enhanced human capacity to improve the quality of life. Education at all levels is needed if economies are to climb from subsistence farming, through an economy based on manufacturing to participation in the global knowledge- economy (World Bank 2000:pp15-16).

Recommendations Based on the above discussion, the following recommendations are made:

- Adequate funding of tertiary education institutions in Africa is very critical for economic development of Africa.
- Heads of tertiary education institutions in Africa need special training in resource management.
- African states should grant sufficient autonomy to tertiary education institutions.
- Diversification of fund-raising sources for managing tertiary education institutions has to be explored.
- The curricula of tertiary education institutions in Africa need to be restructured to be in line with expanding modern technology and changing economic opportunities and demands.

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Citation: Ignatius O. Nwangwu, and Catherine N. Elechi, (2014) The Challenges of Tertiary Education and Economic Development of African States. *J. of Advancement in Engineering and Technology*. VII4. DOI: 10.15297/JAET.VII4.02

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