

Neo-liberalism and emerging challenges of higher education² in Africa: Implications for policy making

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Abstract

Most African countries inherited modern colonial education system which lacked national relevance. In post-independent, higher education was given strategic importance and governments invested heavily to build their human capabilities. However, since the adoption neo-liberal development model, the policy space of African governments has been limited, while higher education has been re-oriented to adhere to market principles. As a consequence, they have faced several challenges: low enrolment ratios and rapidly growing demand, inadequate budgetary expenditure, weak research capacity and limited research output, low quality education, brain drain, rapid increase in commercially-oriented private higher education, balancing their academic operational autonomy and their responsibility of responding to national needs.

Despite the challenges higher education institutions have faced, the paper concludes that they still have strategic importance in their respective countries. It is high time that institutions of higher education meet the growing demand of students or else this human resource boon will soon prove to be population curse for the African economies. The revitalization of higher education institutions will make them not only providers of tradition social services but also play leading role in strengthening lower level of education, including literacy programs to emancipate African societies from all forms of domination and dependency so that every citizen would lead a dignified life in her/his country. To these ends, the following interventions are suggested: (i) Shift of governments to democratic developmental state approach to expand their policy space in managing their respective economies. (ii) Transforming higher education institutions' values to demonstrate their national relevance (iii) Ensure that they are guided by their strategic plans tuned to their respective national development plans to reduce wastage by producing graduates with unemployable skills. (iv) Increase budgetary expenditure on higher education for the provision of physical facilities and cutting-edge technologies for teaching, research and quality assurance. (v) Strengthen South-South cooperation of higher education institutions related to experience sharing in teaching and research. (vi) Strengthen the power of academic departments as essential building blocks of higher education institutions by creating governance structure which gives more power and autonomy in designing their academic programs and operations.

1. Background

Higher education is an important form of investment in human capital development. Higher education institutions are charged with formation of human capital through teaching, research and dissemination and use of knowledge by interacting with the knowledge users (INHEA, 2010, p.20). According to Castells

² Higher education, also referred to as tertiary education, is broadly defined as education beyond the secondary level, education at college or university levels which award advanced diploma, first degree, or any higher level degree.

(2001, p.207) higher education institution (i) historically has been apparatus for ideological struggle for all societies. (ii) A mechanism of selection and socialization of dominant elites. (iii) Generation of knowledge through conducting scientific research that addresses societies' socio-economic and political problems. (iv) Training of a skilled labor force that meets the demand of labor market. In the 21st century, increasing demand for highly skilled human capital for the knowledge-based economy has placed an unparalleled pressure on higher education institutions across the world, particularly in Africa and other developing countries (Bloom, Canning and Chan, 2006, p.15); WB, 2002, p. 3).

In the post-independent era, most African countries considered higher education as a "public good" which offer a broad range of skills and capabilities needed for their socio-economic development. However, since 1980 most African governments adopted neo-liberal model of development and implemented neo-liberal policies, limiting the policy space of African governments. African public higher education institutions, which were perceived as drivers of socio-economic development have been facing challenges resulting from neoliberal globalization associated to marketization and privatization policies (Dzvimbo, and Moloji, 2013, p.2). The neoliberal agenda demands higher education institutions standardized skills and training to meet global standards in order to produce homogeneity of higher education across national boundaries (Olssen and Peters, 2005, pp.313-314). In this sense, neo-liberalism is a politically imposed hegemonic discourse of western countries in higher education of African countries, with far-reaching effects on equity, quality and relevance, compromising its roles in socio-economic development (Chissale, 2012, p.5).

2. Problem Statement

As the world enters 21st century which is characterized by rapid technological progress, information technology and globalization, a critical mass of skilled and educated labor force is a prime requisite for internal driven sustainable development (UNESCO, 2009 p.12). In many developing countries, particularly in East Asian countries higher education has supported their rapid economic growth through enhancing technology transfer, promoting productivity and progressively upgrading the skill-base as required for each successive economic shift to higher value-added areas of manufacturing and service industries (Green and Little 2007, p.49). The 'developmental state' model of rapid economic and social development focused on planning and national values and core skills, and they are key features shared by the education systems of the East Asian states. The interface of skills and their respective economies in East Asia contributed to the reduction of poverty, and substantially to the improvement of the living standards and quality of life the population (Green and Little 2007, p.49).

Societies with high human development, notably with good health and education, are more resilient adverse shocks than those who are malnourished and without education (UNDP, 2014, p.17). Thus, a well developed and equitable system of education, including higher education that promotes quality learning is central for socio-economic development of developing countries, including African countries. If higher education is to respond to a set of national priorities a prudent higher education policy would be required. Salmi and Hauptman (2006) identified three main goals of public policy for higher education: (1) increase access and ensure equity in higher education by increasing student enrolments and opportunities; (2) increase the effectiveness of higher education systems by improving the quality of teaching and research; and (3) improve the efficiency and sustainability of higher education system by maximizing the return of the resource allocated.

Higher education in most African countries was introduced during their colonial era as a means of extending colonial ideology and cultural hegemony with little impact on Africa's human capacity building (Emnet and Doevenspeck, 2013, p.35). As a result, majority of newly independent African countries had no adequate skilled human resource needed for their socio-economic development (UNESCO, 2015, p.4); CHET 2010, p.11). In post-independent Africa, higher education thus became a strategic priority and governments invested heavily in education and training, leading to a rapid expansion in enrollment in the 1960s and 1970s (WB, 2017, p.26). Public higher education institutions in Africa shouldered multiple responsibilities as agents of economic growth, creating Africa identity and nation building in the 1960s and 1970s (Emnet and Doevenspeck, 2013, p.4); Biao 2014, p.110). African governments have been playing a major role of not only constructing roles for higher education but also of production and distribution of resources, financing higher education and employing graduates productively to enhance their socio-economic development (Devarajana, Mongab and Zongo, 2011, p.4). The state-led model of development came under attack in the 1980s as many developing countries, including African countries faced serious economic crisis. The neo-liberal thinking, of the 1980s, and the political changes in Eastern Europe in the 1990s questioned the role of the state in socio-economic development. Neoliberal practices and policies are built on a set of predominantly market-driven assumptions, diagnoses, and prescriptions for a specific set of situations in many African higher education sector (Aina, 2010, p.26). Under neo-liberal regimes public expenditures on higher education were reduced and diversion of public investment from higher to primary education was emphasized (Banya and Elu, 2001 P.1; UNESCO 2013. p.6); Teferra, 1997, p.4; Adeyemi, 2000, p.36). Government policies re-oriented higher education away from their hitherto socio-economic development mission to commercial orientation through privatization of public higher education in the name of efficiency and self-financing (Mwesigye, and Muhangi, 2015, p.99). The implications are that (1) public higher education institutions in Africa countries have been over-expanded and need to be privatized. (2) Public higher education institutions have been heavily subsidized by governments and those governments have to remove the subsidies by introducing student tuition fees (3) Public higher education institutions are not of strategic importance for social and economic development, and need to be commercialized based on market principles. Thus, concerns about human capability building, equity, accessibility, quality, which were prevalent during the 1960s and 1970s, have been overshadowed by concerns about efficiency, excellence, expenditures reduction and rates of return (Torresi and Schugurensky, 2002, p.1.). With the increased fiscal crisis and inability of the African governments to fund an expanding system of public higher education has led to the emergence of the private higher education whose main objective is profit earning, although there has been rising public concern on equity, relevance and quality of the educational services provided (UNESCO, 2006, p.14).

Under neo-liberalism the mandate of public higher education of producing conscious, creative and societal problem-solving learners has been placed under pressure to use funds more efficiently while encouraging the establishment commercial higher education which responds to growing public demand. Reflecting its low educational attainment of Sub-Saharan African countries, the overall human development index (HDI) is 0.502, which is categorized as low human development (UNDP, 2014, p.163). Pursuing the neo-liberal economic model, African experience illustrates how irrelevant neo-liberal policies have led to its deep economic crisis in the last four decades: poverty, social fragmentation, civil conflict and destabilization, emigration of skilled labor as well as widespread economic and social exclusion (Heidhues, 2011, p.4). Thus provision of basic social services such as education, health care,

sanitation, clean water, etc. need to be provided by the government to reduce the social cost of neo-liberalism in Africa.

It is widely recognized that higher education in Africa has to contribute to the formation and development of human capital, cultivation of social values of collective benefit and collective emancipation from ignorance and external domination (Aina, 2010, p.23). In line with this and in order to reverse the social, economic and political consequence of neoliberal policies in Africa, there are valid reasons for alternative development approach which ensures equitable development, where all groups in a society in their capacity contribute to development of their economies and enjoy the fruits of development in their respective countries. To this end, African higher education institutions need to reassert their societal merit through proactive higher education -community engagement. Higher education -community engagement is a two-way process of identifying, analyzing and solving problems bedeviling both higher education institutions and the African communities' development (Biao, 2014, p.7). It is partnership within which the community helps the higher education institutions, while government's role in making higher education nationally relevant and of high quality standard remains central. As a public good and strategic sector, public higher education institutions particularly must be the top national priorities of African countries in order to play their roles in building cohesive societies and sustainable development in their respective countries in the challenging era of knowledge economy.

3. Objective of the study

Inclusive sustained economic growth is desirable goals of all nations, including African countries. Endogenous growth theory indicates that sustained economic growth in a country depends on investments in human capital, technological progress and research and development and in physical assets (Evans, 2008, p.6). In the endogenous growth theory, investment in education has central role for building human capabilities. Thus, a well developed and equitable system of higher education that provides high quality education will contribute to sustained economic growth. It is, therefore, imperative for African countries to increase public investment in higher education in order to enhance access to and improve the quality of education (Ved, 2007: 3249).

In their post colonial period, most African countries emphasis on higher education with the objective to build their human capabilities by producing well trained human resources to spur national development (Biao, 2014, p.4). Since the international community adopted Agenda 2030 for sustainable development in 2015, the visibility and importance of education in general and higher education in particular to sustainable development has increased (IDS, 2016, p.17). Given the critical role of higher education in socio-economic development, African governments would be required to increase their public investments in higher education institutions of high quality which is accessible. As a general rule about 15-25% of a country's education budget should be spent on higher education; the education budget should aim at 7% of GDP (South Africa Council of Higher Education 2001, p.7).

However, since the 1980s, the societal purpose of higher education has been altered to a greater extent because its functions have been aligned with neoliberal principles of efficiency and self-financing. As Zeleza (2003, p. 149) has clearly stated the developmental role of institutions of higher education of the 1960s and 1970s in Africa shifted to the "market-orientation", and as a consequence faced several challenges linked to neo-liberal globalization and policy shift of African governments to neo-liberalism which subscribe privatization of public higher education and commodification of higher

education. Neo-liberal globalization has shifted the values of higher education in Africa towards a capitalist political economy of enhancing individual benefits through acquiring more skills (Banya, 2008, p.231). Neo-liberalism which underpins on the virtues of free market, deregulation and privatization of public sectors, including public higher education while limiting the role of the governments in the development of their respective economies in Africa has brought several formidable challenges. The overall purpose of this study is to analyze the challenges of higher education in Africa and to examine the policy implications that will make higher education driver of sustained economic development.

The specific objectives of the study are to:

- Underpin the strategic importance of higher education for socio-economic development of Africa ;
- Analyze the challenges of higher education under neo-liberalism; and
- Indicate policy implications which would make higher education institutions at the top development agenda in order to play their roles in the socio-economic development of their respective countries.

Taking into account the problem statement and objectives of the study, the central research questions are: (i) what are the major challenges facing higher education in Africa? (ii) How do the challenges relate to neoliberal policies in higher education? (iii) What policy lessons can be drawn for African governments to make higher education at the central of their development agenda?

4. Methodology

In methodological perspective, the research is document research. The sources of data is secondary and are collected by conducting extensive literature review from relevant journals, articles, books, relevant publications and reports of international organizations and relevant national policy documents.

Sample

The study covers all higher education institutions in African countries in order to generate reliable findings regarding emerging issues of higher education and development.

Method of data analysis

The secondary data are processed using excel. The data gathered are contextualized and critically analyzed in line with the objectives and research questions of the study.

5. Organization of the paper

Following sections 1-4, section 5 deals with theoretical perspectives of higher education and human resources development in the context of socio-economic conditions prevailing in Africa. Section 6 is the main part of the paper and focuses on the major challenges facing African higher education in the era of neo-liberal globalization, while section 7 presents conclusions and policy implications.

6. Higher education and human development: Theoretical perspectives

Sustained economic growth and poverty reduction in developing countries require the development of productive capabilities of the countries in such a way that the working-age population is fully and productively employed. National productive capabilities are developed primarily through the building of human capabilities in which higher education has central role (ECA, 2015, p.76). Every education system has its underlying agenda, regardless of the type of regime, and therefore plays a political as well as educative role, either to reproduce existing social relations and maintain hegemony, or promote social

change and social justice. In the immediate post independence period, most African countries had predominantly state-based education system. Education policies had been designed to encourage participation of citizens in their socio-economic development by providing public education at all levels, including higher education. To these ends, investments in human capital (education sector) had been predominantly financed by their respective governments at all levels of education, including higher education (ECA, 2003, p.5). However, since 1980s, there has been a shift of emphasis to neo-liberal development model, which diminished the role of the governments in their human resource development. Neo-liberalism assumed its hegemonic position through the process and forces of globalization. Its economic ideals are embedded in policy menus of international financial institutions and are infused into public policy arenas of developing countries in the form of liberalization, privatization, decentralization, reduction of public spending in all public sectors, including higher education (Sivadasan, 2015, p.1; Chissale, 2012, p.8; Davies and Bansel, 2007, p.249).

In the neo-liberal regimes of African countries, higher education is viewed as private commodity and much less as public good. Also higher education has particularly been overlooked by the international community stemming from the belief that it yields lower social returns relative to other investments, especially primary and secondary. As a result, public expenditures on higher education institutions have been drastically reduced (UNESCO, 2015, p.4); (Schultz, 1998); (Kapur and Crowley 2008, p.80). Implementation of neo-liberal policies in the institutions of higher education in Africa have brought four negative effects: (i) rapid growth in private higher education institutions with rising public concern regarding low quality, while engendering inequity in their respective societies (ii) An increase in the sources of private funding, while the poor people remained unable to access because of their low purchasing power. (iii) Transforming private higher education institutions into a profitable business, with little consideration on relevance of their programs to their respective national economies. (iii) Increased size of graduates with unemployable skills (Sivadasan, 2015; p.3).

Under neo-liberal regimes, higher education development in Africa is not only reflective of the logic of free market economy but also ignores the social and economic development mission, (Chissale, 2012, p.7). There is thus a contradiction in higher education mission between pursuing a business-orientation in their operations and societal role of promoting socio-economic development. Moreover, the policy spaces of governments of African countries have been limited, and as a result most governments lacked the capacities (technical and financial) to guide their economic and social sectors, including institutions of higher education (ACU, 2004, p.28). Where policy constraints are so pervasive, the contributions of higher education institutions in socio-economic development are severely limited. The experience of Africa under neo-liberalism indicates that most African countries have faced multi-faced development problems: low human development, poverty, diseases and high illiteracy on a grand-scale, while agricultural productivity and outputs have remained at peasantry level.

The ultimate goal of higher education in Africa is not only equipping people with the skills and knowledge but also for the emancipation of the people in economic, social and political spheres both nationally and internationally. In the context of the knowledge economy, higher education has become particularly critical and that African governments need to build their human capabilities through increased public investment in institutions of higher education so that they will be able to play their roles in enhancing sustainable development (INHEA) 2010 p.14). Thus higher education cannot be left to the market because it is characterized by a range of market failures: failures in credit markets (the difficulties faced by poor persons in borrowing against future human capital), concerns over inequality in

income distribution and the existence of static and dynamic positive externalities (Kapur and Crowley 2008, p.43). Left to markets, supply of higher education will not be in an optimal way, particularly in terms of quality (Evans, 2008, p.16). Thus governments must remain responsible for the whole function of institutions of higher education and to provide the necessary resources in order to play their role in the process of socio-economic development.

As higher education in Africa under neo-liberal regimes has not been following a well laid out strategic path that meets the expectations of the public, governments in Africa have still central role in the development of their public higher education institutions in their efforts to build their human productive capacities. Higher education institutions, on their part, have to shoulder multiple responsibilities, including developing African expertise; analysis societal development challenges through research for informed decision making; strengthen domestic institutions for adopting good governance, enhancing public awareness regarding environmental, conflict resolution and respect for human rights, while actively taking part in the global academic community whose agenda have global and regional relevance (Thomson, 2008)

African governments thus need to abandon neo-liberal development model as a failure experience in their economic and social development (Lensink, (1996, pp.109-126). As human capital in the context of Africa is the stepping-stone to sustainable development, there are objective reasons that African countries need to develop a new conceptualization of the states which emanate from the wills of their people and commitment to the provision of educational services, including at higher education level. An Alternative to neo-liberal model of developments which African countries need to adopt is democratic developmental state approach which underpins structural transformation from agriculture-intensive economy to a more industrialized and knowledge-based economy in which public higher education institutions play central role. As indicated in the report of Economic Commission for Africa (ECA, 2011, p. 75), while adhering to the tenets of democratic values, the development policies of the developmental state promote human capability building, physical capital accumulation, utilization of surplus labor; relax foreign exchange constraints through import substitution, and strengthen coordination and allocation of scarce resources through well-designed and strategically focused national and sectoral plans.

The democratic developmental state approach by expanding the policy space of African governments in building their human capabilities and productive capacities would enable to overcome several development challenges facing the countries. To become developmental states, African countries need to build transformative institutions, primarily run by competent, professional bureaucrats. In order to put an end to Africa's deep economic misery, the political leaders of the developmental states in Africa need to be committed to their respective national development goals that are supported by a strong vision which put their people's priorities at the center. All developmental projects have to be managed by competent and professional bureaucrats, recruited solely on meritocracy, and autonomous from the influences of rent-seeking groups. African countries guided by democratic developmental states will build their human capacities which ensure socially equitable and sustainable development. Thus, within a democratic developmental state paradigm, development of human, technical, managerial capabilities of African peoples is the sole guarantee for internally driven socio-economic development that would liberate Africa from all forms of hegemony, and subsequently ensure inclusive social and economic development. The social and economic futures of higher education will to a greater extent depend on their contribution to the creation of social justice by underpinning humanist values: ideological principles of social justice and respect of others values and social inclusion and participation. To this end, government policies of higher

education in Africa must be tuned to the achievement of social justice and realization of a new social order free of domination and where every member of society is provided with equal opportunities, including access to higher education.

7. Empirical Findings

Higher education is one of the main social sectors in Africa. This section critically examines the major challenges of higher education institutions in Africa and policy implications to make them drivers of development in their respective countries.

7.1 Low enrolment due to limited space and rapidly growing demand for higher education

Higher education participation rate (gross enrollment ratio) is defined as the “total enrolment (of all ages) expressed as a percentage of the 20-24-year old age group in the population (UNESCO, 2010). The enrolment ratio provides a measure of access to higher education and is critical for understanding and assessing the performance of higher education system, as the international evidence suggests that there is a correlation between higher education participation levels and economic development (WB, 1989). According to Trow (2005) access to higher education systems move from elite, through mass to universal higher education. Elite systems are characterized by low enrolment rates (between 0 and 15%). In systems of mass higher education access is a right for those with certain qualifications and enrolment rates vary between 16% and 50%. Finally, universal higher education is characterized by enrolment rates larger than 50%. African countries with a participation rate of lower than 10% are considered as stage one factor –driven economics based on agriculture and mining (Cloete and Gillwald 2014, p.162) . Table 1 shows gross enrollment ratio (GER) in Sub-Saharan African.

Table 1: Gross enrolment ratios in higher education in SSA, 1970-2011, selected years

Region	1970	1980	1990	2000	2010	2011
world	10	12.3	13.6	19	29.6	30.1
SSA	0.9	1.7	3	4,4	7.2	7.6
Latin America and Caribbean	7	13.4	17	22.8	41.2	42.3
East Asia and Pacific	2.9	5.1	7.2	15.8	29.1	30.1
OECD Members	23.6	30.8	38.4	50.8	68.1	68.3

USAID, 2014, p.45

As shown n Table 1, average gross enrolment ratios in higher education in SSA increased from 0.9% in 1970 to 7.6% in 2011. The gross enrollment ratios in SSA are still far behind those in OECD and other regions of the developing world. The enrollment ratios in Africa have not reached the level of mass higher education system as the enrolment ratio has not reached even the lowest level of 16%, which qualify for mass education. With an average enrolment in higher education of 5% of the population, sub-Saharan Africa has the lowest participation rate in the world (INHEA, 2010 p.89). According to projections, Sub-Saharan Africa will experience unique demographic transition, with an estimated 258 million Africans expected to reach prime working age (15 – 25 years) by 2025. African higher education institutions must be prepared to take on this challenge (UNESCO, 2015, p.6). Access and equity in higher education is not only excruciating but very competitive as a result of limited spaces because of inadequate public investments for teaching and research facilities (Obielumani , 2015, p.68). The

inability of governments to respond to the growing demand for higher education due to lack of resources is likely to pose risks of political and economic instability in future.

7.2 Funding/Budgetary Constraints

Sustained public expenditures on higher education institutions would be required for building human capabilities which will play central role in their respective countries. Government budgets in most Africa countries have been inadequate to fund the actual needs of their institutions of higher education because of their inability to mobilize adequate financial resources. Over the past 15 years, Africa countries, on the average, allocated 0.78 percent of their gross domestic product (GDP) as shown in Table 2. Although higher than the average rate of non-African developing countries (0.66 percent of GDP), the share fell short of the average for the world, which was 0.84% of GDP in 2006. In the poorest African countries, the average share was 0.63 percent of their GDP, largely as a result of their narrow tax base (WB, 2010, p.34).

Table 2: Public expenditure on higher education by country group, 1990- 2006 (selected years)

Region	Expenditure as % of GDP	Number of Countries	Expenditure as % of GDP	Number of Countries
Africa	0.75	38	0.78	49
Non-African Developing countries	0.56	33	0.66	36
World	0.69	85	0.84	146

Source World Bank, 2010, p.13

The financing problem of higher education is more acute in Africa than in the rest of the world because of the rapidly increasing demand for higher education and weak economies. In many African countries, the current rates of expansion of higher education do not seem to be financially sustainable. The quest for sustainable development of higher education system is particularly critical in low-income African countries, whose narrower tax base translates into more fiscal constraints (WB, 2010, p.30). The financial challenge is more serious when taking into account that fiscal constraints derived from the need to control public budgets have been further affected by the consequences of neoliberal policies of tight fiscal and monetary stances (UNESCO 1995, p.17). Increasing enrolments and budget constraints are still pressing in many Africa countries. At the root of budgetary constraint is an inadequate investment in many Africa countries, which on the average was below 25% of their GDP, a threshold necessary for achieving real GDP growth rates of 7%-8% percent that would have an impact on poverty reduction (UNCTAD, 2012, p.4). If African countries are to overcome their financing challenge, they are expected to extensively tap their domestic savings potentials and increase their investments to reach 25% or more of their Gross Domestic Product (GDP) to sustain 7% -8% growth rates per annum that will have a great impact on sustained economic growth, and subsequently meet the financial needs of their higher education institutions UNCTAD, 2012, p.4). African countries thus need more policy space in line with the developmental state paradigm to design and implement their policies for optimal use of their available resources in a way that would lead to virtuous circle of high capital accumulation, increased investment, sustained economic growth, increased budgetary revenue, and subsequently increased budgetary expenditure on higher education (UNCTAD, 2007, pp.4-5)

7.3 Weak research capacity and limited research output

Institutions of higher education play an important role as society's knowledge hubs, where concentrations of highly qualified senior staff are able to engage in innovative research that contributes to national development. This knowledge and applied research are increasingly recognized as among the key sources

of growth in the global economy (InterAcademy Council 2004). Countries which have an expanded system of higher education with higher levels of investment in research and development (R&D) activities have higher potential to grow faster in a globalized knowledge economy. Expenditure on research and development (R&D) in most African countries, however, is too small to support focused and effective research outputs which address national development needs (Sintayehu, 2014, p.8). Sub-Saharan African countries spend less than 0.3% of their GNP on research on average – the lowest level in the world (INHEA, 2010 p.32). Reflecting this reality, for example, between 1988 and 2001, the number of scientific articles published worldwide grew by 40 percent while the number fell by twelve percent in Africa (Kapur and Crowley 2008, p.78). As shown in Table 3, Sub-Saharan Africa produced the least scientific research (3,499) and the fewest patent applications (101) in 2007. Europe and Central Asia (34,905) have taken the lead in publication, while East Asia and the Pacific region are the frontrunners in patent application (65,506).

Table 3: Scientific Publications and Patents by Region.

Region	Scientific publications	Patent applications
East Asia & Pacific	14,817	65,506
Europe & Central Asia	34,905	32,728
Latin America & the Caribbean	10,093	40,003
Middle East & North Africa	3,123	926
South Asia	8,896	2,143
SSA	3,499	101

Tijssen, 2007

In private higher education institutions in Africa, there seems little driving force to invest in research and development for two reasons: (1) lack of demand for research by business community and (2) the existence of high positive externalities which tend to depress investment in research (Ntiamoah-Baidu, 2008, p. 3). The main reasons for low research output in Africa are lack of research-experienced faculty, brain drain, heavy teaching load, and lack of resources—such as, library facilities, information and communications technology infrastructure, and well-equipped laboratories (Mohamedbhap, 2011, p.4; (Damtew & Altbach, 2004, p. 38). Public investments in building a proper foundation for research, including skills in research management and in the basic natural and social sciences, remain challenging in many African countries and institutions of higher education. In future, public research institutions of higher education are likely to face significant constraints on their budgets as governments will be unable to provide adequate resources while implementing neo-liberal fiscal policies underpin stringent budgetary expenditure. As African institutions of higher education struggle to balance their scarce resources with increased demands for resources, they face the challenge of providing teaching services to rapidly increasing number of students and equip them with the required skills and knowledge that address socio-economic challenge of the African societies. Thus, the under-funding of higher education in most African countries has hindered building research capacities and conducting socially relevant research activities (Kapur and Crowley 2008, p.82). Millet, for instance, continues to be an important part of the diet for millions of Africans. Despite the fact that many African countries have not reached the level of food security, Africa still has less than a dozen millet breeders in the entire continent, a reflection of low research capacity (Kapur and Crowley 2008, p.81). Even international research centers are less interested in research which many Africa subscribe most. However, almost none of the more than US\$35 billion in

agriculture research spent by North American and European-based centers went to Africa, a reflection their low priority (Kapur and Crowley 2008, p.81).

7.4 Low quality higher education

Widening access to higher education is good on its own, but there must be quality that should go with quantity (Obielumani, 2015, p.69). Quality education embraces all its main functions and activities: quality of teaching and research, which means the quality of its staff and programs, quality of students, quality of infrastructure and academic environment (UNESCO, 1995, p.29). Higher education institutions in many Africa countries have been operating with resources well below the minimum needed for reasonable levels of quality both for undergraduate and graduate levels (INHEA, 2010 p.50). This was mainly because of implementation of neo-liberal fiscal policies designed to reduce budgetary expenditure, including higher education (UNESCO, 2003, p.7) . Public expenditure per student has declined considerably, and this has led to deterioration in quality of higher education (Mohamedbhap, 2011, p.3). As a result, concern about the quality of higher education by employers is on the rise in many Africa countries because their graduates are poorly prepared for the workplace (WB. 2007, p.7). Graduate unemployment rates are high in many African countries and employers across the continent complain of a lack of basic, technical and transferable skills (The British Council, 2014, p.3). Several factors contributed to the decline in quality of higher education in many Africa countries. These include rapidly rising enrollments and high student-teacher ratios, a decline in per unit costs, brain drain , insufficient numbers of qualified academic staff , inadequate teaching facilities such as lecture halls, laboratories, library facilities , low internal and external efficiency and poor governance (United Nations University, 2009, p.4; WB, 2010, p.43; WB. 2007, p.14). In some Africa countries quality assurance has become their top priority, although a higher education quality assurance agency demands a high level of human and financial capacity. In a situation where the pool of qualified human resources is already strained, many African countries are unlikely to afford to set up a full scale national agency for quality assurance (WB, 2007, p.16). Thus insufficient regulatory frameworks for quality assurance and lack of resources hindered higher education institutions from investing in quality improvement in their programs and teaching facilities (UNESCO, 2015, p.7)

7.5 Brain drain/ emigration of skilled labor

A critical goal of improving higher education in Africa is to contribute more to the formation of human capital. But this goal has been thwarted because of emigration of skilled labor in the form of form of “brain drain” primarily to OECD countries (Materu, 2006, p.8). Studies show that on average 20 000 highly educated Africans have been migrating to the North every year since 1990 and, Africa has lost 30% of its stock of skilled human resources (ECA, 1990). (Zezeza, 2002, p.8). Thus, there are valid concerns in African countries that scarce public expenditures on higher education have been lost through emigration of its professionals and skilled labor. The brain drain has jeopardized the academic institutions of African countries, with immediate damaging effects and future consequences for their economies. The main reasons for brain drain are deterioration of working conditions and the socio-political conflicts (UNESCO, 2003, p.18). The process of internationalization of higher education has also produced disproportionate mobility flows and has exacerbated brain drain from Africa (Sintayehu, 2014, p1). While the loss of skilled labor from Africa countries toward developed countries is likely to continue in the foreseeable future, governments are challenged to find a solution to recover some of the resources they lose. One option is to design mechanism of recovering the full cost of training of the emigrant staff in the form of prepaid deposit scheme which is refundable upon the return of the trained staff.

Furthermore, most private higher education hires faculty members from public higher education institutions to do much of their teaching, either on a full-time basis or part time. Thus, public higher education ends up subsidizing private tertiary education. In many cases, faculty members neglect their public higher education duties in favor of the private institutions, contributing to the internal brain drain of public institution (INHEA, 2010 pp52-53).

7.7 Expanded private higher education with loose societal mission and inequity of access

As public higher education institutions in Africa struggle with overcrowded classes and inadequate resources, most governments passed legislation allowing for the private provision of higher education (Kapur and Crowley 2008, p.80). As a result, in many African countries, the number of private higher education institutions has outnumbered the public institutions (UNESCO, 2013, p.11). However, access to private higher education is limited to those which have the means to afford tuition fees and other expenses. Private higher education is still for the few privileged fee-paying students in Africa. Only 38 per cent of enrolment is female, and significant inequalities exist between different socioeconomic, ethnic and regional groupings (British Council, 2014 p.3). Many talented young people are thus prevented from taking up the opportunity for further study that could help drive forward their countries' development (British Council, 2014 p.3). Governments have attempted to address issues of access in higher education in two principal ways: financial aid schemes to address the large opportunity costs and liquidity constraints faced by students from lower socio-economic groups; and selection criteria (or admissions policies) that take into account a student's socio-economic background (Kapur and Crowley 2008, p.54). The approaches, however, are far from being successful because loan programs have faced many challenges in the implementation due to students' default, high administrative costs and difficulties in assessing student needs (Kapur and Crowley 2008, p.55). Also private institutions of higher education are criticized for specializing inexpensive fields of study such as business and accounting which are more profitable (Kapur and Crowley 2008, p.80). Also, private higher education institutions in Africa have tended to have less focus on research and development, overlooking their social mission (INHEA, 2010 pp52-53). Moreover, there is a rising public concern that opening higher education markets to private foreign providers in Africa would transform their countries into the dumping ground of low-quality education which have little impact on the development of the countries. Foreign providers of higher education focuses on more profitable subjects while leaving national public universities to provide for non-profitable subjects such as arts and humanities (Mohamedbhai, 2002).

7.8 Challenge of balancing institutional autonomy in their academic operations and national responsibility

In the immediate post independence period of African countries, provision of public higher education, public funding, and government control characterized the governance and management of higher education (UNESCO, 2013, p.22). In most government institutions, the focus was on process rather than performance, appointments are politicized, and autonomy in administration, financial and academic content was minimal (Kapur and Crowley 2008, p.51). The lack of institutional autonomy and poor academic governance had reduced the role of higher education in addressing the social and economic development challenges of African societies. The implementation of neoliberal policies in institutions of higher education warranted changes in the governance structures to accommodate market principles. With the reduced role of the state in financing, the higher education system in many African countries moved from a 'state-controlled' to a 'state-supervision' model of governance (UNESCO, 2013, p.22). All these reforms provided the institutions enough scope to be autonomous in their operations such as develop new

study programs and courses, defined institutional strategies, and regulated student admissions (Varghese, 2013).

While giving operational autonomy to institutions of higher education, African governments provide a framework for all institutions (including private institutions) which indicate their accountability and responsibility to contribute to the national development objectives (UNESCO, 2013, p.23). Thus, higher education institutions in Africa under neoliberal regimes have faced the challenge of balancing their institutional autonomy in their operations and shouldering national responsibility in addressing socio-economic challenges of the societies through making their programs more nationally relevant and through conducting research which address societal problems.

8. Conclusion and policy implications

8.1 Conclusion

Modern higher education was introduced in African countries during their colonial era as part of the cultural hegemony of the respective colonizers. The education provided was not relevant to the historical, economic and social realities of the African communities. As a result university education inherited from the European colonization had little impact on the development and improvement of the majority of African people because the curricula and research were not contextualized to meet the needs of the African people. Thus, at the time of independence, most African countries inherited inadequate skilled human resource needed for their socio-economic development. In the immediate post-independence, higher education became a strategic priority and many governments invested heavily in education and training, leading to a rapid expansion in enrollment, including higher education institutions. Public higher education institutions in Africa shouldered multiple responsibilities as agents of economic growth, strengthening national identities and nation building during the 1960s and 1970s.

Since 1980, many African governments adopted neoliberal model of development and implemented several variants of neoliberal policies. Neo-liberalism is politically imposed hegemonic discourse of western countries in most African countries with far-fetching impacts on their economic sectors, including higher education. Neo-liberalism underpins limited policy space, reduction in budgetary expenditure, commercialization of higher education while the demand for higher education is increasing. Because of their limited policy space, African countries governments lacked the capacity (technical, administrative, and financial) to guide their economic and social sectors, including institutions of higher education. Public higher education institutions, which were perceived as drivers of socio-economic development, have been facing challenges resulting from neoliberal policies associated with marketization and privatization. Under neo-liberal regimes, most institutions of higher education in Africa have faced several challenges linked to lack of resources and governance. The major challenges are (i) low enrolment ratios and rapidly increasing demand for higher education. The average enrollment ratio which does not exceed 8%, is the lowest participation rate compared to other regions in the world. (ii) Inadequate budgetary allocation -the level of public investment in higher education in Africa was 0.78 percent of its gross domestic product (GDP), which is inadequate to meet the growing demand for high quality higher education and socially relevant research activities of the country. (iii) Weak research capacity and limited research output basically because of resource constraints. Sub-Saharan African countries spent less than 0.3% of their GNP on research on average, the lowest level in the world, and that

institutions of higher education lack the capabilities and resource to conduct relevant research activities. (iv) Low quality education because higher education institutions in many Africa countries operate well below the minimum resources required to produce high-quality undergraduate and graduate students. Institutions of higher education in most African countries have been increasingly facing difficulties in maintaining optimal student-teacher ratios. Lecture halls are often overcrowded, while laboratories and library facilities are insufficient. (v) Brain drain because of pushing and pulling factors and that African is one of the regions of the world which annually lose its skilled labor in large quantity. The brain drain has jeopardized the academic institutions of African countries, with immediate damaging effects on their socio-economic development. (vi) Expanded of private higher education with loose social mission and inequity of access because of their commercial orientation only students which could afford the fee are eligible for accessing, engendering inequity. Private institutions of higher education also tended to have less focus on research and development, overlooking their social mission. (vii) Challenge of balancing institutional autonomy in their academic operation and responsibility to contribute to their respective national development, while operating with inadequate resources.

Despite the challenges higher education institutions have faced , this paper concludes that higher education institutions in Africa are still of strategic importance in their respective countries. Development of higher education in Africa countries is the sole responsibility of their respective governments and that no outside prescriptions is expected to make higher education institutions responsive to their national demands. It is high time that institutions of higher education meet the growing demand of students or else this human resource boon will soon prove to be population curse for the African economies. In the era of knowledge economy, the workforce of the future will need a whole spectrum of knowledge and skills to deal with technology and the globalization of knowledge. Thus, there are pressing needs for revitalization of higher education institutions in order to be centre of excellence in teaching, research, and public service provision, and subsequently the major drivers of their countries' socio-economic development. To these ends, African leaders must commit themselves to democratic developmental state by abandoning neo-liberalism which is a failed paradigm and expand their policy space to make higher education social institutions which give not only social services but also play a leading role in strengthen lower level education, including literacy programs which are crucial in emancipating African societies from all forms of domination and dependency so that every citizen would lead a dignified life in her/his country. Without emancipation of the African people, there is a high likelihood that the people will remain prisoners of servitude and vulnerable to external influences that fuel and perpetuate conflict and instability.

8.2 Policy Implications

Today more than ever, the question remains how African countries can move beyond the failures of neoliberal model of development and construct more meaningful development beyond the current mess that would lead to inclusive development. In line with this, African governments would be required to develop their development strategies to diversify their economies and to generate wealth to satisfy the basic needs of their population by putting higher education at the center. To these ends the following measures are suggested:

- (i) Shift of African governments to democratic developmental state by abandoning neo-liberalism to expand their policy space in managing their economic development and to be owners of their development programs by mobilizing their internal resources in order to reverse the damages inflicted by neoliberal development model.

- (ii) Transforming higher education institutions' values, missions by underpinning that higher education is not service to be delivered on the market to those who can afford to buy but a public good and that higher education institutions must be transformed to demonstrate their social and national responsibilities in overcoming many of the development challenges facing African countries. To this end, it is necessary to introduce ideological education which increases the consciousness of their students; instill new social values of dedication to societies development and deepen their critical thinking and as a means of counter-balancing the hegemonic ideology of neo-liberalism and to explore alternatives for their respective countries. .
- (iii) Ensure that higher education institutions are guided by their strategic plans tuned to their respective national development plans so that wastage of human resources will be reduce by producing graduates with employable skills.
- (iv) Increase budgetary expenditure on higher education institutions by mobilizing adequate financial resources to improve teaching, learning, research and staff working condition and to reverse brain drain. Making adequate funds available to fast-track developments in higher education system, including the provision of physical facilities and cutting-edge technologies for learning, teaching and research; removal of all impediments affecting the widening of access and participation in higher education and a deliberate effort is put in place to ensure quality assurance.
- (v) Strengthen South-South cooperation of higher education for conducting joint research of common interest and share experience in making higher education more of social institution that responds national demands as well as with other institutions of higher education which can contribute to the building of higher education capabilities of Africa.
- (vi) Improve quality of higher education by strengthening and building the human, technical and financial capabilities of the statutory agencies of higher education.
- (vii) Strengthen the power of academic departments as essential building blocks of higher education institutions by creating governance structure which gives more power and autonomy in designing their academic programs and operations while encouraging them to be more responsive to the demands of their respective societies.

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