Research for Sustainable Development in Sub-Saharan Africa in the 21st Century

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Abstract
This paper posited that although the first Sub-Saharan African University was established in 1827, university research has yielded little significant result within the African space. A few reasons have been advanced to explain the situation. First, African universities have capacity to admit only 7% of qualified candidates. Secondly, Africa has not demanded solutions for its socio-economic challenges from African universities. Thirdly, African elites still hope that the operationalisation of the concept of globalisation will take care of the socio-economic development needs of Africa. The paper also identified the absence of additional pathways to education, unemployment and livelihood issues, an unorganised informal sector and a city life that is unresponsive to citizens’ efforts towards survival as a few of the challenges currently bedevilling the ordinary African person. These challenges speak to what may be viewed as compelling research agendas that promise to positively impact the development of Sub-Saharan Africa. The solutions that would most suitably address these concerns need to be derived from the wealth of knowledge (both traditional and modern) that can be adapted to the specific social, economic, environmental and psychological conditions of Africa.

Key Words: Research agenda, Universities, unorganised informal sector, livelihoods, sustainable development

Introduction
The first Sub-Saharan African university (Fourah Bay College, now University of Sierra Leone) was established in the year 1827 (Teferra & Altbach, 2004). Beyond the 1960s (the period during which most African countries acceded to independence), a number of tertiary institutions (universities, mono-technics, polytechnics, colleges of education, etc.) got established on African soil. Yet, not much research was demanded from these nascent institutions. Neither did African authorities prescribe an important enough role for research within the developmental framework of the continent. Beyond the request that the academic personnel of African
Universities should carry out some amount of community service along teaching and a kind of research that mainly promoted their upward career mobility within university campuses (Association of African Universities, 2018), not much was demanded of African academics in the area of development-oriented research before the close of the 20th century.

A number of reasons could have accounted for this situation. First, the period lying between the 1960s and the year 2000 may have been considered as a period of consolidation for African budding tertiary institutions. During this 40-year period, the expectation must have been that African tertiary institutions would develop their human resource base and material infrastructures with a view to positioning themselves within the world academic arena. Second, between the 1960s and 1990, the World Bank and other international development partners did not believe that Africa needed universities in any significant number as the view was held that primary and secondary education held the prospect of higher returns on investment in education than did higher education (Psacharopoulos, 1980; Smith, 1965). Consequently, before the end of the 20th century, African tertiary institutions counted fewer universities than there now exist. Since high calibre research is usually expected more from universities than from other tertiary institutions, it may have been that the research results produced by a few existing universities were not impactful enough to be visible. Third, the hegemonic powers (colonial metropoles) of African countries did succeed in convincing African leaders that they were able to fill the developmental gaps that non-performing African universities left within the life of these states during the period leading to the end of the 20th century.

In the words of Ajayi et al. (1996), whereas African academics planned to take the nations of Africa to great levels of mental and material development after independence, it was sorrowfully discovered that,

> After independence, the university people found that they were no longer the ones defining the mission: the state did and universities took their cue from that to define their role. It was the state that crystallized the mission as Development (Ajayi et al., 1996 p. 87 as cited in Preece, et al., 2012).

In the meantime, Africa has come against numerous challenges. Contrary to expectations, the waves of world economic recessions of the 1980s and 1990s (Tapia, 2013; Hogan, 2010) and the global financial crisis of 2008 (Amadeo, 2018) have not necessarily curtailed the ability of former colonial powers to continue to extend financial and material aids to Africa. In fact, after nose-diving between 2005 and 2008, the rate of external aids received by Africa between 1996 and 2016 has since doubled (OECD, 2018). However, it is the developmental worth of these aids that is in question. When carefully analysed, it is seen that support for African debt repayment has been declining steadily since 2005 (OECD, 2018). Yet, all aids are given for and deployed to the sectors of social welfare, modern economic activities and production of manufactured goods whose ultimate financial yields return principally to those who invested in these sectors, namely, the capitalists of the Global North.

One critical sector (education) funded by these external aids has never performed well enough to be of any significant developmental benefit. For example, too low a number of graduates is currently produced by African institutions of higher learning to meaningfully impact African modern socio-economic life (Oketch, 2016). Apart from producing graduates lacking in critical thinking (Akinyemi, Ofem and Ikuenomore, 2012), African higher education has been accused of equipping its products with skills that are at variance with the demands of the market.
(Babalola, 2007). Additionally, African higher education has demonstrated an unforgivable neglect of the agricultural sector (Babalola, 2007), which for all intent and purposes ought to constitute the backbone of her economy and the lifeline for sustainable nutritional practice on the continent.

The current rise of populist governments across Europe and the United States of America, the development of punishing policies against international migration, the declaration of trade wars, the withdrawal from international partnerships judged to be unprofitable and non-strategic (e.g. Brexit, withdrawal from climate change agreements by the USA, etc.) and the renewal of arms and nuclear weapon race among advanced and emerging societies during the second decade of the twenty-first century would do nothing to ameliorate the circumstance of Africa. If anything, they would worsen the African situation. Technically therefore, external aids do not necessarily address the developmental needs of African nations and the nations of Africa themselves are yet to prioritise their developmental needs within a sustainability framework. Yet, learning from history, it is now remembered that when the chips were down at various times in human history, it was the philosophers (in ancient Greece and pre-Republican France), the universities (in ancient Rome, pre-industrial Europe and post-industrial Europe) and the early intellectuals (in pre-independence Africa) that proffered the great solutions that pulled societies upward and out of difficulties.

This paper aims to analyse the current developmental challenges facing Sub-Saharan Africa with a view to proffering ways in which African universities may assist in solving some of these challenges through research.

**Research**

Research is an investigation which seeks to either proffer solutions to an already identified problem or one which seeks a more profound understanding of a phenomenon. It has been found that research usually tends to generate two types of knowledge, namely, mode 1 knowledge and mode 2 knowledge (Coghlan & Brydon-Miller, 2014).

Mode 1 knowledge is the type of knowledge that may be categorised as academic. It includes such pieces of knowing whose discussion pertains to the realm of intellectualism and higher-order thinking. Examples of these pieces include the development of theories, modelling of design prototypes, etc. Mode 2 knowledge, on the other hand, speaks to the social relevance of knowledge as a first line impact. In other words, mode 2 knowledge is a type of knowledge that most members of society can relate to and use for the purpose of deriving some practical benefits. These benefits are usually those ones that help community members to resolve issues regarding for example, access to education and learning outside the school system, shortage of housing facilities and access to affordable health care to cite but a few.

Both positivist and interpretive research paradigms may be used to generate either mode 1 or mode 2 knowledge. In the 21st century, the African higher education space does boast of a considerable number of academics that have acquired requisite skills in positivist and/or interpretive research paradigms to generate knowledges that could be sustainably relevant to Africa’s current level of development. The sustainably relevant developmental initiatives referred to here are to be found within the practice of innovative thinking and modelling. Innovation is not invention. Innovation is the tweaking of an already invented product, practice or idea. Research is an able tool for both the purpose of invention and innovation.
Theoretical Framing

The theme of this paper is discussed within the frame of two theories, namely, the Cultural Theory of development and the Human Development Index Literacy Theory of development.

The Cultural Theory of development submits that the culture of a people, but not other factors, accounts for the development of society. Such specific elements in culture as time management, concepts of education, politics and economy have been highlighted as being most important in determining how and when society exhibits significant signs of development (Harrison, 2006).

Although the social Capital Theory has often been considered to be an aspect of the cultural theory of development, Rabie (2016) suggested that Social Capital Theory is actually synonymous to Cultural Theory of development. While Rabie concurred that Social Capital theory like Cultural Theory is made up of a number of components, she indicated ‘social trust’ as the nucleus around which all other components of Social Capital Theory gravitate. “Personal and group trust in society is an aspect of culture……social capital, which is a function of social trust, facilitates the creation of associations in society whose presence is indispensable to economic growth” (Rabie, 2016 para.7)

While it is agreed that culture more than other factors determine developmental trajectory and speed, it is also suggested here that all cultures are willy-nilly influenced by external factors especially in today’s globalised world. As such, a kind of literacy of education especially suited for highlighting paths to human development would be needed to prompt societies’ cultures to adjust one way or the other under the influence of global tendencies. That kind of literacy is found within the human development index literacy theory (HDIL) (Biao, 2011). HDIL was developed specifically to address the challenge of development in rural Africa. It took its cue from the UNDP (1990) HDI theory but argued that a special literacy education programme can assist rural Africa to exploit and rely on its rural resources for the purpose of attaining basic education, health and acceptable level of life expectancy which are the human conditions that HDI seeks to promote.

Applied to the current discussion, this theoretical framework suggests that Sub-Saharan Africa would need to begin prioritising its challenges with a view to solving them through relevant research activities. Yet, while focusing on African challenges, universities and research centres in Africa would need to keep teasing from time to time from the global arena such ideas and knowledge that would help Africa in accelerating its development agenda. The process of having a foot in the global arena while focusing on local challenges is likened to developing a special scanning process (special literacy) that would enable African researchers to identify those ideas that may be imported from the global arena to assist in solving problems at the home front.

Sustainable Development

The concept sustainable development is both a process and outcome of development. It is a process in that it outlines the route developmental activities must take in order to perpetuate the renewal and regeneration of resources so as to enable future generations to use same resources safely (United Nations, 1987). It is an outcome because the process of sustainable development results in physical and psychological end results and benefits. In a physical sense, nature’s resources remain present within the environment even after a generation has gone bye. In a
psychological sense humanity is happier when at no period in his history, he struggles to satisfy his needs in natural resources.

While there have existed numerous theories of development (classical, neo-classical, liberal, human centred and others), the addition of the concept sustainable to development simply suggests that, irrespective of the theories of development espoused by an individual, community and society, both the process and outcome of development should make allowance for the next generation of human beings. Unfortunately, that which defeats the aim of the prescription of sustainable development usually resides within specific theories of development.

For example, the Liberal Theory of development recommends that all human beings and human organisations should be given a free hand to open and run businesses as they wish each relying on their capabilities, acumen and initiatives. This idea presupposes the enthroning of a cut-throat competition which would encourage the employment of all desperate means to outdo the other competitor. Within this kind of logic, the continued existence of natural resources may not be guaranteed. This is why, even as a new path of development is about to be laid for Africa here, the sustainability component of that development is emphasised.

**Development within the Sub-Saharan African Context**

Sub-Saharan Africa is one part of the world that has experienced a complicated story of development. As a collective of human beings, Sub-Saharan Africa had its own vision and instruments of development which it used until the period of colonialism. From 1884, the year of the balkanisation of Africa (Neuberger, 1976) to date, Africa has vacillated between his pre-colonial world view and his post-colonial world view. On the one hand, beginning from the colonial period the international community has worked hard to integrate Africa into the world systems of politics, education, economy, health and environmental sciences. Unfortunately, the adoption of these world systems comes at a cost. Sustained huge monetary budgets that are not available to Africa are needed to bring about a transition from traditional African society to modern African society. On the other hand, a close examination of the performance of the school system that ought to serve as instrument for this transformation reveals that only 7% of those qualified to be in African tertiary educational institutions actually get placement (Teferra, 2015). Less than half of students that are qualified to be in secondary schools, are actually in these schools (UNICEF, 2016) and only about 50% of primary school population reach the final year of primary school education (United Nations, 2015). Yet, university graduates are expected to drive the continental development (World Bank, 2015).

**Instruments of Development**

Only the wealthy countries of the Global North are doing well using Western type education as instrument of development (OECD, 2015), despite the high cost of this instrument (Combs, 1987; Illich, 1971). This is not surprising. About a hundred years before Africa began to independently run its socio-economic operations using money (modern currency or capital), the Global North has set up the machinery that will perpetually guarantee her unfettered access to the needed capital to fund modern education at home. This machinery includes but is not limited to the three stages that saw to the monetisation of the world. Between 1870 and 1945, a world currency concept was established through the setting against the gold of all individual currencies that may come to exist. Between 1945 and 1971, world currencies exchange rate was set against the United States of America Dollar and between 1971 and 2015, the flexible
exchange rate was adopted (World Gold Council, 2018). The International Monetary Fund (IMF) that was established in the 1940s continues to see to it that the world monetary structures obey the Global North’s concepts of economics, wealth and development.

Therefore, money and all it can buy constitutes a veritable instrument of educational development. However, education itself is a more powerful instrument of development. Education is a process of socialisation which seeks not only to perpetuate that which is accepted to be good and beneficial in society but it is an instrument which usually promotes a defined world view. Hence, formal education (the school) is a vehicle for marketing the Global North’s world view and non-formal education (sometime referred to, as informal education) advertises traditional societies process of education.

However, within the context of globalisation, all human communities are currently in perpetual contact and interaction and all world views are constantly inter-mingling. The dynamics within the perpetual embrace of all worldviews favour the most economically endowed. As such, through all such international bodies as UNESCO, UNICEF, UNFAO, USAID, DFID, DVV/IZZ, Sub-Saharan Africa has been fairly well integrated into the world systems and schooling has taken a fair foothold on the continent. Yet, all inventories have shown that one and a half centuries of schooling have not brought the desired socio-economic development for Sub-Saharan Africa. Neither would the next two centuries bring any appreciable socio-economic if schooling were the system of education Sub-Saharan Africa was to rely upon going forward since an important amount of capital would be needed to operationalise the school system.

Whereas it is proper and beneficial for Sub-Saharan Africa to hook on to world systems within the context of globalisation, Africa should not develop an over-expectation from the operationalisation of the concept of globalisation. No societies will donate her monies, resources and knowledge to Africa free of charge. Many a people in Africa, including, sadly, academics and government officials have held the view that globalisation will see to the development of Africa. True, “Those who championed globalization once promised a world of winners, one in which free trade would lift all the world’s boats, and extremes of left and right would give way to universally embraced liberal values” (Bremmer, 2018 para.1). Unfortunately, “The past few years have shattered this fantasy, as those who’ve paid the price for globalization’s gains have turned to populist and nationalist politicians to express fury at the political, media, and corporate elites they blame for their losses” (Bremmer, 2018 para.1). Where Africa is therefore interested in development, it must begin to create for its own consumption, additional material and knowledge wealth by beginning to mine current opportunities in which it dwells.

**Current Compelling Research Areas in Sub-Saharan Africa**

A number of knowledge areas currently exist in Sub-Saharan Africa which, if researched into, would lead to improvement of life and living in the sub-continent. These areas include the unearthing of additional pathways to education, the creation of livelihoods, the refinement of the informal sector of national economies, and a re-examination of African city planning models and philosophies.

**Additional pathways to education**

In a general sense, that which is understood to be education nowadays is schooling. Schooling or formal education is one system in which Sub-Saharan Africa has shown great weakness as
stated earlier. Yet, the human race lives in an era of knowledge economy or learning societies. In other words, human beings everywhere would derive maximum benefits from living only if they are ready to access information and learn about phenomena that ultimately impact their life. As stated earlier, only a negligible few Sub-Saharan Africans are currently positioning themselves for living in learning societies through schooling.

What then happens to the remaining teeming populations of Sub-Saharan Africa that have no access to the school? Must they not learn too? They must and should learn. But through which channels? The answer to this last question dwells in research. Before the arrival of the concept of school, Sub-Saharan Africa has always learnt. The contents of those learnings were not necessarily those which need to be learnt nowadays but the venues for those learnings, the strategies and approaches for those learnings subsist. Are there ways in which these educational venues may be revisited by modern educators with a view to reconfiguring them into inexpensive learning venues befitting the modern times?

What about instructional methods? Is it possible to adopt the praise singer’s methods of communication in advancing learning outside the school system? Would a combination of school and non-school instructional methods produce any desirable results in learning?

What about curricula contents themselves? School curricula contents may produce a vocationally inclined individual or an academic person or a generalist. Can research not address Jimenez and Patrinos (2008) question as to whether Cost-benefit analysis can guide education policy in developing countries. In other words, should Africa concern herself more with socially profitable education or with the cost of education?

- **Livelihoods and employment**

*Employment* and *livelihood* are related terminologies in that they all talk to human survival and/or decent living. Yet, the terminologies *employment* and *livelihood* imply different connotations. Employment implies that persons legally employable are found to be in an activity that is paid (ILO as cited in OECD 2007). However, livelihood is

… a set of activities and strategies pursued by household members, using their various assets (physical, natural, human, social, financial) in order to make a living. Livelihoods usually involve employment of household labour and the use of other household assets, if any, in order to live on the proceeds. For the large majority of people across all countries, the most important livelihood asset is primarily their own labour, followed by other household assets (physical, financial, social and natural) (ILO 2010, para 2).

A careful study of the two terminologies (*employment* and *livelihood*) suggest that persons operating within the realm of *employment* are in a lessstenuous situation than those operating within the area of *livelihood* creation. Whereas some organisations assume the responsibility of finding salaries and payments to reward employees in various employment sectors, those left to irk livelihoods, have to rely on their own labour, assets and strategies to come by.

In most African countries, the development of the private sector is limited and government ultimately finds itself becoming the largest employer of labour. Unfortunately, under strenuous economic circumstances, there is so much employment these nations of Africa can provide. Consequently, in many nations of Africa, unemployment rates are high and may range
between 10 and 40% (Rosenberg, & Maclean, 2017; World Bank, 2008). With high unemployment rates come high levels of poverty and with high levels of poverty comes the desire to struggle to eke a living. Yet, the people of Africa can be assisted to move from the level of livelihoods to the level of employment creation. The reality of our times is that decent living cannot be attained without a substantial amount of capital and the exit from livelihoods zone resides in mobilising and strategising the use of capital. This much, the Grameen Bank Lending of Yunus in Bangladesh has taught us (Dalton, 2018). The concept of Grameen Bank like other pro-poor initiatives (community currency, pedagogy of the oppressed, etc) is based on the idea of ‘appropriate technologies’ which emphasises the unearthing and use of such technologies that are inherent to communities and that these communities can begin to employ immediately with a view to improving their conditions.

It is to research that one must turn to highlight appropriate technologies relevant to African communities of the 21st century and to investigate ways of creating sustainable livelihoods for the people of Africa in the 21st century.

- **Informal Sector of the Economy**

The activities collectively referred to as informal sector of the economy are peculiar to Africa not only because they have their origin in Africa (Hart, 1973) but also because the highest concentration of informal sector activities is located in Africa. One highly developed informal sector activity in Africa that bears relevance to current modern living is street vending. Yet, this activity is under official assault in almost all countries of Africa where street vendors are subjected not only to numerous city council regulations but also to law enforcement ill-treatment (Biao, 2017).

Street vending not being the only available informal sector activity on the continent, research would be needed to unearth other informal sector activities with a view to making them visible enough to attract unemployed persons in search of employment and livelihoods.

- **Sustainable Town Planning**

If there is an area of activity before technology that revealed a most high level of human genius, it is town or city planning. From ancient Egypt through ancient Greece to ancient Rome, cities of exceptional characters have been built (Kotkin, 2006; Childe, 1950). Till date, even the ruins of those ancient cities still permit the curious to peep through the exceptional capacities of the human mind to conceive and actualise. Ancient Africa was not left out of these feats of city building. From Alexandria through Gao to Timbuktu, African architectural marvels were displayed for all to see (Jenkins, 2009; Coquery-Vidrovitch, 1991).

Each of these cities creditably served the needs of their builders at the time. Since human needs are not only transient but dynamic, ancient city ideologies have now given way to modern city regimes whose role is to support the promotion of modern human needs and aspirations. One prominent regime of modern city planning is one referred to by Joseph (2011) as the modernist approach to town planning. This approach emphasises Land-use zoning systems. Land-use zoning systems are systems of town planning which identify and designate specific portions of a city to specific formal uses such as the erecting of residential quarters, the building of commercial spaces and the creation of recreational areas (Joseph, 2011). Once erected, these formal city creations become inviolate and any activities viewed as disruptive to the order laid down is met with severe penalties meted out by City Councils.
Africa inherited the modern concept of city planning from the Global North after World War II in 1945 (Joseph, 2011). Unfortunately, numerous activities remain non-formal in Africa. Unlike in the Global North, numerous trading activities (street vending, artistic works, auto mechanic works, vulaganising, etc.) are not carried out as formal activities in cities. The bulk of those involved in these activities are the peasants of Africa constituting not only the majority of African population but also the heart of the continent. These peasants of Africa can neither be wiped out in a swoop nor deported to some place.

Would research therefore not assist Africa to create cities that would cater to the needs of these social strata that cannot be got rid of? Would research in modern town planning and city and regional development assist Africa in building both inclusive and resilient cities and regions? Fortunately, while in large parts of the world the bulk of urbanisation has already taken place and is embodied in city forms and existing infrastructures, cities in Africa currently have an unprecedented opportunity to shape their urban futures in a more inclusive, sustainable and resilient manner. The decisions taken by governments at national, sub-national and city levels now will have consequences for the functioning, liveability and environmental sustainability of their cities for decades to come. The next decades offer an opportunity to address urban poverty and inequality and shape development priorities to ensure that urbanisation helps foster well-functioning liveable and sustainable cities (International Council for Science, 2018 para.3).

The hope therefore still exists that Africa can adopt a different city planning agenda from the Global North with a view to addressing her own peculiar needs even in these modern times. In any case, the modern philosophy of town planning is being currently criticised for its obsoleteness and for its being environmentally unfriendly even within the Global North (Fanglang, 2016).

Conclusion

Relying on the foregoing discussion, it does appear that Africa’s research agenda must necessarily differ from the Global North’s if it is to pursue a realistic developmental trajectory. The reason for this is not far-fetched. The challenges facing Africa are different from those facing the Global North. If research is a process of searching for solutions to one’s own challenges or a way of seeking deeper understanding of one’s own circumstances, then the African university and graduate studies must go back to the drawing table with a view to prioritising African challenges in their research agendas.

These research agenda may elect to prioritise methodologies akin to either mode 1 knowledge or mode 2 knowledge or a combination of both modes of knowledge. That which is paramount is that, irrespective of the methodologies adopted, the bulk of Africa and Africans should begin to feel both the impact and relevance of African universities through the accessing of relevant information and tools with which they may solve their daily challenges.
References


Tapia, J. (2013). *From the oil crisis tot he great recession: Five crises of the world economy.* Retrieved from worldeconomiccrises