

Innovation and Entrepreneurship: The Footpath to Industrialization, Diversification and Development of African Economy

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Abstract

Africa is by far the world's poorest inhabited continent, and it is, on average growing poorer and poorer as economic growth geometrically lags behind population growth. The continent's current poverty is rooted, in part, in its history of colonization. While China and India have grown rapidly and South America has experienced moderate growth, lifting millions above subsistence living, Africa has stagnated and even regressed in terms of foreign trade, investment, and per capita income. Many African countries are trapped in commodity dependence, relying heavily on a few primary commodities for most of their export earnings. In order to achieve a sustainable development, it is critical for these countries to break away from this commodity dependence and to diversify their economies. Industrialization which engenders economic diversification and development is regarded as increased and continuous productive and manufacturing activities in a state leading to the positive and steady change in economic and social life of the people. Apart from the raw material availability factor being pertinent for industrial productivity, an interest in developing new technologies in a society, verily also allow for industrialization. New methods, ways, processes and machineries to make production more efficient are usually the indispensable conditionality. The evolution and creation of these new methods, ways, processes and machineries are easily achieved through the mechanism of innovation and entrepreneurship. Innovation indeed is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service. It is this new and different products and processes that can transform Africa from produce export dependent continent to processed goods producing continent with humans and machineries clicking their hands steadily at productive work. This paper proposes the creation, enhancement, dissemination and promotion of innovative entrepreneurial ventures as the road to Africa's industrialization, diversification and economic development.

Keywords: *Africa, Industrialization, Innovation, Entrepreneur, Development*

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Background to the Study

Where was Africa and what led to its underdevelopment are questions left to history though a little insight may aid in forging the way forward out of its economic backwardness. What caused Africa's underdevelopment is a complex issue. Europe's past (and present) exploitation of Africa played a significant part. Before the Europeans arrived in Africa, Africa had vibrant economic, social and political structures. These were severely disrupted by Europeans to create wealth for themselves. It is well known that Africa is falling behind the rest of the world in terms of economic wellbeing. Even though global poverty is declining due to rapid economic growth in India, China, and other parts of the world, Africa's contribution to this decline is disappointing and absolute poverty in many of the African nations is on the increase. The African condition of underdevelopment has today manifested in the increasing inability of African countries to provide the basic essentials of life to their citizens. The problem of hunger, unemployment, disease, illiteracy, socio-economic anxiety and insecurity, have tended to overwhelm mass majority of the people, resulting in mass frustration, alienation and disorientation of the citizenry (Micahet *al.*, 2017)

The imposition of colonialism on Africa altered its history forever. African modes of thought, patterns of cultural development, and ways of life were forever impacted by the change in political structure brought about by colonialism. The African economy was significantly changed by the Atlantic slave trade through the process of imperialism and the economic policies that accompanied colonization. Prior to the "Scramble for Africa or the official partition of Africa by the major European nations, African economies were advancing in every area, particularly in the area of trade. The aim of colonialism is to exploit the physical, human, and economic resources of an area to benefit the colonizing nation (Settles, 1996). The main reasons for the colonization of Africa were the need for a suitable market where the numerous European manufactured goods could be easily disposed of at a reasonable profit (Ocheni and Nwankwo, 2012).

Though man has always exploited his natural environment in order to make a living, subsequently there also arose the exploitation of man by man, in that a few people grew rich and lived well through the labour of others. Then a stage was reached by which people in one community called a nation exploited the natural resources and the labour of another nation and its people. Since underdevelopment deals with the comparative economics of nations, it is the last kind of exploitation that is of greatest interest here specifically the exploitation of nation by nation. One of the common means by which one nation exploits another and one that is relevant to Africa's external relations is exploitation through trade. When the terms of trade are set by one country in a manner entirely advantageous to itself, then the trade is usually detrimental to the trading partner. To be specific, one can take the export of agricultural produce from Africa and the import of manufactured goods into Africa from Europe, North America and Japan. The big nations establish the price of the agricultural products and subject these prices to frequent reductions. At the same time the price of manufactured goods is also set by them, along with the freight rates necessary for trade in the ships of those nations. The minerals of Africa also fall into the same category as agricultural produce as far as pricing is concerned. The whole import/export relationship between Africa and its trading partners is one of unequal exchange and of exploitation (Micahet *al.*, 2017).

It was to ensure that Africa was made a consumer nation for European manufactured goods that colonialist sought and took full control of the African economy and administration. If Europe had not guaranteed this control, it would have adversely affected the development and progress of their new industrialization, because most of the industries would be compelled to close down if there are not ready market and consumers for their products. Also direct control of the African economy and political administration enabled the colonialist to ensure that African colonies or states did not take to manufacturing. It helped to restrict Africans and their technology to the confines or role of producing only primary goods or agricultural raw materials needed by the industries in Europe. This is the main reason why today African states find it very difficult to industrialize and to go into full manufacturing. This also explains why Africa is a consumer nation for foreign manufactured goods. The situation equally accounts for the present underdevelopment of the African states and their technology (Ocheni and Nwankwo, 2012).

They make us producers of primary raw materials with little zeal for manufacturing engagements. They pay us peanuts for our raw materials and give us finished products at exorbitant costs. This practice dating from colonial times persists till today, as they make their finished products very palatable and drive them through our throats at unbearable costs. Today virtually all African countries are trapped in commodity dependence, relying heavily on a few primary commodities for most of their export earnings. In order to achieve a sustainable development, it is critical for these countries to break away from this commodity dependence and to diversify their economies (Gregow, 2011). As it is, the role of Africa economy and states in the world market or international trade is the production of primary goods and agricultural products. The advanced countries of Europe control the production of manufactured goods.

A number of countries, especially in developing countries, highly depend on revenues from primary commodity exports making them vulnerable to the vagaries of international commodity markets. Unstable commodity prices create macro-economic instabilities and complicate macroeconomic management of these economies whose principal means of foreign exchange earnings come from the exports of primary commodities, Erratic price movements generate erratic movements in export revenue, cause instability in foreign exchange reserves and are strongly associated with growth volatility. The more commodity-dependent an economy—that is, the higher the share of primary goods in a country's exports—the more likely it is to be vulnerable to commodity price shocks (UNCTAD, 2017).

This is the bane of economic development in Africa, reason for the continent's abysmal development index as our major earnings stem from export of primary products which prizes are set by the user advanced countries that simultaneously import finished goods into our countries and sell at their choice profit costs. It is opined that in so far as we are concentrated on production of primary raw materials of farm produce and minerals we shall continue our economic slavery to advanced countries; selling our raw materials to them at their prize and buying their finished products from them at their prize also. The indispensable attitude to ensure quick reversal of the trend is the employment of innovation and entrepreneurship towards the varied diversification of African economy leading to industrialization of the

individual economies that make up the whole. This paper posits that innovation and entrepreneurship is the footpath to industrialization, diversification and economic development of the continent.

Methodology

Data for this paper were derived from secondary sources: previous researches and analyses of scholars, government documents; as well as journal articles that are related to the subject. The study involved an extensive literature review which critically analyzed the reason for Africa's economic backwardness, colonization and its continued adverse impact on the overall economic development of the continent. The study included physical visits to some countries in the continent with interactions that offered a sit for appraising their general economic status and securing some insight into their economic strategies for future industrialization.

Innovation, Entrepreneurship, Diversification and Economic Growth

Innovation is the process of making changes, large and small, radical and incremental, to products, processes, and services that result in the introduction of something new for the sector and which adds value to users and contributes to the knowledge store of the economy. Applying innovation is the application of practical tools and techniques that make changes, large and small, to products, processes, and services that result in the introduction of something new in the sector and which adds value to users and contributes to the knowledge store of the economy (O'Sullivan and Dooley, 2008). It can be easily inferred that raw materials and minerals are turned into more useful products through the brain processes of innovating and applying the innovations. Processes of agricultural and other raw materials production are obviously attended by routine or less new changes than in the production of new value added finished goods.

To fully assimilate the meaning of innovation we would decipher the Latin Origin of the word. Innovation or 'innovare', which means 'to make something new', The Latin concept is quite cryptic and can be better understood when divided into three parts. To make something new one has to: (a). Generate or realize a new idea (invention and creativity) (b). Develop this idea into a reality or product (realization) (c). Implement and market this new idea (implementation). The phenomenon refers to replacing old products, processes or services with new ones, continually updating and improving them. As the brain of man is limitless, virtually every product, process or service can be improved to add value in time, space and utility and the action can be continuous.

Entrepreneurs possess the zeal and acumen to purposefully search for the sources of innovation, the changes and their symptoms that indicate opportunities for successful innovation. And they then apply the successful innovation to achieve fruitful new product, process or services. Admittedly, all new small businesses have many factors in common. But to be entrepreneurial, an enterprise has to have special characteristics over and above being new and small. Indeed, entrepreneurs are a minority among new businesses. They create something new, something different; they change or transmute values. However, an enterprise does not need to be small and new to be an entrepreneur. Indeed, entrepreneurship is being

practiced by large and often old enterprises. The General Electric Company (G.E.), one of the world's biggest businesses and more than a hundred years old, has a long history of starting new entrepreneurial businesses from scratch and raising them into sizable industries (Drucker, 2002).

The rapid economic growth of Tiger Asia (Korea, Thailand, China, Malaysia, Taiwan and Singapore), was secured by their ability to capture the manufacturing industries from more economically developed countries through entrepreneurial activities anchored on innovation proliferation. Lower labour costs, combined with rapidly improving infrastructure, allowed them to build large industrial bases making everything from textiles to cars and electronics. From there, these economies were able to move further up the value chain, innovating, developing their own technologies and brands, in some cases then off shoring manufacturing again. Attempts to build manufacturing bases in Africa have proceeded slowly during the various commodity booms and with most booms over, African economic development stagnate as we continuously maintain our tract in the vicious circle of exporting primary raw materials at cheap rates while we buy finished goods at exorbitant prizes. African governments have known for decades that they need to diversify, but over the post-2000 years of booms in various commodities, which were driven largely by high commodity prices, they did not prioritize investments in other productive sectors. Today Africa is locked in this vicious circle to the utmost benefit of advanced countries. It can economically liberate itself and develop only if it diversifies and break into global manufacturing supply chains. Diversifications are easily achieved through consistent innovative activities anchored on entrepreneurship. When entrepreneurial innovative activities are engendered in all sectors of the African economy the result would be diversification of the economy in all ramifications.

Innovation is thus a basic factor for economic diversification and a crucial driver in boosting growth. Innovation is also seen as key to addressing pressing societal problems such as pollution, health issues, and unemployment. Rated schools of thought view innovation as the tool or instrument used by entrepreneurs to exploit change as an opportunity. Innovation involves more than just science and technology. It involves discerning and meeting the needs of the masses in all ramifications. Improvements in marketing, distribution, and service are innovations that can be as important as those generated in laboratories and work places involving new products and processes. Although innovation is largely driven by entrepreneurs and the private sector, government actions play a strategic supportive role (Miniaoui and Schilirò, 2017).

Growth can basically be attributed the following fundamental forces: an increase in factors of production, improvements in the efficiency of allocation across economic activities, knowledge and the rate of innovation. Given full employment and efficient allocation, growth is thus driven by knowledge accumulation and innovation. The process of innovation is typically modeled as a function of the incentive structures, principally- institutions, assumed access to existing knowledge, and a more systemic part. Innovation also implies that the stock of (economically) useful knowledge increases. In other words, innovation is one vehicle that diffuses and upgrades already existing knowledge, thereby serving as a conduit for realizing

knowledge spillovers. The process of innovation is consequently considered to be one of the critical issues in comprehending growth (Braunerhjelm, 2010).

Advanced economies recognize the importance of innovation in helping an economy grow and thrive. And this is the bane of the African economy where we have limited ourselves hitherto to production of raw materials and minerals. Entrepreneurs can create the solutions that can improve the standard of living for the citizens of a country. They are a critical engine for economic wealth. They are critical to reducing the need for older, inefficient technologies by replacing them with new and evolved systems. Entrepreneurial firms and their ability to learn rapidly, has been a critical factor behind the success of Korea, Taiwan and China with their performance supported by their business policy environments. Case studies of East Asian firms, particularly in electronics show the significant influence of entrepreneurship and a deliberate pattern of learning and innovation (Swierczek and Quang, 2004). Africa must change its style of economic activities if it must rise in the global ladder of world economies. Consistent and continuous production and sales of primary goods to advanced countries at prizes set by the purchasing countries and the consequent importation of finished products at exorbitant rates from foreign lands is abysmal poverty and economic retrogression amidst population explosion.

African countries depend predominantly on primary commodities for their export revenues: food products, agricultural raw materials, crude petroleum, and minerals. Furthermore, each African country exports an extremely narrow range of primary commodities. Most African countries earned 50 percent or more of their total export revenues from just one primary commodity and nine of these earned 75 percent or more from just one commodity. Only about four African countries earned at least 50 percent of their export revenues from no more than three commodities. Three of these namely: Kenya, Senegal, and the Seychelles, produce and export refined petroleum products based on imported crude; these exports are really more in the nature of re-exports. Many primary commodities are important for more than one of the countries. Cocoa, coffee, sugar, tea, groundnuts, cotton, and animals and their products of hides and skins are significant agricultural exports for three or more countries. Crude petroleum, copper, diamonds, and iron ore are important for at least two countries (Gersovitz and Paxson, 1990).

The position of this paper is that rather than exporting these primary commodities at giveaway prices and importing finished products from advanced countries at exorbitant costs, African countries should employ innovative entrepreneurship to convert these primary products to useful finished products through value addition. This would reduce the quantity of finished goods imports and with time some of the finished goods would be exported to other countries to earn foreign reserves. Technologies for such innovation implementation abound and could be enhanced through research and in some cases technology transfer or purchase can be employed to foster value addition manufacturing in pertinent sectors. There are numerous innovation centres in Africa including Research Institutes, Universities, Polytechnics, Companies and research based outfits and they continuously churn out innovations on paper and the board without ensuring the application of the innovations to impact on the economy.

Hence in Africa, lots and lots of papers are presented and discussed without savoring the accruing advantages that would be harnessed through proper application of the innovations.

Conclusion

Africa is endowed with many natural resources and agricultural raw materials used for the production of many essential goods. Since the time of colonization these primary goods are taken to advanced countries where they are converted to more useful products and brought back to us at exorbitant costs. This exploitation has continued till date and would continue unless African countries rise to the occasion and re-strategize their economic productive activities and policies. The tool of transformation of economic production is innovative entrepreneurship and this is where the West has excelled us and remains their hinge of exploitation. This paper canvasses a paradigm shift in policy, research, economic productions and trade by African countries if we shall liberate ourselves from this all-time exploitation of the continent by the West.

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