

THE CHALLENGES OF MIGRATION AND TECHNOLOGICAL DEVELOPMENT IN AFRICA

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Abstract

This paper critically studies the problems posed by migration and technological development in Africa. Migration and African technological development have been two paradoxical or polarized contemporary issues even in our 21st century Africa. Migration if not properly controlled has a deleterious implication that can drastically hamper African technological drive and advancement. Technological development has its own merits and demerits. Technology simply means the devising of tools to manipulate nature. One of the major problems of migration in Africa is that of brain-drain and the imbalances in our human and material resources that has not been fulsomely harnessed by Africans. Using the method of dialectics, which is the logic of unearthing two opposing ideas in order to logically arrive at the truth, the author concludes that Africans must liberate themselves from the moral, socio-political debacles and economic comatose *visa a-vie* the epistemological quandary of the philosophical foundation of migration from its deleterious implications. Again, we as Africans, as a matter of obligation, must engage in effective planning system by redefining our well being and ensuring good governmental policies that can stabilize Africa's economic system to match with the global capitalist system and invariably discourage mass exodus of Africans to other countries of the world in search for greener pastures.

Keywords: Migration, Development, Technology, Culture

Introduction

The idea of migration and African technological development is a very crucial issue in our quest for any meaningful sustainable development in Africa. When we talk about development, it simply means to de-envelop. We need to get out of our cultural constraints for us to develop economically, socially, politically, scientifically, technologically, culturally and also to ensure capacity building of the human person. When we talk of migration, we refer to the movement of people for the purpose of better living conditions. Technological development can actually attract the movement of people to regions that are more industrialized. The concept of human migration has to do with economic factors. Human migration has both positive and negative impacts. One of the negative impacts of human migration is crime-factor and over-crowding or over-population. One very striking advantage of migration is that it could lead to acculturation or enculturation of people of diverse political, cultural, economic, social and religious backgrounds. This is what we may refer to as cultural diffusion. Migration in Africa has become a pertinent issue to us. It has led to lack of harnessing of our human and material resources. We should not therefore blame anybody for the underdevelopment in Africa or agree with Walter Rodney that our underdevelopment is extraneous, that Europe was responsible for Africa's underdevelopment. Today; the situation has worsened due to the evil of neo-colonialism, the last stage of imperialism in Africa. African leaders are now the economic and political bed bugs. They are in their various positions sapping the vast wealth of Africa for their own selfish interests and aggrandizements. African leaders are not bothered on how Africa as a continent can develop scientifically and technologically.

Africa as a continent, must square up with the global trend of technological advancement, modernization or industrialization. When we talk about the era of technological development we are really stressing the human quest for progress, better living conditions or qualitative standard of living. Technology has resulted in the advent of railways, air transportation, sea transportation, massive production of goods and services, electrical appliances etc. African leaders must rise up to the current global challenges to meet up with our collective search for African technological development and migration should be discouraged to the barest minimum in order to reduce the problem of brain drain in Africa.

Definition of Terms

There are some concepts that ground this paper, and their analysis will be an important key to proper understanding of this work. Consequently, there is need to clarify their usage from the onset.

Human Migration

The phrase 'Human Migration' is the movement by people from one place to another with the intention of settling in the new location. The movement is typically over long distances and from one country to another, but internal migration is also possible. Migration may be individual's family unit or in large groups. Migration has continued under the form of both voluntary migration within one's region, country, or beyond and involuntary migration which includes the slave trade, trafficking in human beings and ethnic cleansing. People who migrate into a territory are called immigrants, while at the departure point they are called emigrants.

Some modern migration is a by-product of war, political conflicts, and natural disasters. Contemporary migration is predominantly economically motivated. International migration is similarly motivated by economic disparities and opportunities which occur within the European unions, where legal barriers to migration between member countries have been wholly or partially lifted. Migration has transformed the world. Forced migration has been a means of social control under authoritarian regimes, yet free-initiative migration is a powerful factor in social adjustment and growth of urban populations. Seasonal human migration mainly relates to agriculture, and tourism to urban places. While rural to urban is more common in developing countries as industrialization takes place (urbanization); Urban to rural is more common in developed countries due to higher cost of urban living (Suburbanization), from the pre-modern period of migration, early humans migrated due to many factors such as changing climate and landscape and inadequate food supply. Manning (2005: p.19) "distinguishes three major types of migration: labor- migration, refugee-migration and urbanization". Industrialization encouraged migration wherever it appeared. The increasingly global economy globalized the labor market. Moreover, migration was significantly made easier by improved transportation techniques and due to the advent of technological progression and assimilation.

Migration for work in the 21st century has become a popular way for individuals from impoverished developing countries to obtain sufficient income for survival. Migration, so to speak, from its contemporary perspective, means survival strategy in our global capitalist system. The main reason for labor migration is wage difference between two geographic locations. This

wage differences are linked to geographic labor demand and supply. Labor tends to flow from low-wage areas to high wage areas.

Migration could be viewed as a result of risk aversion on the part of a household that has insufficient income. World system theory looks at migration from a global perspective. It explains that interaction between different societies can be an important factor in social change within societies. Every migration flow generates a return or counter-migration. Large cities grow by migration rather than natural increase. Migration correlates with technology and technological progression and assimilation and can definitely affect human existential condition. Some scholars of cultural anthropology like Lee (1966: p. 288)

Divides factors causing migration into two groups of factors: 'Push and pull factors'. Push factors are things that are unfavorable about the area that one lives in. Some of the push factors include: not enough jobs; few opportunities; inadequate conditions; desertification; famine or drought; political fear or persecution or crisis; slavery or forced labor; poor medical care; loss of wealth; natural disasters; death threats; desire for more political or religious freedom; pollution; discrimination poor chances of marrying; condemned housing and war; and pull factors are things that attract one to another area like job opportunities; better living conditions; employment; education; better medical care; attractive climates; security; family links; industry; better chance of marrying.

Migration occurs because individuals search for food, sex and security outside their usual habitation. Human beings develop tools and equipment to enable them interacts with nature to produce the desired food and security. The improved relationship among human beings and improved technology further conditioned by the push and pull factors all interact together to cause and bring about migration and higher concentration of individuals in towns and cities. The higher the technology of production of food and security and the higher the cooperative relationship among human beings in the production of food and security and in the reproduction of the human species, the higher would be the push and pull factors in the migration and concentration of human beings in towns and cities.

Technology

Owomoyela (1996: p. 90) posits that:

The old assumption that technology and development are the necessary ends of society has lost much of its persuasiveness. A conference on the theme: Technology, culture and development in the Third World: Lesson from Africa would in the past have suggested an invitation to consider the impediments that traditional African cultures constituted in the path of technological development. These days it invites us, rather, to control from an African perspective the questions that surround science and technology, and to consider the possibility of revising the hitherto prevailing direction of traffic in the global movement of ideas and ideology in no less than in the flow of science and technology. The New World Order is only the latest in the series of new orders that have been announced and promoted to reform the old international order of business, the most developmentally pertinent being the New International Economic order (NIEO), announced by the United Nations on May1, 1974. It aims at transforming the world economy to the end of incorporating Third World countries into the ranks of developed and prosperous nations, and its architects look to Science and Technology as means to achieving that goal. A series of examination of African ways, free of the old colonialist or

neo-colonialist prejudices offered the possibility of unearthing viable African contributions to global order that would be new.

Thus defined, technology, the application of science, constitute a complex with development, modernization, and even Westernization, terms so solely related that each implies the other. The acquisition of technological culture is therefore multifaceted and fraught with good and deleterious implications. To become modern, societies must acquire the supposedly modern qualities of rationality, empiricism, efficiency and change; in place of the supposedly traditional fatalism, veneration of custom and the sacred, indiscipline and stagnation.

According to Owomoyela (1996: p. 90) “modernization, thus, transcends the mere development or employment of gadgets; it entails a profound radical transformation in good human living condition and outlook”. For Daniel Lerner, first among the characteristics of modern societies is mobility, along with an ethics of social change. In contrast to the mobile, changing and rational modern society, according to Cyril Black who concurs with Daniel Lerner, that those traditional societies are typically closed and rigid in their structure. Yet another supposed trait of the modern person, as of the modern society, is literacy. Some Europeans apparently assumed that the absence of literacy meant an absence of both scientific learning and philosophy or higher religion. Literacy itself came to be regarded as a major attribute of civilized societies. For Owomoyela (1996: p. 10): “The persistence lie on the fact that Western habits of presenting the traditional/modern, European/non-European, Western/non-Western divide as binary opposition has prompted the question of the identification of Africa with nature and the West with culture and this has automatically been the paradigm of the New World Order”.

Third World peoples are under pressure to distance themselves from their cultures and convert to Westernism, to become whites, as some African leaders do. Owomoyela (1996: p. 97) agrees with Daniel Lerner when he writes that:

Modernization as a concept began as Europeanization, but Americanization soon became the common stimuli of the Atlantic or Western civilization. The First World-versus-Third World nature of the conflict has become highly inconsequential. The world has become a global village or community. A strong sense of community characterizes and determines their institutions and human interactions. Everybody knows practically everybody else’s affair, and reflections on everybody’s behavior have an impact on its own and reflections on everybody else. Membership of such societies implies acceptance of mutual obligations, rational dialogue among nation-states in terms of technological advancement and a level of accountability that minimizes the incidence of anti-social behaviors. The structure of traditional African societies affords far greater logical coherence than the pseudo-Western, modern substitutes have been able to ensure.

Arguing further Owomoyela (1996: p. 101,102) insists that:

Traditional communities were bastions where each member could feel secure and confident of succor from other members if he or she was in need. Traditional societies offer individuals greater social security than they can hope from the modern state. The communalistic ideal was a reality long before Marx and Engels formulated their theories, and the African experience demonstrates its superiority over the modern alternatives of individualism, capitalism and the other components of the modern Western structure. It was moreover superior to what Marx and Engels

proposed, because it thrived on mutuality, cooperation and accommodation rather than conflict.

For Owomoyela (1996: p. 102), “Ali Mazrui has drawn our attention to another reason to prefer the traditional spirit to the modern. He argues that with regards to reverence for nature, the world could learn some useful lessons from Africa. Ali Mazrui opposes that which is based on totemism. This intellectual discourse alarms at the realization of just how hard technology is and has been on humanity and the human environment”. Moreover, Ali Mazrui’s observation on African reverence for nature and the environment is truer of the traditional African than of the modern African, the latter of whom has few qualms about destroying maiden forests and blasting granite, mountains so long as he makes some money from the timber and the gravel.

Development

Development is a situation of improvement in the standard of a people. It is a multi-dimensional process that morally connotes change from a less to a more desirable state. Accordingly, development represents a form of advancement in a state of affairs. It encompasses higher levels of attainment in technology, standard of living, infrastructure, responsible leadership structure, knowledge and health.

Rodney (1972: p. 10) construes “development as economic or material development”. We can see that development is not always positive. There is development in the negative form. But for Rodney (1972: p. 10) “development must be conceived as a multi-dimensional process involving changes in structures, attitudes and institutions as well as the acceleration of economic growth, reduction of inequality and eradication of absolute poverty”. True development must mean the development of man. It is also clear that development does not start with goods and things; it starts with people.

Development stands for improvement in the provision of good roads and transport system, electric power supply, health, housing, portable water, food, qualitative education, good health care delivery system, impartial justice system, industrialization, care of the environment and general reduction of poverty. Development as an event is a process which involves existential conditions of human beings and the consciousness of their immediate environment. Whether development is individual or social, it is ultimately the development of the human person. Individual development refers to the process and event of growth of the individual human person while social development refers to the processes and events of change and progress in the society. Therefore, development is essentially and ultimately about the individual human person and society. This is in reference to the stages of biological, structural transformation of institutions, its growth and progress. Development is also a social phenomenon, for human society is made up of and defined by its cultural identity. Each human society has peculiar culture distinct from that of any other human society. To develop, simply means to de-envelop. The process of development is a critical phenomenon and also the development of society is a complex process.

Development involves generally the evolution of a better life for the members of society. Development was presented as the harmonious progressive unfolding of potentialities of a person a society or a people, in the principles and values by which he/she is a person, a society or a people, in the course and context of its interaction with the environment and with other persons,

societies or people, in pursuit of the realization of its nature and end. Thus Development is all about people and society. It starts with people and ends with people. It essentially refers to the dynamism of society.

Rodney (1972: p. 10) reminds us that “the only path to true human development and liberation for the people of Africa was through the transformation of their lives in a struggle to replace and reshape the neo-colonialist government that dominated human society and prescribed their real existence”

The question as to whom or what is responsible for Africa’s under development is of two levels. To begin with, the operation of the international or imperialist system bears major responsibility for African economic retardation by draining African wealth and by making it impossible to develop more rapidly the vast human and material resources of the continent. The second factor has to deal with those who manipulated the system and those who are either agents or unwitting accomplices of the said system. Walter Rodney’s famous book, *How Europe underdeveloped Africa* is a leit-motif test for the Third World struggle for development in Africa and African liberation. The Third World region has become synonymous with oppression, exploitation, poverty and subordination. Africa should engage in the struggle for a new world order and aggressive economic growth and socio-political liberation. The Third World has become the most abusive and bare-faced form of exploitation, oppression and subjugation

Development implies an increasing capacity to regulate both internal and external relationship. More often than not, the term ‘development’ is used in an exclusive economic sense. The justification for this is grounded on the understanding of economy as an index of other social features. A society develops economically as its members increase jointly their capacity for dealing with the immediate environment. This capacity for dealing with the immediate environment is dependent on the extent to which they understand the laws of nature, on the extent to which they put understanding into practice by devising tools and in a manner in which work is organized.

Rodney (1972: p. 10) insists that “taking a long-term view, it can be said that there has been constant economic development within human society since the origin of man, because man has manipulated enormously his capacity to win a living from nature”. The magnitude of man’s achievement is best understood by reflecting on the use of devising tools (technology) geared towards the progress of human society. This is what is implied when Walter Rodney asserts that every people have shown a capacity for independently increasing their ability to live more satisfactory life through exploiting the resources of nature. Rodney (1972: p. 10) reiterates that “development was universal because the conditions leading to economic expansion were universal”. African technological development is essentially and intrinsically the quest for the people of Africa to manipulate their environment for the sole purpose of the betterment of their living conditions in the African continent.

Everywhere, man was faced in the past with the task of survival by meeting fundamental material needs, and better tools were a consequence of the interplay between human beings and nature as part of the struggle for survival. The overall tendency for African technological development is geared towards increasing production, and at giving points in time, the increase

in the quantity and quality of goods was associated with a change in the quality or character of the society. Another over all tendency of an increased human productions, and with reference to Africa, indicate the universal application of the principle of qualitative and quantitative change; an example which need to be drawn from the Asian Tigers, namely, Korea, China and Japan. But it must be admitted that with time, technological development in Africa as a continent can expand its economic capacity like China and Japan.

The expansion of science and technology can bring about a well being which will give way to a new state of human society and human society has always been the case that the expansion of the economy deals eventually with a change in the form of complex social relations. Karl Marx believed that technological progression and assimilation has an overall evil tendency, in the sense that, the increase in the use of industrial machines will definitely lead to a displacement of man's labor. Labor presupposes the epitome of the human species. Man, for Karl Marx, is a specie-being. The greater quality of goods and services were based on the acquisition of skills and human inventiveness. Man can only be liberated in the sense of having more opportunity to display and develop his talents. Technology will make human society less hardened and less uncertain and members of the society will potentially have greater choice over their destinies all of that is involved when the word development is used. Some critics simply believe that technological progression and assimilation and the evolution of human society is threatened by modernization and industrialization and human society will eventually come to a halt.

Furthermore, the Guyana scholar, Walter Rodney reminds us that the notion of revolution and class consciousness must be borne in mind when it comes to examining the situation of the modern worker and peasant classes in Africa. Rodney puts it succinctly clear that for the greater part of African history, the existing classes have been incompletely crystallized and the changes have been gradual rather than revolutionary. What is probably of more relevance for early African development is the principle that developments over the world's territories have always been uneven. Rodney went further by saying that while all societies have experienced development; it is equally true that the rate of development differed from continent to continent and with each continental different part increased their command over nature at different rates. There are certain factors which tend to militate against Africa's quest for technological development or progression and assimilation; this deleterious implication is of two sides, the environment and the super structure. This is to say, human beings battled with the material environment, they created forms of social relations, forms of government, patters of behavior, and systems of belief, which together constituted the super structure which was never exactly the same in two countries or societies. An example is the political and religious patterns that affected each other and were often intertwined.

The Third World Dilemma and African Liberation: Emerging Issues in Africa

Baradat (2008: p. 245) "voices out his view that although the various developing world countries have unique qualities; they also tend to exhibit certain ideological traits in common. In the past decade, many underdeveloped states have experimented with democracy but the lack of political and economic stability has already defeated several of these efforts and threatens even more". Leon Baradat averred that developing world countries tend to evolve unique political and economic systems. Under the most pleasant circumstances, some developing world states may

gradually improve their economic and political systems enough to maximize the benefits for all their citizens. According to Baradat (2008; P. 245):

During the Cold War the pre-modernized states were often referred to as the Third World. The term was certainly not coined by people of the underdeveloped countries themselves, since it implies subordination. The term “Third World” is no longer appropriate, if it ever was. Today the term ‘Developing World’ is used to refer to the pre-industrialized nations. Among the developing world states are Bolivia, Nicaragua, Nigeria, Ghana, Malaysia, and many other world is characterized by a bewildering diversity that virtually defies adequate generalization. What is mostly synonymous with the African continent is the problem of poverty. But there are similarities, however, and perhaps the most comprehensive similarity among these countries is poverty.

The Malthusian calamity of population growth far exceeding the food supply is pressing hard on this sector of the world. Baradat (2008: P. 245) gives a timely warning that “hence, even in its most obvious commonality, poverty in the developing world is fraught with contradictions and exceptions. The Third World States were characterized by the grip of colonialist imperialism and Cold wars of national liberation were fought to loosen the colonialist’s grip of Asia and Africa. Imperialism and neo-colonialism has been a major problem to Africa”. Imperialism was a crippling influence in the Developing World. Baradat (2008: p. 245) affirms that “it was not only politically and economically oppressive; but it tried to destroy the cultures, the social structure, and the political systems of the colonies”.

The Third World states were faced with a denigrated spirit and ignominy by their colonial masters. This prompted Baradat (2008: p. 247) to state in no uncertain terms that “the imperialist interlopers ignored the values of the people of their colonies. They minimized their histories, denigrated their traditions, disparaged their religions, and blatantly asserted Western superiority”. Africa as a continent must begin to toe the line of viable alternative for development. For Baradat (2008: p. 248):

The aspirations of these new African states were articulated in complicated hybrids of Western ideas and traditional values and institutions. The Third World states suffered severe identity crisis resulting from cultural imperialism they endured. The developing countries lack the funds for domestic capital investments and therefore, are forced to encourage foreign aid and investments, even though experience has painfully taught them that foreign influence and aids can become oppressive. However, understandably, this dilemma makes the people of developing countries defensive about their states in world affairs.

Consequently there is the need to ensure good government policies that will minimize and regulate incessant migration of people from a region or a country as an instrumental political task. Consequently, people of the developing world have become even more focused on their own economic, social and political difficulties, science and technology inclusive. There is therefore the need to free themselves from the present shackles of colonialism and imperialism and also to see these twin evils as prominent goals. Africa is a crisis ridden continent. She is being ravaged by conflicts. Part of her ethnic, economic and political problems must be addressed in order to restore broken cultures, political independence, economic self sufficiency, and self-esteem. The reasons for myriad of conflicts in Africa are varied and complex, but essentially they revolve around ethnic, economic and political problems.

Marxist ideology has become the main path way by which Africa can wrestle against poverty, ignorance, and powerlessness among the masses. Little wonder, Baradat (2008: p. 248) strongly defends the view that:

Poverty is probably the most common single feature in the Developing world. In fact, the situation is becoming very complicated and potentially catastrophic. The on-going population explosion combined with a lack of capital, changing economic nature of the current era, neocolonialism and foreign aid have already been described as another African dilemma ravaging the continent of Africa.

One major problem to African development is the role played by International Corporations. For Baradat (2008: 248):

Certainly, among the greatest threats to the independence of the Developing World countries, however, is the role of international corporations in the political affairs or equation of the emerging states. The power relation between the International Corporations and the host countries is frequently so uneven that the developing nations of the world find themselves needing those companies more than the companies need them, and they are forced to sell their labor and resources at what they consider unfair rates. This labor market relation is one of the major causes of migration to industrialized countries.

History of thought reveals that once a corporation has made heavy investment in developing country, it understandably becomes interested in its politics. This interest sometimes leads to improper involvement in the domestic and international political affairs of the host country, evoking charges of oppression, exploitation, and neocolonialism. Although, many factors such as national tradition and cultural habits are important and the basic point is that the most fundamental source of the problems plaguing the fledging democratic state is economic. Democracy, with its need for tolerance and its requirement for public consensus, often does not fare well during periods of severe economic privation. Many social and political theorists like Leon Baradat continue to emphasize the brute fact that , if, however , the long-term economic difficulties in the Developing World are not overcome, soon a new era of social insecurity could cause old demons- or perhaps, yet –to- be- imagined totalitarian ideologies to arise.

The Dialectics of Migration and African Technological Development

This intellectual discourse is predicated on the dialectical method, the formal method used in examining two opposing ideas in order to find the truth. It is the method of arriving at the truth by starting a thesis developing a contracting antithesis, and combining and resolving them into a coherent synthesis. The history of mankind reveals that uncontrolled migration can be a disadvantage measure to any country's quest for technological advancement and development. The Marxian critique of the process of dialects reflects on the scientific-empirical process of inherent social contradiction. The dialectical method is predicated on experience and observation as a systematic method of argument or exposition that systematically weighs contradictory facts or ideas, here we are talking of migration and technological development with a view to resolving their real or apparent contradictions or differences.

The function of philosophy is simply the logical process of the reconciliation of contradictions either of truths, beliefs or historical processes. The dialectical method relates to the philosophy of relating to logical disposition. Dialectics is the art or practice of debate or conversation by which the truth of a theory is arrived at systematically

The pertinent question is, what is the relevance of dialectical method in connection with migration and African technological development? The answer is basically controvertible but quite simple. It presupposes the dialectical nature of social change as a result of any inherent internal contradiction with reference to the African dilemma. This dialectical nature of social change relates to how Africa as a continent can definitely imbibe the human agent, the spirit of social change. Change cannot take place by itself. Change can only take place through the human agent. African governments should put certain strategic policies in place to check incessant migration in Africa. Migration in Africa has reached a crisis-point in the sense that we are facing the problem of brain-drain and underdevelopment.

Walter Rodney gave an explicit view in his book: *How Europe Underdeveloped Africa*, that African culture is not antithetical or an impediment to African technological development. What is definitely antithetical to African technology is the lack of adequate planning, poor socio-political and economic policies among African countries. African culture can definitely blend with our drive or quest for African technological development, if we still understand technology to mean the application of science to guarantee the well-being of mankind in our material world. According to Crocker (1998: p. 39):

Development ethics is ethical reflection on the ends and means of socio-economic change in poor countries and regions. Development is the process which should be reconceived as a beneficial change, usually specified as alleviating human misery or suffering and environmental degradation in poor countries. Development philosophers and other ethicists formulate ethical principles relevant to social change in poor countries, analyze and assess the moral dimensions of development theories and seek to resolve the moral quandaries raised in development policies and practice.

There are several sources for moral assessment of the theory and practice of development. First, beginning in the 1940s, activists and social critics such as Ghandi in India, Raul Presbisch in Latin America and Frantz Fanon in Africa criticized colonial and orthodox economic development. Gunnar Myrdal, has argued, that development needs to be redefined, demystified, and thrust in the arena of moral debate. Africa as a continent is facing the problems of hunger, poverty, underdevelopment, and international or global justice.

Crocker (1998: p. 39, 40) reviewing Amartya Sen argues on the same line of thought when he writes that:

Development should be understood ultimately not as economic growth, industrialization or modernization, which are at best means and sometimes not very good means but as the expansion of people's valuable capabilities and functioning: what people can or cannot do e.g. whether they can live long, escape avoidable morbidity, be well nourished, be able to read and write and communicate, take part in literary and scientific pursuit, and so forth.

Crocker (1998: p. 32, 33) reasoning in consonance with Escobar reasons as follows and correctly too that: "using the concept of development, instead of, for example, progress, transformation, liberation, or post development as an alternative to development sounds correct. Development should be refined as a multi-disciplinary field with both theoretical and practical components that intertwine in various ways, technology inclusive.

Technology when placed side by side with development are two fundamental concepts that emphasize a commitment to alleviating worldwide deprivation. Technology transfer can be both an obstacle and an aid to authentic development strategy.

Appraisal of African Technological Development

The problem of African technology development is caused by poor migration policy and that is a major drawback to Africa's capacity building. Technology is the application of scientific knowledge which acts as a tool for development for the betterment of human existential condition. The problem associated with Africa as a continent is a multifaceted one. It goes beyond technological development and innovation. African leaders should step up their political and economic policies to help African economic transformation and by so doing strengthen scientific and technological capacity, enhance capacity building, which will reduce the unnecessary dependence on natural resources or raw materials. Technology will make the economic knowledge-base to boost investments. This will also improve agriculture, industries, goods and services and hammer on other related innovations in order to eradicate poverty and achieve sustainable development in Africa.

Moreover, another main objective is to ensure that African countries contribute to the global pool of scientific knowledge and technological innovation. In addition, it provides both the political and policy leadership for the implementation of African science and technology. The roles of African leaders entail taking science and technology seriously as drivers of economic development, and sustainable development. This lack of scientific and technological drive or advancement is one of the greatest impediments in driving African economic development and rapid sustainable development in Africa. Technological development, progression and assimilation are crucial elements to the growth of African economic development through capacity building. Science and technology in Africa are inseparable and indispensable handmaids in human history. The first evidence of tool used by our ancestors is inferred to in the valley across sub-Saharan Africa.

Currently, forty percent (40%) of African born scientists live in predominantly European countries and other continents of the world. This has been described as African brain drain dilemma. The continent has augmented its collective science funding by about fifty percent (50%) in the last decade, but this is not enough to meet the goal for rapid human development. Although, technology has its greatest impact in the United States and Europe, while its presence in Africa is still very limited, as the continent lags behind, other regions of the world in terms of funding technological development and innovation soar highest. However only six African countries: Morocco, Egypt, Senegal, Madagascar, Tunisia and South Africa have a giant stride in their quest for technological development goals. In recent years, a greater number of African countries have hitherto embraced technology as a driver of economic development. The advancement of science and technology should be seen as a high level platform for developing policy framework and prioritizing on science and technology and drive for African development. The main objective of this intellectual discourse is on the need for African countries to discourage migration for us to meet up with the challenges of African technological development which is to enable Africans harness their human and natural resources to its optimal level. The application of science and technology is to enable us mitigate physical barriers for communication and to allow humans to interact freely on a global scale.

However, not all technology has been used for peaceful purpose; the development of weapons of ever-increasing destructive power has progressed throughout human history. Technology has negatively affected societies and its surroundings in a number of ways. Technology has helped in developing advanced economies and the rise of leisure class. Technological development has resulted in the production of unwarranted by-products such as weapons of mass destruction, pollution of various kinds and it depletes natural resources, to the detriment of planet earth. Rapid implementation of technology has helped to influence the recent technological developments, including the printing press. The telephone and the internet have lessened continued human suffering. Human technological progression and assimilation is beneficial to society and the human existential condition. Technological development, generally, has a beneficial effect on human society and the betterment for the human existential condition.

Karl Marx was seen as a techno-optimist. Some critics believed that technological societies are inherently flawed with certain plethora of problems due to the prevalence of science and technology. They suggested that the inevitable result of such a society is to become ever more technological at the cost of freedom and psychological health.

Martin Heidegger, for example, hopes to reveal the essence of technology in a way that will not confine us to a stultified compulsion to push on blindly with technology. Heidegger could be referred to as a techno-pessimist. Some of the poignant criticisms of technology are found in what are now considered to be dystopian. Technology can be construed as an object of political debates.

The value of a society and new technology often raises new ethical questions. Philosophical debates have arisen over the present and future use of technology in the society, with disagreements over whether technology improves the human condition or worsens it. Technology is the making, modification, usage and knowledge of tools, machines, techniques, crafts, systems and methods of organization, in order to solve a problem, improve a pre-existing solution to a problem, achieve a goal, handle an applied input or output relation or perform a specific functions; it can also refer to the collection of such tools, including machinery, modifications, arrangements and procedures. Technologies significantly affect human as well as other animal species to control and adapt to their natural environments. The term can either be applied generally or to specific areas: examples include construction technology, medical technology and information technology. The human species use of technology began with the conversion of natural resources into simple tools. Its major aim is to manipulate nature for the betterment of human existential condition.

The Question of Migration and African Technological Development

Migration, if not controlled by any country, has a deleterious effect on a country's quest for development. Migration in African continent has led to brain drain, disconnection of technological progression and assimilation. Technology has a great effect in Africa's quest for rapid socio-economic development. Technology is like a bomb shell that must definitely explode in order to kick start scientific and technological progression and assimilation. One of the major objectives of technological advancement and development is the manipulation of nature. Nature is being manipulated through the help of great advantage of technology and development.

African culture does not retard our quest for technological development and advancement. Technology should be the seed that must be planted to enhance the rapid well being of Africans in the African continent. The question of Africa or West is simply the politics of difference. Africans should not embrace all the bad sides of Western culture, but they can emulate the Western notion of technology and development. Technology and development are meant to enhance human well being. It is the sustenance of the existential conditionality of any people in the society.

Some have highlighted the benefits of globalization as being sourced from Western technologies and development. Globalization, as construed is therefore lopsided process of world change which constitute a negative influence in Africa where poverty, diseases, hardship, lack of infrastructure, inadequate gross domestic product, low per capita income, political instability and misrule have held up tenaciously the socio-political progress of Africa's quest for technological progression, assimilation and economic advancement.

The current level which technology has upgraded itself has raised some problems. Technology is not just a matter of technology alone. It is deeply contoured by economic growth, social progress, elements of national development, the betterment of the existential human condition and political stability. Technology in any case is a product endeavors and therefore ought to be handmaid of human conviviality. The altruistic value of enhancing the joy of business of living in the consciously respectable beauty of our African world is predicated on conducive human betterment in their existential condition. African countries should aim at ensuring the need for economic progress, technological advances, and political stability. Issues and aims will then not only get redefined but will also become achievable and worthy as far as our existential human condition is concerned. Technological development should reverse the rampant pauperization of Africa by modernization and industrialization strategies.

The present world order is a confrontation of two world views vastly differing and different from one another. The concept of development does not address the problems of the historical world order as it relates to Africa, rather it further enhances the enslavement of Africa. But the poignant issues in the 21st century, is the deleterious implications and the challenges of development for Africa and the citizens of the Third World region in general. The concept of development is the off shoots of the idealism and concepts of brotherhood of mankind arising from the fact of global trends in human socio-political and economic relations. As the people of the world embrace the beautiful idea, each race and people ask rational questions over its place, relevance, and role in the new world order.

Synthesizing the idea of technology and development in all its ramifications the economic, the social, the cultural, and the political, one easily discovers that its foundation is laid down in the philosophy of inclusiveness. What had plagued Africa and the Third World region is the dualistic interpretation of the word development and underdevelopment, civilized and uncivilized world. Dualism presupposes that the existential condition of people in the world is polarized, is double sided, it is two sided. However, the philosophy of justice and equity and fairness has created a polarized or dualistic process of world order.

Technology, in the sense of globalization has a system of world socio-political, cultural process and the idea of borderless economy. Hence the era of capitalist expansion from the centre to the periphery with mountain of development for Europe and the U.S and the valley of underdevelopment for the Third World has reached a crisis point of diminishing returns. A new global vision of even development and modernization seem to be the purest and better option in a world that is necessarily becoming one through high-tech communication. This global world vision is the vision of high technological values, of human rights and humanity of peoples and races, economic equality and employment, political stability, good health, education and self, collective development of all from global perspective. Technology has hitherto not be the exclusive preserves of the few privileged in advanced nations until recently when it dawned on the latter through changes beyond Africa's control, that Africa must of necessity co-habit with other countries of the world- East, West, North and South.

Apparently, Africa and its institutions have been overtaken by new era challenges and there is need to design new strategies and new institution for a new era which technology seems to be apparently the answer. But in what way will it be for the universal and optimum benefit of all races in a manner that would engender African development and freedom from imperialism in Africa in connection with the rest of the world. This requires new reforms and institutions that would complement or substitute existing ones. The convergence of humanity in our contemporary social world presupposes the technological and scientific era of the renaissance, with this era only adding impetus to recent development in science and technology.

The world recognizes the need for technology because social and economic problems are epidemic viruses that know no international boundaries. A socio-economic issue of any particular country or nation as wealth or fortune of any nation is not estimable without a comparative assessment with that of the entire committee of nations. This simply means that what affects any particular country be it political, economic, social, cultural, science and technology might affect other parts of the world. With the aid of information travel technology, cross-cultural relations have become an important rhythm of human existence.

The implication of the notion of technology is a question of a global process of world order and to return it into an historical opportunity for greater wealth creation and distribution, and a tool for larger integration in the world economic system is inevitable. But there is the other side of the dubious tossing coin, which borders on the implication of scientific and technological advancement and development for African development and freedom.

How will Africa and African governments respond to scientific-technological advancement for the betterment of the existential human condition? There is no doubt that technology is a blessing to mankind but currently it still presents certain plethora challenges or problems to the developing countries. The point is that though the capitalist global economy excels in creating wealth, it still leaves many people in Africa feeling powerless and insecure in the face of economic forces they cannot control. The capital wealth has never been eventually distributed either at intra-individual levels or at international levels. Consequently there are poor people and poor nations in the context, whereby people are forced to migrate to other part of their worlds. Poor technological progression, assimilation and advancement in Africa and the economy of the African nations is a poor one when compared with the Western economy in the global capitalist

system and it is by virtue of this adverse relations and disconnections that African states and peoples are reduced to poverty stricken continent since they cannot get enough advantages of the global capitalist order. The question of what to do to integrate the poor nations and the advanced nations into the world capitalist system is a question that borders on the challenges of world global order. Capitalism now spreads worldwide, it is essential that ownership be mobilized to help solve our most pressing social, political, economic and environmental problems.

Conclusion

In a final and critical analysis, the break through to a new stage of human development is dependent upon man's technical capacity to deal with the natural environment. It is also to be borne in mind that peculiarities in the super-structure of any given society have a marked impact on the rate of development. Africa should take a clue from the logic of the global capitalist system in order to fulfill her objective of acquiring more and more capital. Capitalist took a greater interest in the logic of science which could be harnessed in the form of industrial machinery to work and make profit on their behalf. The rapid tempo of technological development in Africa could make amends for the period of subjugation when economic, scientific and technological growth was misdirected and retarded. Consequently the question of technological development in Africa was marred by capitalist imperialism of the West and Europe. Rodney (1972: p. 10) insistently holds his grounds that "It is important to bring to the fore that workers or peasants of any society have now become the most dynamic force in world history and human development".

Development becomes simply a matter of the combination of given factors of production, land, population, capital, technology, specialization and large scale production. The pertinent question or million dollar question is: what is the relevance of dialectical method in connection with migration and African technological development? The answer lies in the dialectical nature of social change in relation to how Africa as a continent can imbibe the Marxist spirit. Social change is guaranteed by human agent. African culture is not antithetical or an impediment to African technological development. Technology simply means the application of science to guarantee the well being of mankind in our material world through the manipulation of our natural environment. The factors militating against African countries are as follows: lack of adequate or effective planning, corruption, poor economic policies. Poor development strategies, lack of industrialization, environmental pollution, religious fanaticism, lack of good standard of living in order to discourage the mass exodus of Africans, the lack of implementation of good governmental policies that is people oriented, the traps of global justice due to global capitalist system or international imperialism, natural disasters or epidemics.

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