Published by European Centre for Research Training and Development UK (www.eajournals.org)

APPLICATION VENUES OF COUNTER-CURRENT DEVELOPMENT MODEL (CCDM) IN DEVELOPING COUNTRIES: IMPERATIVE FOR THE KNOWLEDGE DRIVEN ECONOMY

Chukwubuisi H. Chikwelu

National Centre for Energy Research & Development, University of Nigeria Nsukka

Chinwe O. Ezeani

Nnamdi Azike Library, University of Nigeria Nsukka

Bernedeth N. Ezebge

Department of Social Sciences, University of Nigeria Nsukka

ABSTRACT: This paper explains the nitty-gritty in the application of Counter-Current Development Model (CCDM) for the developing economies. It examines several ways of CCDM applications such as visionary and transformational leadership, competitive human capital development, research for sustainable development, productive economy (energy, agricultural, technological and industrial developments were highlighted), development and modernization (food security/modernization and national security, peace and unity); and then feedback. All these were illustrated with diagrams for conceptual and theoretical frameworks. Other CCDM application venues include: provision of conducive environment for competitive economic activities; need for people-centred political system and issues of revolution. It concludes with recommendations on peaceful revolution strategies.

KEYWORDS: Counter-Current, Development Model, Productive Economy, Transformational Leadership, Development, Peaceful Resolution

INTRODUCTION

Counter-Current Development Model (CCDM) is a socio-political economy model formulated by Chikwelu, et al (2014). This model is a paradigm shift from *down-current movement* which is a passive movement caused by outside forces that results in underdevelopment to *counter-current movement* which is activity-based movement caused by conscientious efforts towards steady economic growth and political stability in a given nation. The central thing in the Counter-Current Development Model (CCDM) is knowledge; as a result of the empowerment of the people, the citizens of a nation. This is knowledge for building a productively competitive economy to emerge in any country there must be good governance – governance centred on the people's welfare and uplifting their standard of living; anything short of this is bad governance and economic mismanagement.

Published by European Centre for Research Training and Development UK (www.eajournals.org)

Counter-Current Development Model Equation

For a fuller understanding of the concept of Counter-Current Development Model (CCDM), Chikwelu et al, (2014) had presented and explained the CCDM equation thus:

$$A = \frac{f_2 - f_1}{m}$$

Where *A* is the rate of accelerated forward movement, f_1 is the force of the current, f_2 is the counterforce applied by the swimmer and *m* is the inertia (that reluctance) of the swimmer. Observe that A is directly proportional to the difference between the opposing forces $f_2 - f_1$.

Let us assume that f_1 is constant. Now, difference is governed or controlled by the applied force of f_2 , i.e. the swimmer. The counter-current movement is activity-based; while down-current movement is caused by the current and outside forces. These are illustrated by Chikwelu et al, 2014 in figures 1 and 2.

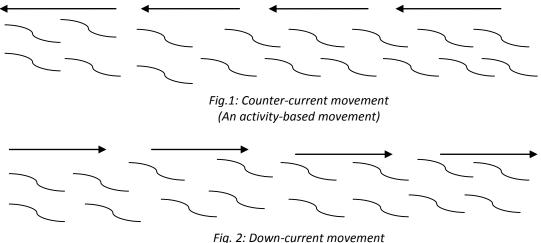


Fig. 2: Down-current movement (Movement caused by the current and outside forces)

It is against this background that this paper tends to explore such venues of CCDM applications for visionary leadership as qualities of good leaders, economic competitive consciousness, provision of conducive environment and strategies for peaceful revolution. When CCDM is applied through these areas it will result in economic boom and political stability for any developing nation.

Justification for the Research

Nigeria and most of the developing countries have been experiencing economic woes and development failures over the years. This is because of lack of seriousness on the part of these

Published by European Centre for Research Training and Development UK (www.eajournals.org)

countries' leadership who have failed, as a matter of fact, to create a conducive environment for sustainable development to thrive. Countries like Malaysia, South Korea, Japan, Indonesia, India, etc, have increased their per capita income since independence, Nigeria and some other developing countries are still crawling economically. Omoh (2013) stated that "While these other countries have reached a self sustaining growth, Nigeria is trapped in poverty as a result of the mindlessness of her leaders. The effect is that the living standard of the populace has declined and dragged more Nigerians into the poverty line." He further asked: "Was it not possible to have reversed whatever the colonialists left behind in fifty-two years? Is it not shameful that only about five percent of the Nigerian population takes ninety percent of its resources while 95 percent are in poverty? Leadership is Nigeria's problem, not the colonial masters." He concluded.

However, Ezekwesili (2013) revealed that:

Economic evidence throughout numerous researches proves that one key variable that determines how fast nations outgrow others is the speed of accumulation of human capital especially through science and technology education. No wonder these same countries like South Korea of fifty million people has a GDP of \$1.12trillion, Brazil of one hundred and ninety six million has \$2.48 trillion; Malaysia of twenty eight million people has \$278.6billion; Chile of seventeen million people has \$248.59billion; Singapore of five million people has \$318.7billion. Meanwhile with our (Nigeria) population of 165million people we make boasts with a GDP of \$235.92billion – completely way off the mark that we could have produced if we made a better set of development choices.

And so, the inability of these developing countries (Nigeria inclusive) to adopt a well-rounded development model that will correspond to their local conditions and economic realities has really kept their economies backward and decrepit. Therefore, they have not been able to effectively formulate and consistently implement policies based on technology-driven education which will progressively and cumulatively lead these countries to establish a productive and knowledge driven economy and also self-reliant, integrated sustainable development. In fact, what we see now cannot do us proud because of lack of transformational leadership, poor productive capacity, low infrastructural facilities, etc. All this, has made the economies of the developing countries dependent and weak.

LITERATURE/THEORETICAL UNDERPINNING

Problem of Nigerian Leadership

It has been generally observed that a nation's economic survival depends largely on the leadership whose responsibility is to harness and manage all available resources. Weak leadership results weak governance which in turn results poor nation. Eboatu (2010) lamenting on the problem of leadership in Nigeria said:

The question has been asked thousand times: we have everything but what is the problem? "The way I look at it is that we are not serious as a set of human beings. I think is that lack

Published by European Centre for Research Training and Development UK (www.eajournals.org)

of seriousness that is the problem because if you talk of other so called problems we have in this country, these problems are trivial. Tribalism! What is tribalism? Tell me, is there any country in the world where you don't have tribes? There is no place you don't have tribes. In Britain where I lived, there are four distinct nations living together called Great Britain and they have different languages. The Scottish man speaks his own language; the Welsh man the same thing; the person from Northern Island speaks different language; the English person also. But they are living together, working together and fighting together.

We believe that this "*lack of seriousness*" referred to by professor Eboatu emanates from lack of visionary and transformational leadership in Nigeria and also lack of enough competitive and productive knowledge among the people. When people are equipped with productive knowledge, they would begin to think what to do to develop and improve themselves and their country. And by so doing, they will positively change their country and their development will be sustainable. But when people are not empowered to be productive, they will begin to gossip and point accusing fingers and preoccupy themselves with the issues of ethnicity and religion which often affect their sense of judgment and making right decisions.

The way Forward for Nigeria and Developing Economies

Commenting on Nigerian leadership, Okonjo-Iwuala (2011:1) states: "We cannot yield the progress of this country to those who want to keep it in stranglehold, we have to move forward; the vast majority of Nigerians want to see changes in the economy like emerging economies in the world". Without doubt, there is urgent need for attitudinal change and evacuation of corrupt mindset and street-flamboyant etiquette from most of the narrow-minded leaders of the developing countries who hustle for political power as if that is the end of development process itself and not the means to sustainable development.

In fact, every nation in Africa (Nigeria inclusive) needs a solid and sound educational system where teaching and learning MUST be practical and activity oriented and not merely theoretical as one experience presently. This is why most of these countries continue to experience educational crises because they fail to ask themselves this simple question: education for what? This question becomes imperative because education should be well structured and organized aimed at producing highly skilled, qualitative and globally competitive human capital or manpower that will be utilized in all areas or sectors of a nation's economy such as Agricultural sector, energy sector, technology and industrial sectors. This is why education MUST be well planned, organized and the people mobilized and empowered for the above purpose in order to make the economy productive and competitive.

In other words, knowledgeable people, i.e., high quality human capital makes the economy of any country productive and competitive. Ezekwesili (2013:6) states that:

Countries invest in the human skills that can help their citizens use modern technology and eventually rise to the stage where those same citizens can develop their countries' own technology. A country's educational system is the key to its long-run development".

Published by European Centre for Research Training and Development UK (www.eajournals.org)

In fact, knowledge is the master key to development. This is why every country, especially the developing or underdeveloped country should endeavour to engage in knowledge management which involves planning, organizing, controlling and directing knowledge acquisition and utilization for sustainable and self-reliant development which again involves time and resources.

Talking about development, Ogban-iyam, (2004:6) asserts that "Development is not static; it is dynamic; it needs innovation and renovation; it needs inventions and discoveries. However, we must always bear in mind that, the pursuit of knowledge is the pursuit of a better sense of reality or aspect of reality"

METHODOLOGY

Survey and descriptive research designed was employed using documentary research which represents secondary sources of data collection. We also adopted interview technique we interviewed some renowned scholars in the field of science and technology, to elicit some important information. Such personalities include Professor Eboatu (former Deputy Vice Chancellor-Administration) Nnamdi Azikiwe University, Awka; Professor Oparaku O.U. (former Director of Energy Research Centre, University of Nigeria Nsukka (UNN); Professor Chukwuma G.O. – Head of Department of Agriculture and Bioresource Engineering, Nnamdi Azikiwe University Awka and visiting Professor of same department in UNN.; Agbo Solomon – Head of Photovoltaic Unit – Energy Research Centre, UNN.

Our methodology involves critical scrutinization and examination of existing data using qualitative descriptive analysis which is reading meaning into what others have written on our subject matter (i.e. all the relevant data gathered) and systematically, summarizing, and examining the relationship among the variables as contained in the data gathered to ensure their validity and reliability for the study.

RESULTS/FINDINGS

Illustrating Counter-Current Development Model Application Venues

Counter-Current Development Model (CCDM) can be illustrated using an activity-based diagram as shown in *Fig.3*. It is a diagrammatical representation of reality which may make the application of the model more practical and goal oriented. For purposes of application; visionary leadership (government) is at the base to give support to every other meaningful activity in the country rather than being at the top. Development and modernization being the product of all these is observed glaringly at the top of the pyramid. For it to be counter-current, leadership should be at the base to support every other activity rather than being on top to suppress.

Published by European Centre for Research Training and Development UK (www.eajournals.org)

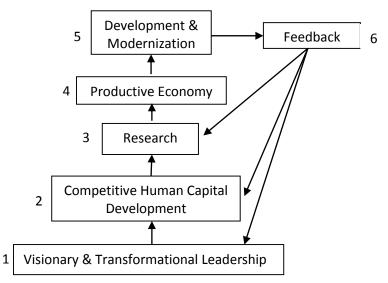


Fig. 3: CCDM Application Venues for productive and competitive economy

For further explanation of the above diagram, it is worthy of note that leadership is at the base because it is the duty of a visionary and transformational leadership to create a conducive environment for integrated and sustainable development to thrive in any country. More so, in Counter-Current Development Model we advocate a servant-leadership. It is evidenced that productive economy gives birth to global competitiveness and sustainable development.

DISCUSSION

Visionary and Transformational Leadership

The central thing in the Counter-Current Development Model is KNOWLEDGE – knowledge as a result of the empowerment of the people, the citizens of a nation. This is knowledge for building a productively competitive economy, knowledge for employment generation and wealth creation. And so for a productive economy to emerge in any country there must be good governance – governance centred on the people's welfare and uplifting their standard of living; anything short of this is bad governance and economic mismanagement. Leaders who are to be entrusted with political power to pilot the affairs of the people must be very knowledgeable (must have received training in some courses such as: political economy, etc.) because state power can heal or kill, depending on the possessor's conception of politics and state power. Therefore, in voting in a political leader into office, the following qualities should be considered thoroughly. Such aspiring leader must:

- a) Be a visionary and knowledgeable person who has a good knowledge of history, politics and global political economy.
- b) Be a man of integrity who understands the essence and substance of politics.

Published by European Centre for Research Training and Development UK (www.eajournals.org)

- c) Be a humane fellow who loves his country and his people dearly and always ready to wipe away their tears; and this will enable him to be transparent and always determined to defend the country's sovereignty.
- d) Be a responsible person who is eager to sacrifice and serve his people conscientiously without compromise and this means that he will be credible and accountable.
- e) Be a person who will embark on sound implementable policies for the welfare of his people; and there must be good policy continuity, especially those geared towards meaningful human capital development, agricultural and infrastructural development, etc. This means that he must be a selfless person who encourages economic sustainability.
- f) Be a person whose subordinates must be trustworthy individuals with very good track records, and not self-centred, applause-seeking political sycophants. This means that the aspiring leader must be a serious-minded and forward-looking person who encourages excellence, merit and competence.
- g) Not be a narrow-minded ethnic chauvinist who is hoodwinked in the turgid thinking that unless his ethnic group produces the country's president or the governor of his state everything becomes null and void and of no effect.
- h) Be a wise and humble person who is always eager to learn and who must be ready at all times to look beyond his immediate horizon or boarders to enable him understand what other nations are doing, especially, newly industrialized countries of the world.
- i) Be a person of good character and integrity who must be elected into political office not to be feared but to be trusted, loved and respected by the people; and who must have the disposition to deliver the people out of despondency, slavery, poverty and disease.

Competitive and Human Capital Development

As earlier stated, Counter-Current Development Model, is knowledge propelled model. This is why the educational framework of most of the African countries (Nigeria inclusive) should be restructured to enable it develop the entrepreneurial skills, the innovative and creative abilities of their peoples for them to be able to contribute and develop competitive economies for their countries in today's knowledge driven global village. Without developing and utilizing such high quality and skilled human capital, no nation will be able to develop a competitive economy that will stand the test of time and unable to be swallowed up by the advanced industrialized economies of the world community. Adewale, (2009) states that, "the world over, human capital forms the bedrock upon which productivity rests". In this knowledge driven global village, Nigeria and other developing countries should not remain in the state of inertia. In terms of motion, inertia is the reluctance to start motion. Any quality in a man that will make him unable to be carried along the desired direction could be likened to inertia. For instance, a person with intellectual disability is in the high state of inertia and for him to be carried along the desired intellectual ability (excellence) such a person must be highly imparted with qualitative and productive knowledge. Only this will make him break out of intellectual inertia or disability, in order for him to conquer his environment himself for common good.

Published by European Centre for Research Training and Development UK (www.eajournals.org)

Therefore, Counter-Current Development Model recommends that the wisest strategy to tackle the issue of economic and technological backwardness in Nigeria and most of the African countries is to aggressively embark on the development of skilled manpower and expertise; those who will progressively turn things around for good; who will internalize and indigenize modern technology to also suit their local environment and attune to the taste of their local peoples. We used the word 'aggressive' above to depict the 'large force' or the 'aggressive force' (in terms of money, resources and good educational policies, etc.) needed to make the educational system in the developing countries (Nigeria inclusive) sound and solid in order to scale up rapidly their human or intellectual capital and make them creative, innovative, productive and competitive. Following the Counter-Current Development Model, let us assume that there is a standard rate of forward motion (or rate of standard growth or development). A person with intellectual disability (or intellectual inertia is expected to apply a large force in order to be able to attain the standard rate of motion (or standard rate of growth or development). Conversely, a person with some measure of intellectual ability will require a less force to attain the standard rate of motion (or standard rate of growth or development) as the case may be. Most of these developing countries are very backward in terms of development because of retardation.

This is why education for these countries must be well funded and the laboratories well stocked with relevant science and technology equipment. Teachers, who must be highly qualified, will be well paid and motivated to enable them give their best to the students. The educational systems of these countries must therefore be activity-based such that will equip the students with entrepreneurial skills and can-do spirit that would enable them use effectively their cognitive, affective and psychomotor domains. And so, through their ingenuity and expertise, they can help themselves earn a living and help their countries' economies to develop sustainably in this globalized economic and technological competitiveness. A <u>developed society is inextricably linked to its developed human capital</u> and they reinforce each other; they are mutually supportive and cannot be separated. Figure 4 illustrates this.

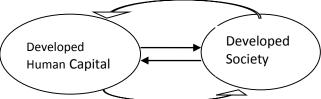


Fig. 4: A Developed country and her human expertise are mutually supportive

Research for Sustainable Development

Counter-Current Development Model demands that research for sustainable development must be taken seriously. This is because research is inseparable from development. Research, therefore, is very important for countries that are desirous to join the developed and industrialized nations of the world community. Our interview with Oparaku (2010) reveals that "research can be said to mean exploration of knowledge and knowledge is infinite". He emphasized that" our knowledge is limited...that means as human beings we continue to explore knowledge. We continue to search

Published by European Centre for Research Training and Development UK (www.eajournals.org)

in order to understand our environment better both in arts and sciences". According to him, research is "trying to find out more about environment, about nature, to use the knowledge we gain to improve our environment, to improve the standard of living of our people". In fact, any country that wants to develop sustainably must engage in meaningful research and development activities. And so, sustainable development will be virtually impossible, and in fact, unattainable in a country that gives less value to research and research findings. In such countries, research findings are usually not utilized and research activities are not given meaningful financial support they deserve.

This, obviously, is the case with most of the developing countries. Research for sustainable development seems, more or less, useless to them because they depend heavily on importation of virtually everything they need, thereby rendering their economies unproductive and uncompetitive in this era of globalization. This is why these developing nations should endeavour to move forward in their development activities by giving priority and direction to scientific research via Counter-Current Development Model. In our interview with Chukwuma (2010) he maintains that "research leads to discovering new ideas or better methods of handling problems". He further reveals that "from history of development in the advanced countries you find out that there is serious emphasis on research and the application of research findings. If any nation tries to brush aside the essence of research and usefulness of research that country cannot develop. Research helps man to conquer his environment and make it more conducive for habitation. It is well known that advanced countries invest heavily on scientific research. To them, it is one of the most important aspects of development processes.

It must be remembered that formally, it was believed that atom was the smallest invisible particle of an element. But through scientific research, it has been discovered that atom contains electron, proton and neutron. So, any nation or organization that wants to improve and move forward economically and technologically must engage in meaningful and purposeful research and other development activities so that it will not remain stagnant. Of course, nations that engage in meaningful technological, agricultural and industrial development cannot cease to finance and give direction to their research activities. The above development activities work in synergies. In advanced countries, industries cannot operate effectively without having link with research institutes or even the universities. For further elucidation, we interviewed Agbo (2010) and he explains that:

It is really difficult to find a country that really goes far without making a lot input in research. I think it is one of the things that make for a distinction between developed countries and the developing nations. You find that most developed countries especially in the western world, where they have peculiar problem, may be with their weather and the environment, they tend to channel their research to solve such peculiar environmental problems. For us in Africa for instance, there are problems that are peculiar to us which will also be very difficult for the western world to give us an answer to it. So, it becomes really very important that we lead such research.

Published by European Centre for Research Training and Development UK (www.eajournals.org)

This is why we discussed earlier that a country, especially, Nigeria and other Africa countries that want to develop sustainably must restructure their educational system and invest heavily on the development of human capital such that they would be utilized effectively and efficiently in all sectors of the economy and in championing research activities and that must be real productive, especially, in the energy, agricultural, technological and industrial sectors, etc. No serious country can do without research. Momah (1999) explains that "the need for qualified, dedicated and motivated manpower for successful research and development programmes cannot be overemphasized".

Productive Economy

In fact, no nation can be regarded as developed if the economy is not productive and competitive. Counter-Current Development Model demands that the following should be given rapt attention in a developing nation.

5.4.1 Energy Development

The availability of energy is one of the major factors that enhance sustainable development in any country. Most advanced countries that have developed their energy sector have really experienced both technological and industrial revolutions; and they are better for it. The importance of energy in national development cannot be over-emphasized. Every developmental effort depends on energy. This is why Akinjide (2011) states that "Any economy without adequate power is living on artificial respiration". Nigeria, for instance is so much blessed with both conventional (fossil fuel) and renewable energy technology sources. Fossil fuel includes: crude petroleum, natural gas, coal, bitumen and tar sands, etc. The renewable and alternative energy technology sources are: solar, wind, biomass, hydro (large and small), tidal power, nuclear energy, etc. Nigeria is located between latitude 4 and 14 degrees north of the equator. This means that Nigeria is well positioned to receive abundant sun and reasonable amount of rain for agriculture all year round.

Most of the countries in the temperate regions have developed solar energy both for domestic and industrial use; but Nigeria and most other developing countries in the tropics have abundant sunshine, yet they have not utilized it as they should. Nigeria, for instance, has both conventional and non-conventional sources of energy and yet they are facing energy crisis. Counter-Current Development Model recommends that the issue of energy should be given 100% attention because energy is like blood for a country. Every development activity depends on it.

5.4.2Technological Development

Technology is power. Therefore, science and technological development is extremely important for any nation that wants its economy to be productive and competitive in this era of globalization. Momah (1999:41) states that: "obviously, it is as a result of the technological know-how of the G-7 or the seven industrialized nations of the world (U.S, UK, France, Germany, Canada, Italy and Japan) that they are ruling the world economically". This is why Counter-Current Development Model recommends that Nigeria and other developing countries should seriously develop their

Published by European Centre for Research Training and Development UK (www.eajournals.org)

human capital (man-power), especially in the area of science and technology and also utilize them efficiently and effectively in national development.

In fact, no country can really develop sustainably without developing its technology sector, otherwise that country will remain perpetually dependent on technologically advanced nations. Today, the world has become a global village due to technological development. Momah (1999:73) states thus: "It is therefore unfortunate that while developed countries are in their fifth technological revolution, Nigeria and the rest of the developing world, are yet to firmly understand the basic rudiments of the first industrial/technological revolution". For now, what is obtainable in terms of technological development in most of the developing countries is not encouraging. According to Emeagwali (2008) Africa's inability to realize its potential and embrace technology has left it at the mercy of the West". In line with the above assertion, Ake (1981) states that:

"Because of the immense technological dependence, which tends to perpetuate itself, it is hard for Africa economies to make much progress in the fight against development because they are dependent on the industrialized countries and on the peculiar monopolistic characteristic of the world technology".

In fact, time has come for Nigeria and other developing countries to set in accelerated motion their train of development by restructuring their educational framework and investing massively on qualitative and productive education of their people, especially in the area of science and technology, in order to resist the efforts of advanced nations continuing to enslave them in a variety of ways because of their control of technology. The developing countries should resist flowing Down-Current according to the dictates of the technologically advanced countries. They should rather apply counterforce to flow Counter-Current and avoid being vulnerable to external control so as to be in control of their destinies. It has been discovered that technological development enhances higher productivity and sustainable development generally, when the right caliber and productive human capital are made available through qualitative education.

5.4.3 Agricultural Development

Any country that wants to develop sustainably must have very solid agricultural base. This is fundamental because a country without sustainable agricultural development will depend on food importation. A serious country with good governance must endeavour to have good and implementable agricultural policies and programmes. For the economy of a country to be very strong and stable it must establish a very solid agricultural sector. Momah (1999:78) states that "agriculture is the basis of industrialization and development worldwide. And a nation that cannot feed itself and grow enough for it and grow enough for its industries is truly not independent". In fact, Nigeria and other developing countries should give more national attention to agriculture which is still very basic in the life of man and the prosperity of nations. Mirani (2010:12) asserts that, "if you can develop and make your agriculture buoyant, you have achieved 80 percent of the desired economic prosperity". In Nigeria, for example, the agricultural sector is still not stable. In

Published by European Centre for Research Training and Development UK (www.eajournals.org)

the 1950s Nigeria's economy was based on agriculture but when oil was discovered, agriculture was abandoned and corruption became an integral part of the system.

Nigeria and most African countries have the potentials and the resources to establish much solid agricultural base which will make their economies very vibrant. This is fundamental because any country that ignores agricultural development will not develop sustainably. As pointed out earlier, agriculture was the mainstay of Nigeria's economy in the 1950s. Then Nigeria was known for its massive and high level production of groundnuts (then referred to as ground pyramids) in the North, cocoa production in the West and palm trees were grown for palm oil and other products in the East. Counter-Current Development Model demands that Nigeria and other developing countries should as a matter of urgency revisit agriculture and breakout from following the wrong economic equation which has retarded their development for centuries now. This countries must therefore live on their own economic development logic which must correspond to their own local realities and conditions.

5.4.4 Industrial Development

Any country that wants to survive in this new-age of "global village" must endeavour to develop its production capacity. Such country must develop its human capacity and technology. Such a country must be a producer and not a consumer society. After the stabilization of agricultural sector, a wise nation will set up industries, especially, small-scale industries; and from small-scale industries, it can move to establish large-scale industries when enough expertise must have been developed for the management of such industries and the sophisticated equipment. The provision of basic infrastructural facilities such as electricity, water, good roads, etc., must receive full government attention. For instance, Nigeria today is experiencing industrialization failure due to many of the factors enumerated above which includes the dearth of industrial raw materials. As a result of these, industries in Nigeria are really closing up. Momah (1999:39) observed that:

"While the rest of the world is re-industrializing and opening up new frontiers in outerspace and ocean beds, Africa, south of the Sahara is de-industrializing. The countries of Black Africa are looking up to Nigeria to lead the way. Obviously, Nigeria in terms of size, human and material resources, remain the hope of the Sub-Saharan Africa and indeed, of the black race."

Nigeria's industrial sector is really facing a lot of difficulties. Their products are expensive and uncompetitive due to high cost of importing industrial raw materials into the country; shortage of electricity supply; heavy importation of finished products into the country and such imported products are often more refined and cheaper than products from local industries. According to Onwualu (2010:44):

This among other factors, make Nigerian products uncompetitive and in turn encourages importation of almost every product into Nigeria. This uncontrolled importation has also worsened the situation of the industries, which has led to low capacity utilization, outright closures and relocation of many industries to other countries with more favourable economic environment. The

Published by European Centre for Research Training and Development UK (www.eajournals.org)

social consequence of this is unemployment, poverty, restiveness, conflicts and more recently kidnapping. In his own observation, Reinert (2007) states that "the form and speed of globalization over the last twenty years have resulted in the de-industrialization of many countries, forcing them into a situation where diminishing returns is the key features of their production".

Development and Modernization

Food Security and Modernization

It is development that brings about modernization. By development, we mean, productive and competitive economy, thriving in a socially stable and conducive environment. The economy of a country that is based on production as a result of the creative and innovative abilities and ingenuity of their people will ever remain sustainable and competitive in today's globalized economic order. Modernization without development could be referred to as cosmetic or artificial socio-economic change which came as a result of the importation of sophisticated technologies or other materials without due consideration of the indigenous technical experts or human capital to manage them. But when a country has enough human capital experts, these imported materials could be developed or converted to technologies that will correspond to the people local conditions and realities.

When there is sustainable and integrated development in a country, there will be provision of infrastructural facilities which are integral parts of development. There will be wealth creation and employment generation. There will be technological and industrial products that will make life more beautiful and comfortable. Moreover, there will be food security because a country that cannot feed itself is not yet independent. But such country could be referred to as consumer society. When there is development, there will be national security and peace to appreciable level in society. More so, peace and security will be more obvious in a developed society where citizens are accorded due recognition for their achievements and contributions; where people are properly placed in positions of authority where they can perform best without bringing in ethnic or religious politics; where people are given qualitative training in different fields of human endeavour and are given challenges where they can perform best and excel; where things are well distributed all over the country without being politically biased or exhibition of primordial instincts or greed by political leaders and their associates.

National Security, Peace and Unity

In a country where there is sustainable development, peace and national security are likely to be achieved more; and social problems such as conflicts, crises, unemployment, poverty, restiveness, kidnapping, and other criminal activities by some frustrated and corrupt-minded members of the society will be less. Ibeanu's (2008) conceptualizes peace in terms of a compass with two counterbalancing pointers of development and conflict. The movement of the two pointers is driven by social economic and political conditions, within a given society and in the wider international community. While the development end of the pointer moves from X in the positive direction (+); the conflict end moves from Y in the negative direction (-). This indicates that as

Published by European Centre for Research Training and Development UK (www.eajournals.org)

development increase, conflict decre - . When this happens, the peace space (A) expands, while the violence space (B) contracts, the converse of this dynamic is also true. The is illustrated in Figure 3

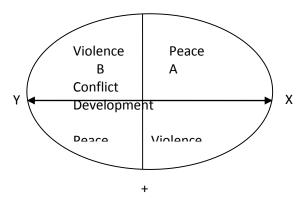


Fig. 5: Ibeanu's (2008) Development-Conflict Compass

Feedback

The Counter-Current Development Model recommends that Nigeria and other developing country should follow the steps enumerated in Figure 3, which has a feedback mechanism and which will eventually give rise to improvements by way of getting new innovative ideas, new knowledge and new technologies, etc. all the steps are integral parts of development dynamics and no step should be looked down upon.

Implication to Research and Practice

Need for Conducive Environment and Competitive Economic Activities

The qualities of a good leader enumerated above are very necessary for good governance because a transformational leader must not fail to provide a conducive environment where the citizens of the country will be systematically mobilized, organized, trained (empowered), utilized and constantly motivated without any restraints, in order to bestow on the citizens the entrepreneurial energy that will enable them earn a living and patriotically engage in the overall development of the nation, therefore, making their economy competitively productive. But undoubtedly, most countries of Africa (Nigeria inclusive) have been experiencing catalogue of leadership failures or woes due to false conceptualization of politics and corrupt impulses of those who control state power, whose major focus is to capture and consolidate state power for their own selfish interests due to their pugnacious and peasant mentality instinct. Giving a good example with Nigeria, Nebo (2011:40-41) clearly states that:

Nigeria's failure to develop and match such countries as the Asian Tigers who started the race to nationhood with us is essentially a leadership problem, a self-imposed crisis of underdeveloped psyche that makes our leaders enslaved to primordial instinct: power

Published by European Centre for Research Training and Development UK (www.eajournals.org)

acquisition as a means to self-aggrandizement; undoing and sometimes, complete elimination of perceived enemies and self-propagation.

This is obtainable because most of them who are in politics are very much ignorant of the essence and the character of politics. Most of them regard politics as a money spinning venture where "national cake" is entrusted in the hands of those who emerge victorious at elections, to divide and share as they please and punish their political opponents as they like. More often than not, violence is employed to play the game of politics and this has imprinted in the minds of most ignorant and ordinary people the negative idea of what politics is all about, so much so that they conceptualize politics as "a dirty game", and therefore, it should be exclusively preserved for few individuals who are very tough and stubborn, who are ready to get rich quick and die fast. And so, most decent people avoid Nigeria-type of politics, as they would avoid HIV aids, for fear of being killed before their time.

Nevertheless, politics is diametrically different from such distorted conceptions which are far from the truth. Asobie (2007:1) disclose that: "*Politics is primarily and ultimately about human welfare*. *It is about the improvement of the material conditions of life; it is also about the maintenance of the psychological and emotional stability of man; and about his spiritual growth as well*". Amadi (2011:13) gives credence to the above conception of politics and calls it" positive politics" because it is politics with a human face; politics centred on the welfare of man. And so, a good leader should provide enabling environment for human resources development, economic and technological development and for positive politics to thrive.

Need for People-Centred Political System

Our political system should be made to be people-centred; if not, the whole process will continue to fail. The so called democratic process in Nigeria, for instance, is so much expense. And it is very much unfair to continue to refer to the government of the rich people as democracy instead of plutocracy. A lot of money is being spent on political office holders in Nigeria while millions of people are wallowing in abject poverty in the midst of plenty. African countries, especially, Nigeria, should utilize their resources judiciously by investing on human development; technological and industrial development for common good. Less money should be spent on political office-holders and more on the people and the infrastructural development. Kalu (2010:22) states that "We need to be revolutionary in our approach to governance" According to him, "it is shameful that we concentrate more on bureaucracy in the public sector; including the presidency, the senate and the House of Representatives,, even at the State and the Local government level. We should cut administrative cost. We are paying so much to sustain people who are not contributing to the system. Sadly too, we continually depend on importation."

In fact, most of these African countries have what it takes to practice welfarism in their different countries, especially, Nigeria. Becoming a welfare state because of the great endowments of natural wealth in most of these countries, there is high propensity for them to become a welfare state. But their inability to harness these great potentials for productive purposes has really done

Published by European Centre for Research Training and Development UK (www.eajournals.org)

them more harm than good. Corruption has become an integral part of the system because of the materialistic and self-centeredness of some pseudo intellectuals who have been managing the affairs of these countries without possessing the intelligence, experience and qualifications necessary for exercising state power. Olajide (2009:22) disclosed that: "even with fewer resources than Nigeria countries like Japan, Switzerland, and Israel and so on, have been able to grow their economies and created welfarism for their citizens. Nigeria has no welfare system for its citizen in this modern century in a situation where welfarism started in Germany in 1883". This is why Counter-Current Development Model recommends that a political leader must be a man or woman of integrity, full of experience, competence and knowledge. There is also provision for political leaders to receive meaningful training from time to time in all areas of human disciplines, necessary to making them become more efficient and effective in their leadership assignments. This is very important because ignorant and uninformed individuals should not be allowed to pilot the affairs of the state.

These are people who regard politics as a do or die battle and as a result they employ all manner of uncivilized means or techniques to capture and consolidate state power for their selfish interests alone. Africa and indeed, Nigeria needs a turning point in their development efforts. They need a change of attitude and orientation; they need a change in strategy and direction; they need to flow counter-current and resist any attempt by external forces to reduce them to stagnation by sheepishly following the political and economic equation and logic of the advanced industrialized countries and their financial institutions like the World Bank, IMF, etc.

Need for Revolution

Counter-Current Development Model recommends that there must be total overhauling of the system which must be revolutionary enough. This is because of the crisis of leadership and governance we have been experiencing in the developing countries. More often than not, when revolution is mentioned most people immediately think of bloody revolution. This is more so when people are experiencing the alarming proportion of bare-faced corruption in most of the developing and underdeveloped countries where few individuals wallow in splendor and plenty while majority of the population live in squalor and abject poverty. Nwabueze, (2010:46) observes that:

Our society today is thoroughly rotten. To make it a better society, it must be transformed into a new one. It is a duty to us and to our children to transform it and clear all the rotten mess. Bringing changes with all the proposed methods and reforms here and there cannot work. We have passed that stage of transformation. What we need is a surgical transformation, because this country can only be changed by blood. Blood revolution; so that whoever survives would gather the pieces.

Kanu (2010:21) also stresses that "it is either we do something or something revolts against us". According to him, "revolution or not, there must be change and time is not on our side". Now, experience has shown and experiment confirmed it that in most revolutions heads rolled and blood

Published by European Centre for Research Training and Development UK (www.eajournals.org)

flowed, but afterwards, the crisis of ethnicism, religious obscurantism or even materialism, etc. would defeat the very essence of the revolution.

Counter-Current Development Model is a peaceful revolutionary Model that advocates for sustainable development which musts start from within (from within a country and from within the minds or the intellect of the people). It is knowledge propelled development model or strategy. It believes that knowledge is a crucial factor of production/development and leadership excellence. It is very clear that knowledge sustains a nation or an organization. Therefore, anything that is not sustainable should not be adopted in the first instance. A bloody revolution might not be sustainable due to many factors like ethnicism, religious differences, lack of knowledge or poverty of knowledge within the population, difficulty in identifying situational leader for the organization of the people, etc. Ethnicism for instance is a major issue in Nigeria and most African countries. Bloody revolution might be sustained where "issues" are considered more important than other minor considerations such as ethnicism. This is why Barrack Obama was elected as the first black president of America. And this is revolutionary effort. Nobody spilled anybody's blood before he mounted the throne. This is the type of revolutionary change CCDM advocates for the rest of the world's developing economies.

CONTRIBUTION TO EXISTING BODY OF KNOWLEDGE

More so, Counter-Current Development Model (CCDM) will help developing countries to resolutely face the realities of development which must be sustainable, based on the deliberate empowerment of the people by their transformational leadership. This is because for the people of these developing countries to be competitively productive, they must be knowledgeable. And so, moving Counter-Current will help developing countries to be able to locate their problems, both economic and technological, at the very source and proffer solutions to them, other than flowing down-current defencelessly, escaping from their political, economic, technological and human capital problems, and then depending on foreign expertise and importation of goods and materials from industrialized countries.

In fact, there is a whole lot more to benefit when developing countries, and their leaders move counter-current and control their destinies, reach destinations and then maintain their sovereignty in the comity of nations. With counter-current development model in operation in the developing countries, it will help them to build an economy that will be technologically based and knowledge-driven which will be sustainable and benefit not only their countries but the world community as a whole.

CONCLUSION AND RECOMMENDATIONS

When the people of a country are empowered with productive knowledge, they will become innovative and can discover things themselves, and then, become very useful to the society. But when people who have not been equipped with productive and innovative knowledge and who have not outgrown certain divisive issues such as ethnicism, religion, power rotation, etc. are used to carry out bloody revolution, there would be confusion and commotion at the end of the

Published by European Centre for Research Training and Development UK (www.eajournals.org)

revolution. Economic growth and development is like a seed planted by visionary leaders which is watered by global competitive consciousness, fertilized by conducive environment for indigenous research, weeded by training/industrialization, pruned by modernization and harvested by feedback of the people who enjoy the fruits – dividend of good governance. This is the ideology embedded in this model.

For CCDM to be fully applied, it demands sacrifice both on the part of the leaders and that of the led. It is a reciprocal relationship because when they work together and seriously contribute their quota towards the sustainable development of the nation's economy, they will surely reap the fruits of their labour and even their children yet unborn will also reap the fruits of the father's labour. And this is revolutionary enough.

But if they are unprogressive people who are very skilled in talking 'greatness' and building castles in the air, and then, sharing the wealth of the nation without being productive, they will be contributing to the backwardness and none-competitiveness of the nation's economy which will adversely affect even posterity because of lack of vision and organization of those who are piloting the affairs of the nation for their own welfare, instead of for the welfare of the people. The CCDM is against entrusting political power into the hands of unproductive and unprogressive talkative, whose stock-in-trade is to satisfy their selfish materialistic impulses. Such people would always attempt to legalize or legitimize things that are criminal and illegal just to gain political support or win an election or win political appointment. But be that as it may, we know that things that are morally wrong cannot by declared politically right, no matter how the points are twisted or justice perverted to favour political interests.

Counter-Current Development Model advocates that political power should be entrusted into the hands of knowledgeable, wise, prudent and productive people who will be able to manage both human and material resources of a nation. So that, even in case where the people of a country themselves demand to stay a little bit apart for peace, via confederal system of government, it will then be done peaceable around a mahogany table by knowledgeable and unbiased leaders who love their people and are ready to die for them.

These recommendations are based on the means of achieving peaceful revolution which will turn around the economy of the developing nations around for better. The CCDM therefore, recommends peaceful revolution through:

- a) Empowering the people with productive and innovative knowledge right from primary school to the tertiary levels because we are presently in a knowledge driven global village.
- b) Encouragement of team work and collaboration throughout the whole country.
- c) Meaningful deployment of human capital so that there will be no under-utilization of human or intellectual capital.
- d) Conscious observation of the law and the constitutional stipulations.
- e) Deliberate government policy, to re-visit the activities of all political office-holders after their tenure in office.

Published by European Centre for Research Training and Development UK (www.eajournals.org)

- f) Conscious concientization and sensitization of the people to begin to ask what they would do for their country and not what their country would do for them.
- g) Embarking on green or agrarian revolution (i.e. serious innovative agriculture that will expel hunger from the land and solidify the industrial base of the nation.

FUTURE RESEARCH

This study will keep Nigeria and other developing countries to carry out further studies on: i) The impact of technology on economic development in Nigeria

ii) Human capacity building for sustainable economic development in other developing economies.

References

Adewale, J.A. (2009) Human Capital Development. The Guardian, Monday April 6

- Agbo, S.N. (2010) Research: Distinction between developed and developing nations. *Interview* with Head of Photovoltaic Unit, Energy Research Centre, University of Nigeria Nsukka. Held on February 2010
- Ake, C. (1981) A Political Economy of Africa. Nigeria: Longman Plc
- Akinjide, R. (2011) Nigeria: The Risk of Implosion. The Guardian Sunday, January 16
- Amadi, G.O.S. (2011), Political Jaywalking and Legal Jiggery-Pokery in the Governance of Nigeria: Wherein lies the Rule of Law? An Inaugural Lecture of the University of Nigeria Nsukka, Delivered on March 31
- Asobie, H.A. (2007) Re-inventing the study of international relations: from state and state power to man and social forces. *An Inaugural Lecture of the University of Nigeria Nsukka* delivered on July 18
- Chikwelu, C. H.; Chimah J.N.; Odo, F.C.; Ezegbe B.N. & Ezeani, C.N. (2014) Counter-Current Development Model (CCDM): A Perspective for Nigeria and other Developing Countries in the Knowledge Driven Economy. *The International Journal of Humanities & Social Studies*. 2 (6), June 2014, 72-75
- Chukwuma, G. O. (2010) Research: Discovering new Ideas. Interview with Head of Department of Agriculture and Bioresources Engineering, Nnamdi Azikiwe, University Awka. Held on September 10, 2010
- Eboatu, A.N. (2010) Problem of Leadership in Nigeria. *Interview with former Deputy Vice Chancellor (Administration) Nnamdi Azikiwe University Awka, Held on September, 17,* 2010 at Energy Centre, University of Nigeria Nsukka.

Emeagwali, P. (2008) Technology is the Root of all Evil, The Guardian, Sunday January 6

- Ezekwesili, O.K. (2013) The Wealth and Poverty of a Nation: who will restore the dignity of Nigeria? *Being a paper presented at the Convocation Ceremony of the University of Nigeria Nsukka*
- Ibeanu, I. (2008) Affluence and Affliction, The Niger Delta as a critique of Political Science in Nigeria, *Inaugural Lecture of the University of Nigeria, Nsukka*, Delivered on Feb. 20.
- Kalu, I.K. (2010) Nigeria yet to Leverage on its Economic Potential. The Economy, vol.1 (16),

Published by European Centre for Research Training and Development UK (www.eajournals.org)

June 31

- Kanu, N. (2010) Revolution: New vocabulary in Nigeria's Political Lexicon. Daily Sun, July 21.
- Mirani, D. (2010) Nigeria Need to grow its Agriculture, manpower and small-scale industries. *The Guardian*, Sunday, April 11
- Momah, (1999) Technology is Power: Memoirs of a Soldier, Scholar, Strategist, Engineer in Government. Ibadan, Nigeria: Spectrum Books Ltd.
- Nebo, C. (2011) Nigerian Sectorial underdevelopment and Leadership Challenges: The Igbo Perspective, *Saturday Sun*, January 8.
- Nwabueze, B. O. (2010) Revolution: New Vocabulary in Nigeria's Political Lexicon. *Daily Sun*, July 21
- Ogban-iyam, O.(2004) On the question of Politics and the Political: Towards a more meaningful and systematic study of politics. *Our Politics*, Vol. 2
- Olajide, B. (2009) Depression: Diversification, the only way out for Nigeria? *The Guardian*, Wednesday July 28
- Okonjo-Iwuala (2011). Towards Economic Sustainability in Nigeria. *The Guardian, Sunday* August 21
- Oparaku, O.U. (2010) Research: An Exploration of Knowledge. *Interview with the former* Director, National Centre for Energy Research & Development, University of Nigeria Nsukka, held on October 9 2010
- Owualu, P. (2010) How importation ruined Nigeria's industrial sector? *The Guardian*, Wednesday
- Reinert, E.S. (2007) *How Rich Countries got Rich... and why Poor Countries stay Poor*, London: Costable & Robinson Ltd.
- Omoh, G. (2013) Nigeria's Under-development, blame our Leaders not Colonialists. *Vanguard*; March, 2013. Retrieved from:

 $\underline{http://www.vanguardngr.com/2013/03/nigerias-under-development-blame-our-leaders-not-colonialists/\#sthash.0mwtl7aN.dpuf$