Climate Change: An Interrogation of Contemporary Challenges of Development in Nigeria

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Abstract

Climate change is a global phenomenon which attracted international community seeking unified approach to stem the tide. Every continent has its share of disaster associated with climate change, yet Africa is disproportionate in the tide. Against this background, this paper examined global politics of climate change and implication on development in Nigeria. The paper was hinged on theoretical modification of climate change using archival methodology. Materials for the paper consisted of journals, books, historical records, video and audio records and abstracts. The rhetoric of climate change is associated with international politics and global inequality which redistributed economic power at the expense of Africa. Archival records indicated that climate change was international concern which brought global summit at the level of United Nations and its designated agencies; World Bank and International Monetary Fund as global financial mediation. It was found that international Sovereign States in the globe were locked in continued negotiation to reduce emission of Green House Gases (GHGs) as alternative solution. The outcome of negotiation was deadlock consequent upon international competition which put Africa at a disadvantage. Results further showed that Nigeria lied in the midst of trouble of GHGs emission due to petrochemical oil industries and gas flaring in large scale. Unfortunately, Nigeria like other transiting economies lacked technological capacity to adequately respond and absorb threatening effect of climate change. The paper recommends that Nigerian state should be proactive and demonstrate political will to stem tide of GHGs emission in the ever-increasing international politicisation of climate change.

Keywords: Climate Change, Global Warming, Green House Gases, Politics, Sovereignty _____

Date of Submission: 10-02-2022

Date of Acceptance: 25-02-2022 _____

I. Introduction

Never in the history of man has the issue of climate change been so topical at the national and international levels. Climate change and its projected impacts on the environment and socio-economic system now constitute the most important environmental problem that mankind faces as we begin the 21st Century (Avoade, 2003). The Intergovernmental Panel on Climate Change in its fourth assessment report state that "warming of the climate system is unequivocal" (IPCC, 2007). For nearly 1 million years before the Industrial Revolution, the carbon dioxide (CO2) concentration in the atmosphere ranged between 170 and 280 parts per million (ppm). Levels are now far above that range 387ppm- higher than the highest point in at least the 800,000 years and the rate of increase may be accelerating (World Bank, 2010). Under high-emissions scenarios, concentrations by the end of the 21st Century could exceed those experienced on the planet for tens of millions of years (World Bank, 2010).

Today, millions of people are already suffering because of climate change. The deadly silence of this crisis is a major impediment for international action to end it. Science is only beginning to address the human impact of climate change. Without describing the full picture of the challenge, we cannot expect our response to match its scale. And we can no longer hold back from speaking out on the silent suffering of millions worldwide. The effects of pollution driven by economic growth in some parts of the world are now driving millions of people into poverty elsewhere (Annan, in GHF, 2009).

Most scientists agree that the observed temperature increases are consistent with the anticipated effects of the vast increase in levels of greenhouse gases (GHGs) in the atmosphere that have resulted from the burning of fossil fuels as well as other human activities. The overall warming has produced long-term shifts in average regional temperatures, precipitation, and sea levels, and this pattern is expected to accelerate as the quantities of GHGs emitted continue to increase. While the scientific discussion of anthropogenic climate change can be traced to the late nineteenth century, the focus on the politics of climate change has much more recent origins (Cass 2017). Climate change emerged as a political issue during the mid to late 1980s, and its rise as a focus of social science research paralleled the explosion in research within the field of global environmental politics that also began during the late 1980s and has continued through to the present (Stevis 2014).

A growing number of research papers, books, blogs, and other articles refer to the "politics of climate change" as one of the key elements shaping current and future responses to this global challenge. This is usually presented as an issue of global politics (related to the contested negotiations of the United Nations Framework Convention on Climate Change (UNFCCC)), as national politics in high income countries (for example, the tension between the Obama White House and the US Congress over climate change legislation), or in the role of global corporate actors in the international politics and economy of climate change (Tanner & Allouche, 2011). Similarly, the framing of climate change in major international development publications such as the United Nations Development Programme's (UNDP) Human Development Report and the World Bank's World Development Report focuses on issues such as the attribution of responsibilities at a global level, the need for market-based mechanisms to reduce emissions and to reduce risk, and the global politics involved in responding to these issues (Gasper, Portocarrero, & St.Clair, 2013) – but rarely recognize the political dimensions of climate change and its impact on development particularly in low- and middle-income nations.

Climate change conceived as a direct consequence of global warming, is now of critical importance among global concerns and pre-occupations accompanied by dire predictions of the disastrous fall-outs for humanity (Broecker, 1975; Bryan, 1986/87; NAS, 2008; Oxfam, 2009). Climate change, is therefore, tagged a "wicked problem" (Batie, 2008), a "study in injustice" (CARE International, 2011:4), a threat multiplier to health, (IPCC, 1995; Epstein, 2002).

In an attempt to check the dire effects resulting from climate change, the leaders of the world, December 2009, gathered in Copenhagen, Denmark to review the progress so far made in attaining the objectives agreed upon in the Kyoto Accord of 1997, and to chart a new agenda for dealing with the global challenges posed by climate change (Odock 2012). While the activities of the developed nations are mostly responsible for the changing climate, the developing nations are those suffering more of the impacts due to inability to cope as a result of poverty and low technological development (Ojonigu, Edga & Iliyasu 2018). The underdeveloped countries of the world in general have been pencilled down as those countries that are most negatively impacted by global climate change, sub-Saharan Africa has been singled out as the region that is likely to be worst hit by the negative consequences of the global scourge of climate change resulting from global warming, irregular rainfall, increased heat and natural disasters (IPCC, 1995; E.U Insight, 2009). However, the expectations of many, including Sub-Saharan was set aback by the failure of the December 2009 Global Conference on Climate Change in Copenhagen, Denmark, to raise their expectations for a healthy climate (Muller, 2010).

Accordingly, Fatile (2013) argued that climate change has affected virtually every human life in contemporary society and it has also brought daunting challenges to virtually all facets of life in contemporary society, including, of course, economic development. Climate change results in fundamental transformation of physical and social life of people. Nigerian government has not been able to tackling the challenges of new adaptation to altered climate conditions in coastal communities and changes in lifestyles resulting from destruction of existing social structure and infrastructures (Osakhede, Ijimakinwa & Adesanya, 2016). These challenges become more obvious in a developing economy like Nigeria (Yusuf, 2012). Numerous studies have focused on different aspects of climate change impacts and adaptation needs in Africa, but few have considered the effects of climate change on the coastal development at national and regional levels.

However, an economic slowdown in developing countries can jeopardize their ability to address pressing problems such as poverty, lack of adequate health care, high unemployment and gender inequality. Environmental degradation can only intensify these existing development problems (Huanng 2012). For example, increased maximum temperatures and changing rainfall patterns are already exerting negative impacts on the agriculture and food security of many low-income communities, while several coastal nations are suffering from damage to their ocean fisheries brought on by ocean acidification (Howes & Wyrwoll, 2012).

On the other hand, if growth continues on what has been called the "business as usual" development path, it is likely to exaggerate existing development problems and compromise the well-being of present and future generations. Growth enables human development that includes non-income dimensions such as education, health, gender equality and freedom of expression, which are essential for human well-being. At first glance, it looks like whichever path developing countries choose, they may not be able to attain all their central development goals. In this regard, this paper seeks to examine the politics of climate change and its challenge on development in Nigeria.

II. Literature Review

In climate change literature, the political tension regarding the increasingly recognized severity and urgency of the crisis, and the nature of the political proposals and possibilities being offered as its potential solution, it is obviously acknowledged by a number of scholars, primarily from disciplines at the intersection of the social and environmental sciences including critical human geography, environmental policy, and science and technology studies (Swyngedouw, 2010, 2011, 2013; Moolna, 2012; Goeminne 2012; Machin, 2013; Kenis & Lievens, 2014; Pepermans & Maeseele, 2016). The foregoing scholars recognised the distinctly political nature of the global ecological crisis: that is, we do not face so much a conflict over the types of political solutions are available to us, in the form of policy proposals or institutional mechanisms, so much as conflicting conceptions regarding the necessary form of the politics themselves to address the crisis.

Using the terms applied by scholars engaged in this debate, Kurtz (2018) called this the politicization debate in climate change scholarship. In its broadest terms, this debate can be framed as between those on the one hand who emphasize a need for consensus-based form of politics, which, he identified as moderate positions within the politicization debate, against those who on the other hand argue on behalf of the necessity for a more agonistic approach to climate politics, which he again identified as the radical position.

In his 2000 article, "What is Political Science?" Bertell Ollmann offers a threefold typology of approaches to understanding political problems and their potential solutions, which he characterizes as moderate, radical, and Marxist. The moderate, Ollmann (2000) argues, sees problems in the world but treats them as largely disconnected from one another, as discrete issues or themes to be tackled one by one. The radical, on the other hand, sees political problems as interconnected, and causally linked through a system of relations. According to Ollmann, only the Marxist adequately ties these relations, problems, and potential solutions together, naming the system "Capitalism" and understanding the distinctly political role that the state and class relations play in organizing these relations. And it is only by struggling against capitalism, and the state (system), according to this perspective that we call "Marxist," that we can actually seek to overcome these problems (Ollmann 2000).

A similar typology is useful to understanding current debates over climate politics. "Moderate" perspectives span the sub-fields of social and natural science, advocating piece-meal approaches to the multivariant tasks and challenges that the climate crisis presents. Perhaps most fundamentally this is reflected in the division between "mitigation" and "adaptation," which has been fundamental to the political framing of climate change since the origins of the IPCC and UNFCCC. Climate change mitigation refers to attempts to address the root causes of climate change, namely the global warming of the atmosphere through the emission of greenhouse gases (GHG). Such attempts at 'solutions,' which range from the variety of proposals to reduce CO2 emissions to more radical for geo-engineering (attempts to deliberately manipulate the earth's environment to counteract the greenhouse effect), are in effect efforts to provide what in traditional political economic theory is a public good: a stable climatic environment. On the other hand, "adaptation" to climate change involves, at the most basic level, implementing what are seen as necessary responses to the changing environment that is occurring as a result of climate change. This ranges potentially from simply ensuring better disasterpreparedness at a household level, to the possibility of wholesale migration of populations from low-lying floodprone areas. These problems of adaptation are necessarily geographically specific and thus understood as inherently private goods (Ekpoh, 2010). As such, the political "problems" of climate change can for many environmental social scientists be reduced to specific sets of "collective action" problems, to be managed through the negotiation and construction of environmental regimes, the facilitation of collectively rational public and private cooperation and competition, and other such political administrative and technical means. In terms familiar to the social scientific literature, many of these approaches can be understood through the framework of climate or Earth System "governance" (Stevenson & Dryzek 2012, 2014; Biermann, 2014; Biermann, et al 2012; Gupta, 2014).

More specifically within the field of environmental political science and climate change politics, we can further identify "moderate" and radical perspectives on climate change politics according to whether or not they view the "politicization" of climate change as a primarily a "problem" or as a "solution." At least this is how the debate is framed by science communications scholars Yves Pepermans and Peter Maeseele in 2016, who identify four main types of "consensus-building" approaches to climate change. The "technocratic" approach sees climate change as an objective scientific phenomenon, which requires the right kind of communication strategies to convince individuals to change their minds, and their behavior, with regards to climate and the environment. Accordingly, there is much overlap between this group and the "social marketing" approach, which emphasizes the role that political psychological "framing" can play in addressing climate change (Adelekan & Gbadegesin, 2005; Ahmed, Diffenbaugh & Hertel, 2009). These approaches emphasize political strategies and techniques that highlight climate change's effects on security, economy, and other politically relevant categories that voters respond to and act upon (Nisbet & Fahy, 2015; Zia & Todd, 2010). These two sets of approaches, which together might be seen as complementary, can be understood as "common

sense" (Gramsci, 1999) conceptions of climate politics from a rationalist, secular, natural scientific worldview. As such, these perspectives are ubiquitous and hegemonic among those who share a broadly "liberal" or "progressive" outlook on climate change.

The third and fourth types of politically moderate, consensus-building approaches take a generally more "normative" environmental political theoretical approach. "Green republican" approaches emphasize the role that constructing discourses, institutions, and practices around a conception of a "green citizenship" or "green state" can play in addressing climate change. These approaches expand upon the narrowly individualist or consumer-oriented conceptions of the technocratic or social marketing frameworks by adding a more explicitly "political" dimension, in the more "classical" sense as bound up with "political community," to their environmentalism (Eckersley, 2004; Dobson & Bell, 2005; Dobson and Eckersley, 2006). "Deliberative" greens go beyond the republican's conception of a universal or objectively-identifiable "good life" by drawing upon Habermassian-inflected theories of political and ecological engagement and participation, most notably in the work of John Dryzek and his collaborators (Dryzek 2013; Stevenson & Dryzek 2012, 2014). Political theorist Amanda Machin uses a similar four-fold framing of mainstream approaches to climate politics in her 2013 book Negotiating Climate Change.

Together these approaches, while sharing important differences between them, can all be understood as "consensus-building" insofar as they all agree that the lack of progress in resolving the climate crisis is a result of the politicization of climate change. That is, ideological and partisan divisions are seen as inhibiting the potential for cooperation and collaboration in jointly addressing the climate change issue (Machin, 2013). Climate change here is understood as a fundamentally objective phenomena that can be apprehended and rationally managed through scientific and deliberative means, and thus the recommended strategies and tactics for addressing the crisis are those which de-emphasize political divisions, and antagonisms, and instead seek to promote compromise. Politics, in other words, is the obstacle to be overcome in order to achieve success in addressing the climate change issue (Pepermans & Maeseele 2016). Kurtz (2018) called them "moderate" according to Ollman's typology insofar as the climate problems they identify can all be parsed out according to their distinct and specific causes and effects, which are in turn to be handled by distinct policy approaches and disciplinary specialists. More importantly however, they are moderate to the extent that while criticizing actually-existing political practices and institutions, the solutions they propose are essentially compatible with or reinforcing the status quo – that is, they are reformist, as the political structures and institutions themselves are not seen as a fundamental source of the political problems, but rather primarily the source of their potential solutions (Okechukwu, 2010).

On the other hand, the radicals criticize the moderates on their inability to grasp the structural-systemic inequalities and injustices that define the socio-ecological context of climate politics, which itself is seen as symptomatic of the "post-political" tendencies of neoliberal globalization (Swyngedouw, 2011). This other, radical side of the politicization debate insists that the fundamental problem in climate politics is the exact opposite of that identified by the moderate consensus-builders rather than seeing politicization as a key problem to be overcome or avoided, this other group of scholars argues that it is a lack of politicization around the climate change issue that obstructs any real capacity for resolving the crisis (Pepermans & Maeseele, 2016). By affirming a rationalist, positivist, and natural scientific worldview as the only scientifically and socially responsible approach to climate politics, the moderates simultaneously exclude or dismiss dissenting perspectives, which seek to call into question those fundamental structures and relations they take for granted, as irrational, extremist, or unrealistic. As Goeminne (2012) notes, this tendency of the moderates to occlude more "systemic" critiques of climate politics, and (thereby the potential for) more "radical" solutions to the crisis, seeks to erase or suppress the fundamentally "political" nature of climate politics, which then manifests as a "return of the repressed" in the form of political reaction (Goeminne 2012) a point laid bare in the wake of the 2016 election and the rise of anti-ecologism qua reactionary nationalism, or what Wainwright and Mann (2013,2015) call "Climate Behemoth".

There are two ways in which our separate examinations of climate change and development suggest that the major global challenges of climate change and development interact. First, climate change impacts most heavily on poor and vulnerable people, and is therefore likely to set back development gains made in the past. Second, climate change poses a threat to sustainable development.

A major difficulty in the consideration of climate change impacts on development is the considerable uncertainty about the rate and nature of global warming; about the consequent rate and nature of its effects on different parts of the climate system; and then about the rate and nature of the effects of changes in these climate variables on human and economic development (Gwary, 2007; Haines Korats, Campbell & Corralan, 2006). Such uncertainty means that considerable care needs to be taken in interpreting estimates of climate change impacts on development. However, understanding the physical, biological and social sciences of climate change impacts is rapidly advancing. The previous estimates of climate change and its impacts have frequently been found to be more conservative than current estimates (Richardson et al, 2009), and this suggests that policy and

planning should take account of the more serious potential impacts. Hallegatte et al (2016) state that climate change represents a significant obstacle to the sustained eradication of poverty, but future impacts on poverty are determined by policy choices, rapid, inclusive, and climate-informed development can prevent most short-term impacts, whereas immediate pro-poor, emissions-reduction policies can drastically limit long-term ones.

Indications of the ways that climate change is already undermining and negating existing development achievements has been documented, for instance in the 'human impact report of climate change: the anatomy of a silent crisis' (GHF, 2009). This report recognises the uncertainty and difficulties inherent in quantifying climate change impacts on development and the risks of either overstating or understating these impacts. However, it does attempt to draw together and triangulate across a wide range of information sources, including IPCC and other peer reviewed and more conservative scientific reports and models, insurance industry information, international organisation reports and case studies. The report estimates that, in 2008/2009, 325 million people were affected annually by climate change, with a further 315 thousand annual deaths due to climate change (these may be compared with annual global estimates of 24 million people needing medical attention after traffic accidents in 2004, 247 million cases of malaria in 2006, 22 thousand deaths from the Indian Ocean Tsunami in 2006 and 519 thousand deaths annually from breast cancer from 2004 to 2008) (GHF, 2009: p. 11). These figures are calculated assuming that 40% of increased weather events and 4% of people affected and deaths caused by environmental degradation are attributable to climate change (GHF, 2009: pp. 9, 11). Global economic losses from climate change are estimated at US\$125 billion and are projected to more than double from 2010 to 2030 (GHF, 2009: pp. 19,20). Critical human impacts of climate change arise through impacts on human habitat, food security, health, poverty, water scarcity, displacement and security.

Thus, UL (2018) affirmed that climate change represents a fundamental threat to current patterns of development, as it is clear that development which involves large-scale emissions of GHGs is not sustainable. The climate system does not have the capacity to absorb large amounts of GHGs without substantial changes in the climate, changes which undermine global natural and economic systems on which we currently depend. These include our water supplies, food systems, health, infrastructure and settlements. Understanding these threats requires an understanding of the science of climate change, impacts of different human activities on climate change and impacts of climate change on human activities and welfare.

Methodologically, the study adopted archival research design. From a qualitative orientation, data collection was done by secondary sources. The data used in this study were collected from secondary sources. The instrument utilized for the collection of secondary data is documentation. Documentary data were collected via amnesty office, books, journals, newspapers, magazines, seminars, thesis and internet sources. Secondary source was utilised because of the objective items consisted in the study.

The Policy and Politics of Climate Change

Policy is a plan action of how an issue is to be tackled or resolved. Climate change policy or policies are series of plans meant to reduce green house gas emissions (taken at different COP meetings) which is instrumental to climate change or global warming. The climate change or global warming politics concerns the debate among nations over the existence of global warming, its causes, effects, actions to be taken, and responsibility ownership. The politics of climate change are complex due to numerous factors that arise from the global economy's interdependence on carbon dioxide emitting hydrocarbon energy sources and because carbon dioxide is directly implicated in climate change (Okechukwu, 2010). Reasons for climate politics:

Economic implications: The vast majority of the world economy relies on energy sources or manufacturing techniques that release greenhouse gases at almost every minute. This intimate linkage between global warming and economic vitality implicates almost every aspect of a nation state's economy. Every stage of a nation's production, transportation, storage, delivery and disposal emits greenhouse gases.

Lack of adequate advanced energy technologies: Fossil fuel abundance and low prices continue to put pressure on the development of adequate advanced energy technologies that can realistically replace the role of fossil fuels - 90% of the world's energy is derived fossil fuels and non-carbon-neutral technologies. Developing countries do not have cost effective access to the advanced energy technologies that they need for development (most advanced technologies has been developed by and exist in the developed world). Without adequate and cost-effective post hydrocarbon energy sources, it is unlikely the countries of the developed or developing world would accept policies that would materially affect their economic vitality or economic development prospects.

Industrialization of the Developing World: As developing nations industrialize, their energy needs increase and since conventional energy sources produce carbon dioxide, the carbon dioxide emissions of developing countries are beginning to rise at a time when the scientific community, global governance institutions and advocacy groups are telling the world that carbon dioxide emissions should be decreasing. Without access to cost effective and abundant energy sources, many developing countries see climate change as a hindrance to their unfettered economic development.

Measurement disagreement: Among the countries of the world, disagreement exist over which greenhouse gas emission metrics should be used like total emissions per year, per capita emissions per year, CO2 emissions only, deforestation emissions, livestock emissions or even total historical emissions. The release of carbon dioxide has not been, historically, even among all nation-states while some nation-states have challenges with determining who should restrict emissions and at what point of their industrial development they should be subjected to such commitments.

The blame game: Some developing nations blame the developed world for having created the global warming crisis because it was the developed countries that emitted most of the carbon dioxide over the 20th century and vulnerable countries perceive that it should be the developed countries that should pay to address the challenge.

Consensus tyranny: The global governance institutions that evolved during the 20th century are all consensus driven deliberative forums where agreement is difficult to achieve and even when agreement is achieved it is almost impossible to enforce.

Lobbying bodies: Special interest lobbying by well organized groups distorts and amplifies aspects of the climate change challenge.

Indeed, the journey to formulating a policy on climate change actually started much earlier in 1990; the United Nations General Assembly decided to start work on climate change convention to address what appeared to be worrisome changes in earth climate patterns (Guardian, 2009). The Rio summit, 1992, was therefore an umbrella agreement which took into account the cardinal principles on which actions to mitigate the causes of global climate change are to be taken. However, the examination of the past global conference held so far on climate change shows that international conventions has suffered from some fundamental weakness. Resolutions were passed after making erudite discussions. But when it comes to actual practice or implementation most of the nations lack the political will. Hence, there were several problems and pitfalls in the implementation of climate change conventions. In line with the above assertion, the two-week Copenhagen Conference organized by the United Nations, with the primary focus to obtain agreement about carbon emission reductions after 2012 when the Kyoto Protocol will expire started and ended on Saturday 19th December, 2009, without adopting a legally binding Accord.

However, while the need for a new deal has never been in doubt, the modalities for its negotiations have been engulfed in storms as negotiations began on the adoption of a new pact. That was a big disappointment to a world that was expecting something positive. The failure of leaders to agree on a legally binding treaty has marked a step backward in the urgent need to address the issues of climate change. Therefore, international environmental architecture has proven itself incapable of living up to the challenges it faces. Moreover, it is pertinent to state that it was the inability to resolve certain issues that determine the summit outcome. These issues bordered on the different nations bid to protect their individual national economic interests. This was manifested in the rift between North and South (Developed and Developing countries). Disputes between the rich and the poor countries dominated the conference, with the poor countries boycotting the proceedings at a time. Whereas all the countries that attended the summit are in agreement that the emissions of green house gases contributed to climate change, however, there is contention over which countries are willing to cut their emissions, when their competitors are not willing to do so. While the developing countries wanted the United States wants China, India, Brazil, South Africa and many more rapidly growing developing countries to significantly cut their emissions too (Guardian, 2006).

The major assessment that can be deduced from this climate change politics is lack of trust and lack of commitment to climate agreements among the countries. The United States is reluctant because China, the largest emitting country at the moment has not taken commitments on emission cuts (Ati et al 2018). The West is unhappy with India, which argues that its development commitment, which require huge energy consumption to enable it catch up with the West will not permit it do so (Guardian, 2009). Other assessment is lack of honesty and transparency among the nations. The truth is that many countries did not want any international regulatory body to dictate how their economies should be run. For example, China has always resisted international effort to monitor its industrial production process. Another assessment is that there was lack of consensus on who finances the assistance to poor countries. According to the World Bank (2008), poor countries will need an estimated 100 billion dollars a year to respond to climate change. But following the hectic diplomacy by the former US President Barrack Obama in Copenhagen, the rich nations promised 30 billion dollars in emergency climate aid in the next three years and eventually 100 billion dollars by 2020 to the developing countries (Ati et al., 2018).

However, several of such promises in the past have not been fulfilled (Guardian 22 Dec, 2009). Other assessments from Copenhagen are that, the developed countries are not ready to meet full incremental cost and provide necessary technology for mitigation adopted by the developing countries. While the developing countries (Brazil and Indonesia) were pushing hard for a forest programme that would pay them to preserve

their trees, the Conference failed to address the matter. It was therefore tragic that the contentions forced delegates to drop a plan to protect the world biological rich tropical forest. What constitutes the agreed full incremental cost became a dispute, and several disputes will come up in the international forum which may not be solved for many years (Eugene, 2013).

Politics of Climate Change, Awareness and Perception in Nigeria

Nigeria today faces many development challenges. The security of lives and property, and national stability, continue to be recurring concerns. Despite major efforts in recent times, progress against poverty remains slow, and any gains in key development indicators remains unconsolidated. Climate Change compound the environmental, economic and strategic challenges we face today, and will certainly undermine our capacity to manage them if not addressed. Climate change therefore raises a concern on the security of our shared future, by heightening the challenges we face virtually all sectors of development.

Given Nigeria's status as a fossil-fuel dependent economy with a large climate sensitive agricultural sector, the development of a climate change policy and response strategy is critical; as climate change portends a serious threat to poverty eradication and sustainable development in general (Onafeso, 2017). One of the key pillars of the Vision 20:2020 is investment in low carbon fuels and renewable energy. Achieving the goal of low carbon, high growth and resilient socio-economic system for equitable and sustainabile socio-economic and environmental development faces some challenges which include stability and sustainability of enabling environment, adequate institutional and human resources capacity and availability of adequate resources to address mitigation and adaptation initiatives to address climate change. Thus, government needs to ensure that economic growth, resource management and climate change mitigation and adaptation happen simultaneously if this will be done effectively (Onafeso 2017).

The National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN) was established in December 2011 and it acknowledged that changes in Nigeria's climate. To prepare for and respond effectively to the impacts of climate change, adaptation is the key. Adaptation should be comprehensive and articulated in a way that recognizes the varying needs and vulnerabilities of all sections of the society. Accordingly, the Government of Nigeria and a number of civil society organizations embarked upon the development of National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CNN). in other to cope with the consequences of the climate change.

In 1992, Nigeria joined the League of Nations in their efforts towards mitigating climate change by becoming a signatory to the UNFCCC as a Non-Annex 1 party, and the ratification of the Kyoto Protocol of 1997 (Ighodalo, 2018). As a Non-Annex 1 signatory, Nigeria is not required to take any actions to curtail its emission of GHGs. However, Nigeria is obliged to issue four key National Communications: four in-depth review summaries; a progress report; a National Adaptation Programme of Action; and a Global Climate Observing System Report (Ighodalo, 2018). The Federal Ministry of Environment was given the responsibility for the implementation of the UNFCCC and the Kyoto Protocol in the country. A Special Climate Change Unit (SCCU) was then created within the Ministry to develop a short to long-term national plan to enable Nigeria to respond to its obligations as specified by the UNFCCC and the Kyoto Protocol, and also to coordinate the activities of the Inter-Ministerial Committee on Climate Change (IMCCC) (Federal Republic of Nigeria [FRN], 2008).

In January 2007 at the German-Africa summit in Accra, initiated by the Federal President of Germany, the former Nigerian President, Olusegun Obasanjo appealed to international assistance (Habil, 2007). World leaders including the Nigerian delegation converged in New York and then in Paris in 2015 for two important meetings bothering on global future. The New York meeting, on one hand, adopted the Sustainable Development Goals (SDGs) as the new global development framework. These SDGs, a set of 17 integrated goals and 169 time-bound targets, which are the successors to the Millennium Development Goals (MDGs), that were implemented mostly in developing countries from 2000 to 2015, with mixed results - are designed to continue where the MDGs left off and have been touted as the mechanism through which the world would be radically transformed in the next 15 years. The Paris meeting, on the other hand, produced and adopted by consensus an agreement negotiated during the 21st Conference of the Parties of the UNFCCC (COP 21). Apart from seeking to hold the increase in the global average temperature to well below 2°c above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°c above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change; the new COP 21 agreement also aim at increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; while also making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development (Onafeso 2017).

Doubtless that the international knowledge and awareness of climate change is increasing by the day (Onafeso 2017). However, people's perception of, and reaction to, climatic change issue varies not only along

economic status and literary levels, but also there appears to be a spatial gradient in perception people from rural to urban areas (Gbadegesin & Ogundele, 2008). While regular perception studies are conducted in form of opinion survey in most developed countries, such surveys which are necessary in order to create awareness about climate change and to assess the public level of knowledge about this global phenomenon have been advocated (Gbadegesin & Ogundele, 2008). Similarly, Adelekan and Gbadegesin (2005) have concluded that climate issues be integrated into environmental studies curriculum of primary and secondary schools in Nigeria and other African countries, as this will "go great lengths" in building environmental responsibility in citizens.

According to Gbadegesin and Ogundele (2008), environmental perception can be described as a piece of knowledge that is acquired by the individual as a result of his visual, tactile, verbal and auditory contact with the environment. From their studies, confirmation abounds that respondents' knowledge of climate change and its consequences are higher in urban coastal (Lagos) areas than in the hinterland (Ibadan) areas. Although, the difference in the years of the studies may account for the differences (Adelekan and Gbadegesin, 2005; Gbadegesin and Ogundele, 2008), the conclusion that African nations need to include climate change issues as a vital component of long-term policy and planning, cannot be over echoed. This is particularly important as majority of developing countries are highly-vulnerable to the potential effects of the changing global climate (Gbadegesin and Ogundele, 2008).

Nigeria today is confronted with many development challenges. The security of lives and property, and national stability, continue to be recurring concerns. In spite of major efforts in recent times, progress against poverty remains slow, and any gains in key development indicators remains unconsolidated. Climate Change has compounded the environment, economy and many other sectors, and will certainly undermine our capacity to manage them if not addressed. Climate Change raises a concern on the security of our shared future, by heightening the challenges we face virtually all sectors of development.

III. Conclusion

The findings of this paper indicate that various sectors of Nigeria's economy would be vulnerable to impacts of climate change. It is therefore paramount that the nation should take proactive measures in her response to this issue. The government and the people of Nigeria should take up the challenge and seek cooperation and collaboration with international agencies in other to create opportunities for technology and skill transfer to foster better adaptation and mitigation measures. This paper recommends the need for further research on climate change in other sectors. A study commissioned by the World Bank in 2007 indicates that Nigeria accounts for roughly one-sixth of the world-wide gas flaring which in turn, spews some 400 million tons of carbon dioxide into the atmosphere. This is mind bugging challenge that requires state policy and political will to attenuate the burden on human capital development and healthy living.

References

- [1]. Adelekan, I. O. and Gbadegesin A. S. (2005) Analysis of the public perception of climate change issues in an indigenous African city. International Journal of Environmental Studies 62 (1): 115-124
- [2]. Ahmed, S. A., Diffenbaugh, N. S. and Hertel, T. W. (2009). Climate volatility deepens poverty vulnerability in developing countries. Environ Res Lett 4(3):034004.
- [3]. Ayoade, J.O. (2003), Climate Change: A Synopsis of its nature, causes, effects and management. Vantage Publishers, Ibadan.
- [4]. Broecker, W.S (1975) Climate Change: Are we on the brink of a pronounced global warming? Science Vol. 189, No.4201, pp. 460-463.
- [5]. Bryan, K (1986/87) Man"s Great Geophysical Experiment: Can We model the Consequences, Oceanus, Vol.29, No.4.
- [6]. Cass, L. R. (2017), The Politics of Climate Change, Oxford Research Encyclopedia of International Studies.
- [7]. Ekpoh, I. (2010), Adaptation to the Impact of Climatic Variations on Agriculture by Rural Farmers in North-West Nigeria" Journal of Sustainable Development. Vol. 3, No. 4.
- [8]. Eugene.K. (2013) The Global Challenge, White Press, Montreal
- [9]. Fatile J.O (2013). Climate Change and Public Service delivery in Nigeria. Journal of Business and Social Science.7(1) 101-102
- [10]. Gasper, D., Portocarrero, A., & St.Clair, A. (2013). The framing of climate change and development: A comparative analysis of the human development report 2007/8 and the world development report 2010. Global Environmental Change, 23, 28–39
- [11]. Goeminne, G. (2012). "Lost in Translation: Climate Denial and the Return of the Political." Global Environmental Politics 12 (2): 1–8
- [12]. Gramsci, A. (1999). Further Selections From the Prison Notebooks. Edited by Derek Boothman. The Electric Book Company

- [13]. Gupta, J. (2014). The History of Global Climate Governance. Cambridge University Press.
- [14]. Gwary, O. M. (2007), Climate Change, Food Security and Nigerian Agriculture. A Paper submitted to Federal Ministry of Environment Abuja and UNDP Abuja.
- [15]. Haines N., Korats, R. S. D., Campbell, L. C. and Corralan, C. (2006), Climate change and human health: Impacts, vulnerability and public health. Journal of the Royal Institute of Public health, 120:585.
- [16]. Hallegatte, S., Bangalore, M., Bonzanigo, L., Fay, M., Kane, T., Narloch, U., Rozenberg, J., Treguer, D. & Vogt-Schlib, A. (2016) Overview. In: Shock Waves: Managing the Impacts of Climate Change on Poverty. Climate Change and Development Series. Washington DC, World Bank. pp. 1–29
- [17]. Ighodalo, B. A. (2018), Climate Change and Sustainable Develoment in Nigeria: Limitations and Opportunitiesm, Handbook of Research on Environmental Policies for Emergency Management and Public Safety.
- [18]. Machin, A. (2013). Negotiating Climate Change: Radical Democracy and the Illusion of Consensus. Zed Books.
- [19]. Okechukwu.E. (2010) The Politics of Climate Change, Ikenga Press Enugu.
- [20]. Stevenson, H. and Dryzek. (2014). Democratizing Global Climate Governance. Cambridge University Press
- [21]. Stevis, D. (2014) The Trajectory of the Study of International Environmental Politics. In M.M. Betsill, K. Hochstetler, and D. Stevis (eds.) Palgrave Advances in International Environmental Politics, 2nd edn. New York: Palgrave.

Adekunle S. Ajisebiyawo. "Climate Change: An Interrogation of Contemporary Challenges of Development In Nigeria." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 27(02), 2022, pp. 10-18.